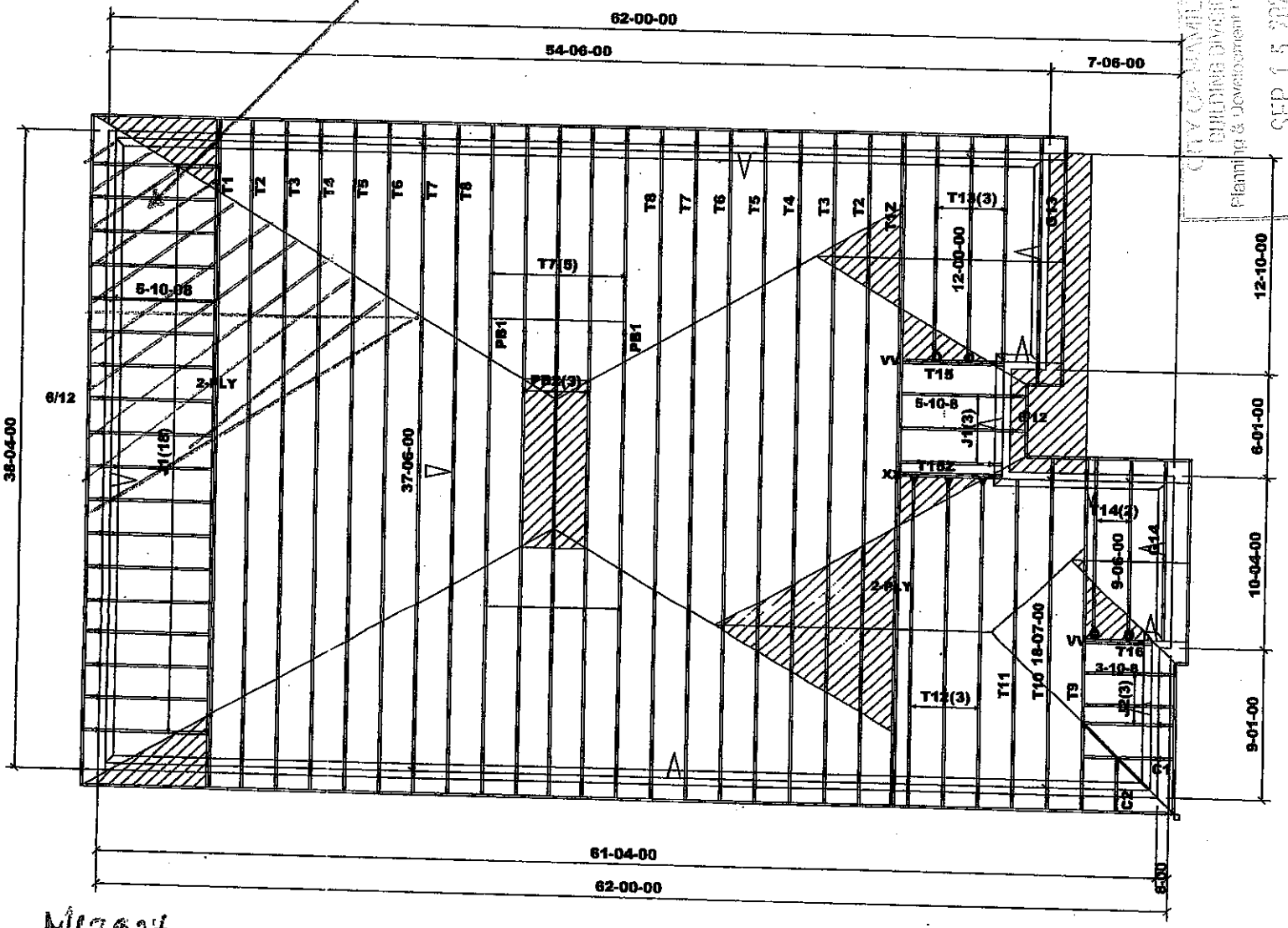
Rear Upgrade




CITY OF HAMILTON
BUILDING DIVISION
Planning & Development Department
SEP 15 2021
DATE
DATE
RECD BY
APPD BY

**10/12 ROOF PITCH UNLESS NOTED**

ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

All conventional framing to conform with Part 9 of O.B.C. 2012 ( 2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 31.35 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

**HARDWARE:**
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
LUS26-2 (VV)
H2.5T (/)

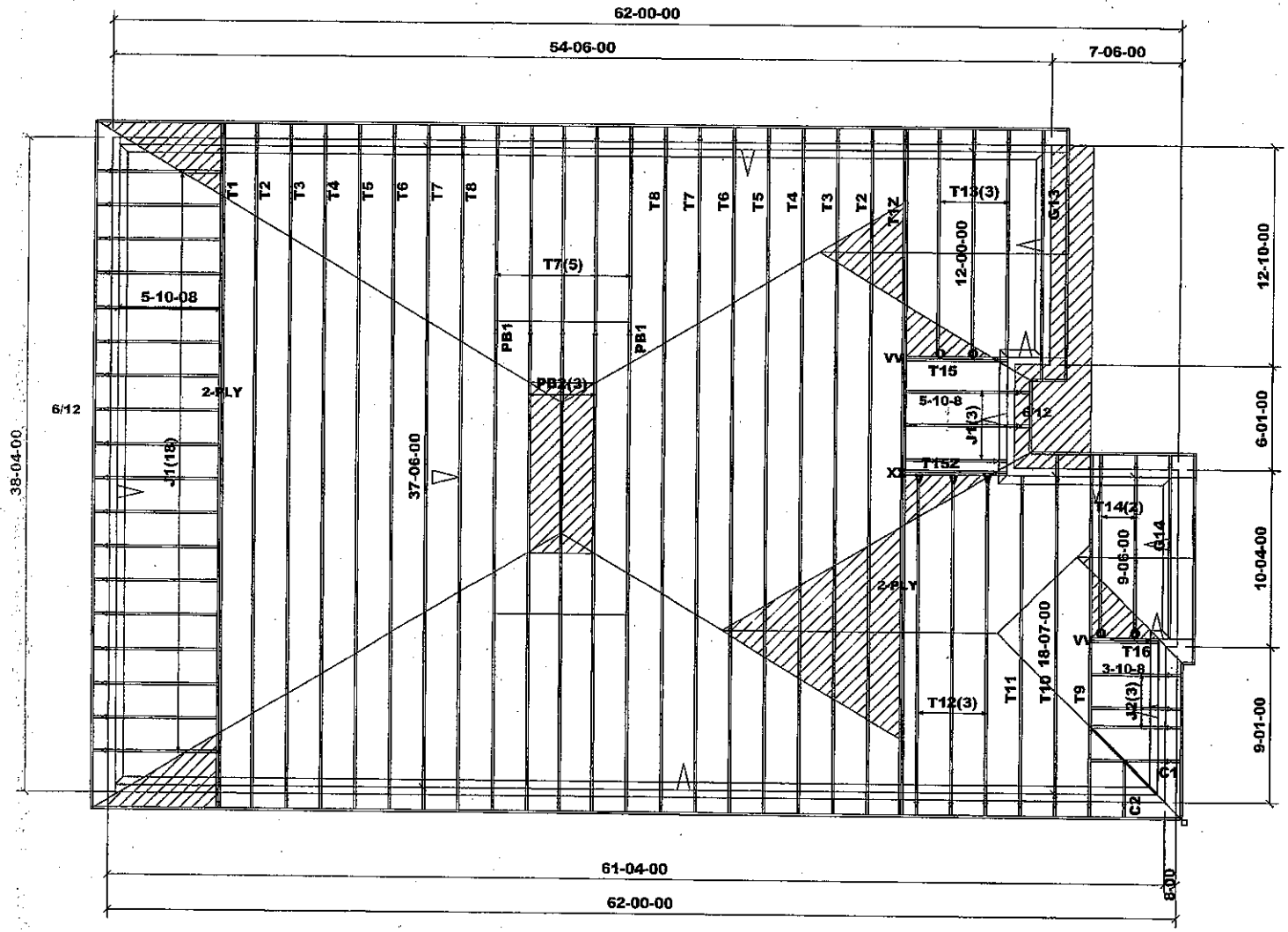
**DENOTES:**
CONVENTIONAL FRAMING

M13804

| | | | |
|---|---|---|---|
| TAMARACK ROOF TRUSSES INC. | Job Track: **52166** | Builder / Location: **GREENPARK HOMES / HAMILTON** | Model / Elevation: **SPRINGFIELD 4 /** 1-STD OR OPT 5 BRM DECK CONDITION WITH REAR UPGR |
| | Plan Log: **204501** | Project: **RUSSELL GARDENS PH.4** | |
| | Layout ID: **417535** | Date: 2021-03-24 Sales: William Garcia Designer: JG | |

THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.

Mitek ver 8.4.2.286




**10/12 ROOF PITCH UNLESS NOTED**

ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

All conventional framing to conform with Part 9 of O.B.C. 2012 ( 2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 31.35 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

**HARDWARE:**
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
LUS26-2 (VV)
H2.5T (/)

**DENOTES:**
CONVENTIONAL FRAMING

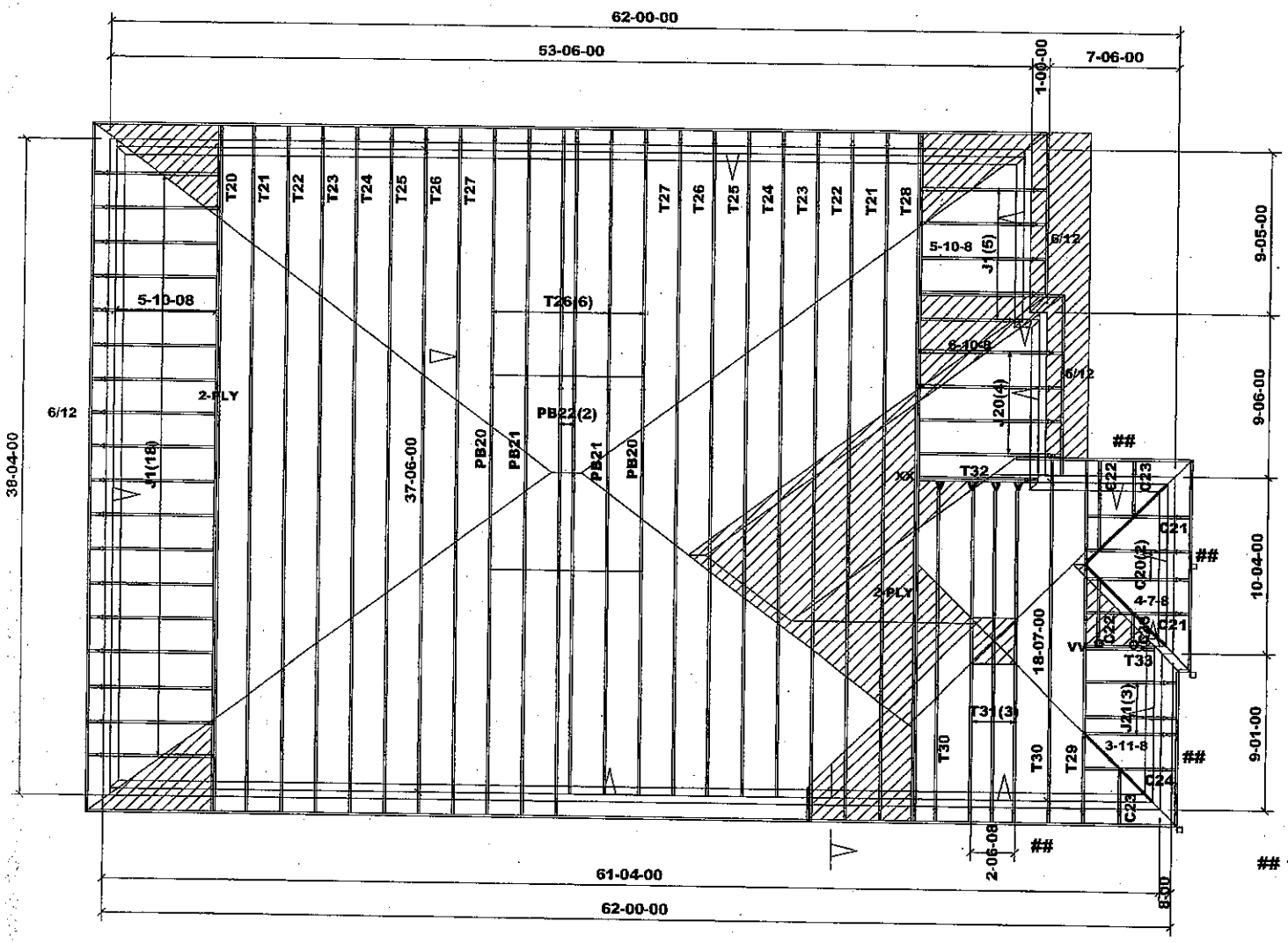
M13807

TAMARACK ROOF TRUSSES INC.

| | | | |
|---|---|---|---|
| Job Track: **52166** | Builder / Location: **GREENPARK HOMES / HAMILTON** | | Model / Elevation: **SPRINGFIELD 4 / 1 -STD OR OPT.5 BRM** |
| Plan Log: **204501** | Project: **RUSSELL GARDENS PH.4** | | |
| Layout ID: **417535** | Date: 2021-03-24 | Sales: William Garcia | Designer: JG |

THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.

Mitek ver 8.4.2.286




**8/12 ROOF PITCH UNLESS NOTED**

ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

All conventional framing to conform with Part 9 of O.B.C. 2012 ( 2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 31.35 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

**HARDWARE:**
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
LUS26-2 (VV)
H2.5T (/)

**DENOTES:**
CONVENTIONAL FRAMING

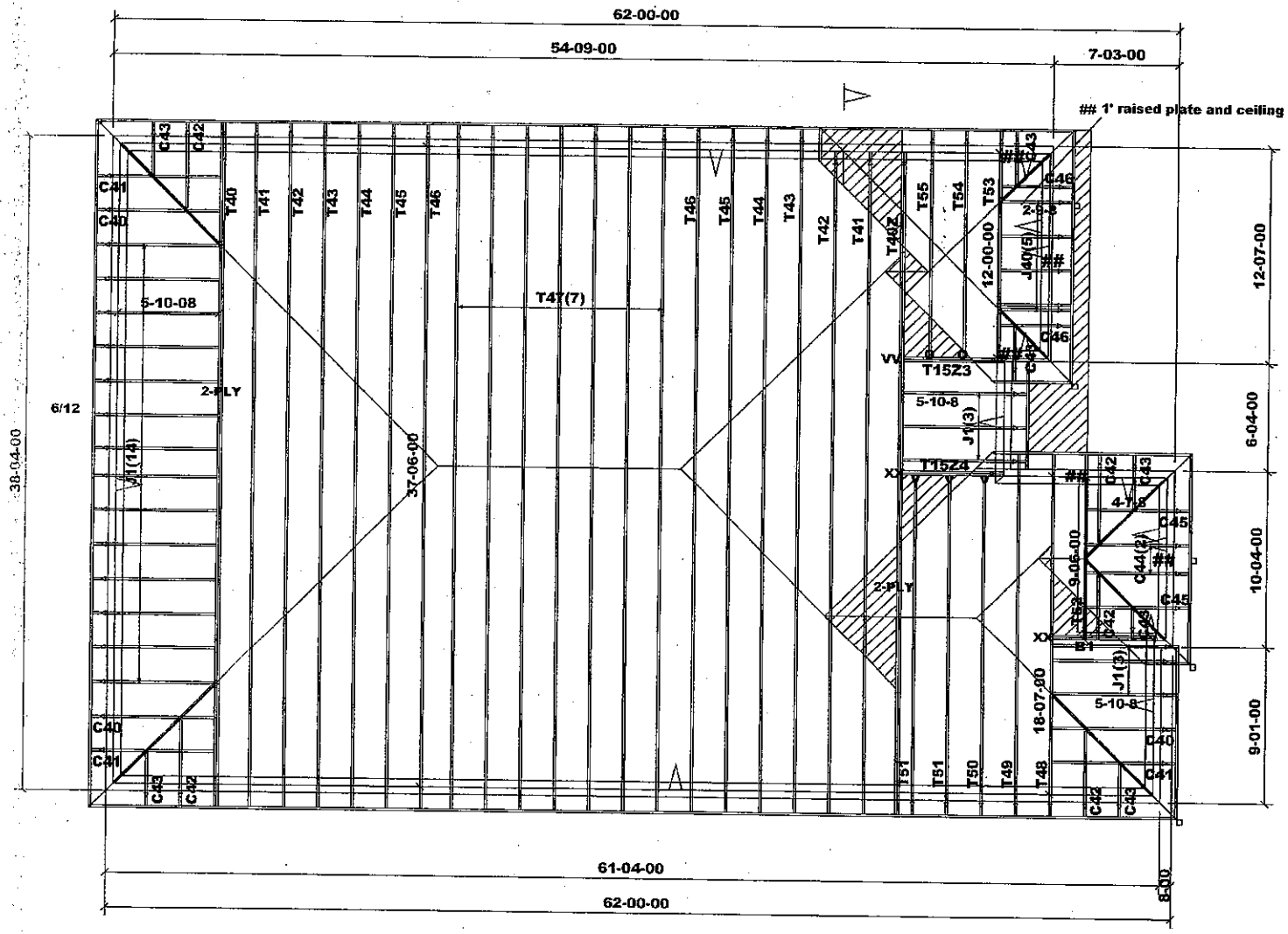
**## 1-4-0 raised fascia**

M13807

| | | | |
|---|---|---|---|
| TAMARACK ROOF TRUSSES INC. | Job Track: **52166** | Builder / Location: **GREENPARK HOMES / HAMILTON** | Model / Elevation: **SPRINGFIELD 4 / 2 -STD OR OPT.5 BRM** |
| | Plan Log: **204501** | Project: **RUSSELL GARDENS PH.4** | |
| | Layout ID: **417536** | Date: 2021-03-24 Sales: William Garcia Designer: JG | |

THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.

Mitek ver 8.4.2.286




**6/12 ROOF PITCH UNLESS NOTED**

ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

All conventional framing to conform with Part 9 of O.B.C. 2012 ( 2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 31.35 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

**HARDWARE:**
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
LUS26-2 (VV)
H2.5T (/)

**BEAMS:**
B1 = 2 - 2x10 SPF #2

**build up to reach 1' in height on B1**

**DENOTES:** CONVENTIONAL FRAMING

M13807

TAMARACK ROOF TRUSSES INC.

| | | | |
|---|---|---|---|
| Job Track: 52166 | Builder / Location: GREENPARK HOMES / HAMILTON | | Model / Elevation: SPRINGFIELD 4 / 3-STD.OR OPT.5 BRM |
| Plan Log: 204501 | Project: RUSSELL GARDENS PH.4 | | |
| Layout ID: 417537 | Date: 2021-03-24 | Sales: William Garcia | Designer: JG |

THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.

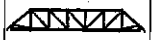
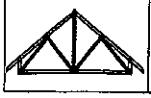
Mitek ver 8.4.2.286

# DELIVERY SHIPLIST

**TAMARACK ROOF TRUSSES INC.**
ALPA LUMBER GROUP

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417535 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 1 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 1 -STD OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

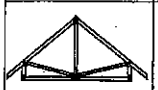
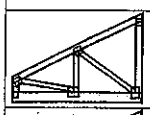
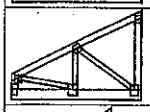
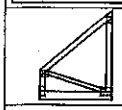
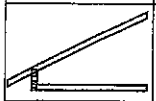
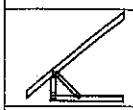
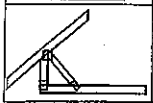
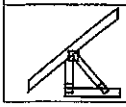
| PROFILE | QTY<br>PLY | MARK<br>TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT. | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1<br>2-ply | T1<br>Hip Girder | 10 /12 | **37-06-00** | 4-01-04 | 2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 426.46<br>260.00 | | |
| | 1<br>2-ply | T1Z<br>Hip Girder | 10 /12 | **37-06-00** | 4-01-04 | 2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 426.46<br>260.00 | | |
| | 2 | T2<br>Hip | 10 /12 | **37-06-00** | 5-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 355.79<br>223.33 | | |
|  | 2 | T3<br>Hip | 10 /12 | **37-06-00** | 6-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 373.56<br>232.00 | | |
| | 2 | T4<br>Hip | 10 /12 | **37-06-00** | 7-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 384.69<br>237.67 | | |
| | 2 | T5<br>Hip | 10 /12 | **37-06-00** | 8-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 409.05<br>257.33 | | |
| | 2 | T6<br>Hip | 10 /12 | **37-06-00** | 9-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 425.02<br>262.00 | | |
| | 7 | T7<br>Hip | 10 /12 | **37-06-00** | 10-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 1546.66<br>954.33 | | |
| | 2 | T8<br>Hip | 10 /12 | **37-06-00** | 11-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 452.62<br>273.33 | | |
| | 1 | T9<br>Hip Girder | 10 /12 | **18-07-00** | 4-10-07 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 92.42<br>58.17 | | |
| | 1 | T10<br>Hip | 10 /12 | **18-07-00** | 6-06-07 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 83.59<br>52.33 | | |
| | 1 | T11<br>Hip | 10 /12 | **18-07-00** | 8-02-07 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 92.47<br>58.67 | | |
| | 3 | T12<br>Common | 10 /12 | **18-07-00** | 9-04-09 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 270.15<br>175.00 | | |
|  | 3 | T13<br>Common | 10 /12 | **12-00-00** | 6-07-11 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 174.27<br>111.00 | | |

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417535 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 2 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 1 -STD OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

| PROFILE | QTY PLY | MARK TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG LEFT RIGHT | HEEL HEIGHT LEFT RIGHT | LBS. BFT. | BUNDLE # STACK # | LOAD BY REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | G13 GABLE | 10 /12 | **12-00-00** | 6-07-11 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 58.36<br>38.00 | | |
|  | 2 | T14 Common | 10 /12 | **9-06-00** | 5-07-03 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 86.91<br>57.67 | | |
| | 1 | G14 GABLE | 10 /12 | **9-06-00** | 5-07-03 | 2 x 4 | 1-03-08<br>1-03-08 | 1-07-11<br>1-07-11 | 45.86<br>30.83 | | |
|  | 1<br>2-ply | T15 Jack-Closed Girder | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4<br>2 x 6 | | 1-02-00<br>4-01-04 | 57.64<br>37.00 | | |
|  | 1<br>2-ply | T15Z Jack-Closed Girder | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4<br>2 x 6 | | 1-02-00<br>4-01-04 | 57.64<br>37.00 | | |
|  | 1<br>2-ply | T16 Jack-Closed Girder | 10 /12 | **3-10-08** | 4-10-07 | 2 x 4<br>2 x 6 | | 1-07-11<br>4-10-07 | 43.14<br>29.33 | | |
| | 2 | PB1 Piggyback | 10 /12 | **17-02-03** | 2-00-00 | 2 x 4 | | | 104.51<br>69.33 | | |
| | 3 | PB2 Piggyback | 10 /12 | **17-02-03** | 3-00-00 | 2 x 4 | | | 162.63<br>103.50 | | |
|  | 21 | J1 Jack-Open | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4 | 1-03-08 | 1-02-00<br>4-01-04 | 352.68<br>224.00 | | |
|  | 3 | J2 Jack-Open | 10 /12 | **3-10-08** | 4-10-07 | 2 x 4 | 1-03-08 | 1-07-11<br>4-10-07 | 45.67<br>29.00 | | |
|  | 1 | C1 Jack-Open | 10 /12 | **1-09-07** | 3-01-09 | 2 x 4 | 1-03-08<br>2-01-01 | 1-07-11<br>3-01-09 | 12.02<br>8.33 | | |
|  | 1 | C2 Jack-Open | 10 /12 | **1-09-07** | 3-01-09 | 2 x 4 | 1-03-08<br>1-01 | 1-07-11<br>3-01-09 | 9.74<br>7.00 | | |

TOTAL # TRUSS= **73** TOTAL BFT OF ALL TRUSSES= **4086.15** BFT. TOTAL WEIGHT OF ALL TRSSES **6550** LBS

## *HARDWARE*

| QTY | TYPE | MODEL | LENGTH |
|---|---|---|---|
| 2 | Hardware | HGUS26-2 | |
| 3 | Hardware | LJS26DS | |

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417535 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 3 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 1 -STD OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *HARDWARE*

| QTY | TYPE | MODEL | LENGTH |
|---|---|---|---|
| 4 | Hardware | LUS24 | |
| 1 | Hardware | LUS26-2 | |

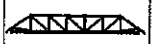
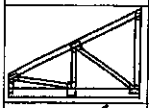
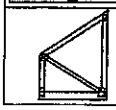
TOTAL NUMBER OF ITEMS= **10**

# DELIVERY SHIPLIST

**TAMARACK ROOF TRUSSES INC.**
ALPA LUMBER GROUP

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417536 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 1 of 2 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 2 -STD OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

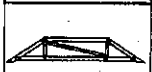
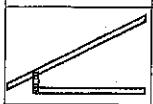
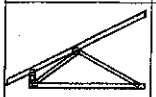
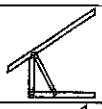
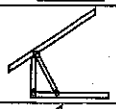
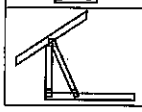
| PROFILE | QTY PLY | MARK TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG LEFT RIGHT | HEEL HEIGHT LEFT RIGHT | LBS. BFT. | BUNDLE # STACK # | LOAD BY REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 2-ply | T20 Hip Girder | 8 /12 | **37-06-00** | 4-01-06 | 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 416.04 248.00 | | |
|  | 2 | T21 Hip | 8 /12 | **37-06-00** | 5-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 353.02 217.00 | | |
| | 2 | T22 Hip | 8 /12 | **37-06-00** | 6-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 363.78 223.33 | | |
| | 2 | T23 Hip | 8 /12 | **37-06-00** | 7-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 370.21 228.67 | | |
| | 2 | T24 Hip | 8 /12 | **37-06-00** | 8-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 385.48 237.33 | | |
| | 2 | T25 Hip | 8 /12 | **37-06-00** | 9-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 391.16 237.00 | | |
| | 8 | T26 Hip | 8 /12 | **37-06-00** | 10-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 1616.99 989.33 | | |
| | 2 | T27 Hip | 8 /12 | **37-06-00** | 11-01-04 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 438.75 267.33 | | |
| | 1 2-ply | T28 Roof Special Girder | 8 /12 | **37-06-00** | 4-07-06 | 2 x 6 | 1-03-08 1-03-08 | 1-04-13 1-04-13 | 440.65 268.67 | | |
| | 1 | T29 Roof Special Girder | 8 /12 | **18-07-00** | 5-09-13 | 2 x 4 2 x 6 | 1-03-08 1-03-08 | 2-08-13 2-08-13 | 98.74 62.83 | | |
| | 2 | T30 Hip | 8 /12 | **18-07-00** | 6-08-08 | 2 x 4 | 1-03-08 1-03-08 | 2-08-13 2-08-13 | 170.9 108.67 | | |
| | 3 | T31 Hip | 8 /12 | **18-07-00** | 8-00-08 | 2 x 4 | 1-03-08 1-03-08 | 2-08-13 2-08-13 | 280.91 182.00 | | |
|  | 1 2-ply | T32 Jack-Closed Girder | 6 /12 | **6-10-08** | 4-07-04 | 2 x 4 2 x 6 | | 1-02-00 4-07-04 | 67.02 42.33 | | |
|  | 1 2-ply | T33 Jack-Closed Girder | 8 /12 | **3-11-08** | 5-04-08 | 2 x 4 2 x 6 | | 2-08-13 5-04-08 | 47.22 29.33 | | |

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417536 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 2 of 2 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 2 -STD OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

| PROFILE | QTY PLY | MARK TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG LEFT RIGHT | HEEL HEIGHT LEFT RIGHT | LBS. BFT. | BUNDLE # STACK # | LOAD BY REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 2 | PB20 Piggyback | 8 /12 | **11-04-11** | 2-00-00 | 2 x 4 | | | 63.68 42.00 | | |
| | 2 | PB21 Piggyback | 8 /12 | **11-04-11** | 3-00-00 | 2 x 4 | | | 64.87 43.33 | | |
| | 2 | PB22 Piggyback | 8 /12 | **11-04-11** | 3-09-09 | 2 x 4 | | | 58.55 36.00 | | |
|  | 23 | J1 Jack-Open | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4 | 1-03-08 | 1-02-00 4-01-04 | 386.27 245.33 | | |
|  | 4 | J20 Jack-Open | 6 /12 | **6-10-08** | 4-07-04 | 2 x 4 | 1-03-08 | 1-02-00 4-07-04 | 101.35 66.00 | | |
|  | 3 | J21 Jack-Open | 8 /12 | **3-11-08** | 5-04-08 | 2 x 4 | 1-03-08 | 2-08-13 5-04-08 | 50.09 32.50 | | |
|  | 2 | C20 Jack-Open | 8 /12 | **3-09-07** | 5-03-02 | 2 x 4 | 1-03-08 10-01 | 2-08-13 5-03-02 | 34.45 23.00 | | |
| | 2 | C21 Jack-Open | 8 /12 | **1-09-07** | 3-11-02 | 2 x 4 | 1-03-08 2-10-01 | 2-08-13 3-11-02 | 28.84 19.00 | | |
| | 2 | C22 Jack-Open | 8 /12 | **1-10-08** | 5-03-02 | 2 x 4 | 1-03-08 1-10-15 | 2-08-13 3-11-13 | 28.11 19.00 | | |
| | 3 | C23 Jack-Open | 8 /12 | **1-10-08** | 3-11-02 | 2 x 4 | | 2-08-13 3-11-13 | 28.63 20.50 | | |
|  | 1 | C24 Jack-Open | 8 /12 | **1-09-07** | 3-11-02 | 2 x 4 | 1-03-08 2-02-01 | 2-08-13 3-11-02 | 13.66 8.83 | | |

TOTAL # TRUSS= **80** TOTAL BFT OF ALL TRUSSES= **3897.31** BFT. TOTAL WEIGHT OF ALL TRSSES **6299.37** LBS

## *HARDWARE*

| QTY | TYPE | MODEL | LENGTH |
|---|---|---|---|
| 1 | Hardware | HGUS26-2 | |
| 4 | Hardware | LJS26DS | |
| 2 | Hardware | LUS24 | |
| 1 | Hardware | LUS26-2 | |

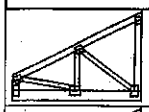
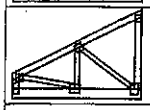
TOTAL NUMBER OF ITEMS= **8**

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417537 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 1 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 3-STD.OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

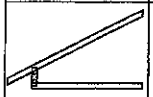
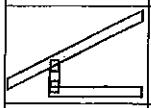
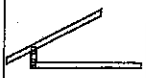
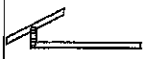
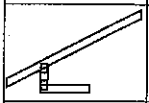
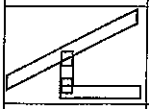
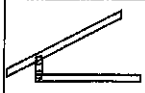
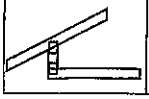
| PROFILE | QTY<br>PLY | MARK<br>TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT. | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 1<br>2-ply | T15Z3<br>Jack-Closed<br>Girder | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4<br>2 x 6 | | 1-02-00<br>4-01-04 | 57.64<br>37.00 | | |
|  | 1<br>2-ply | T15Z4<br>Jack-Closed<br>Girder | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4<br>2 x 6 | | 1-02-00<br>4-01-04 | 57.64<br>37.00 | | |
| | 1<br>2-ply | T40<br>Hip Girder | 6 /12 | **37-06-00** | 4-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 361.1<br>218.67 | | |
| | 1<br>2-ply | T40Z<br>Hip Girder | 6 /12 | **37-06-00** | 4-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 361.1<br>218.67 | | |
| | 2 | T41<br>Hip | 6 /12 | **37-06-00** | 5-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 350.04<br>215.00 | | |
| | 2 | T42<br>Hip | 6 /12 | **37-06-00** | 6-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 352.28<br>214.67 | | |
| | 2 | T43<br>Hip | 6 /12 | **37-06-00** | 7-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 349.77<br>213.67 | | |
| | 2 | T44<br>Hip | 6 /12 | **37-06-00** | 8-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 362.67<br>221.33 | | |
| | 2 | T45<br>Hip | 6 /12 | **37-06-00** | 9-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 368.85<br>225.33 | | |
| | 2 | T46<br>Hip | 6 /12 | **37-06-00** | 10-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 387.35<br>237.33 | | |
| | 7 | T47<br>Common | 6 /12 | **37-06-00** | 10-06-08 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 1340.43<br>809.67 | | |
| | 1 | T48<br>Hip Girder | 6 /12 | **18-07-00** | 4-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08 | 1-02-00<br>2-02-00 | 87.76<br>56.33 | | |
| | 1 | T49<br>Hip | 6 /12 | **18-07-00** | 5-01-04 | 2 x 4 | 1-03-08<br>1-03-08 | 1-02-00<br>2-02-00 | 75.33<br>47.83 | | |
| | 1 | T50<br>Hip | 6 /12 | **18-07-00** | 6-01-04 | 2 x 4 | 1-03-08 | 1-02-00<br>2-02-00 | 78.18<br>49.50 | | |

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417537 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 2 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 3-STD.OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## *Roof Trusses*

| PROFILE | QTY<br>PLY | MARK<br>TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT. | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | T51<br>Common | 6 /12 | **18-07-00** | 6-03-12 | 2 x 4 | 1-03-08 | 1-02-00<br>2-02-00 | 151.29<br>96.33 | | |
| | 1 | T52<br>Hip Girder | 6 /12 | **9-06-00** | 3-05-12 | 2 x 4 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 37.65<br>23.83 | | |
| | 1 | T53<br>Hip Girder | 6 /12 | **12-00-00** | 2-06-12 | 2 x 4 | 1-03-08<br>1-03-08 | 1-02-00<br>1-02-00 | 48.1<br>30.67 | | |
| | 1 | T54<br>Hip | 6 /12 | **12-00-00** | 4-06-12 | 2 x 4 | 1-03-08 | 2-02-00<br>2-02-00 | 52.44<br>32.83 | | |
| | 1 | T55<br>Hip | 6 /12 | **12-00-00** | 4-08-08 | 2 x 4 | 1-03-08 | 2-02-00<br>2-02-00 | 53.13<br>34.83 | | |
|  | 20 | J1<br>Jack-Open | 6 /12 | **5-10-08** | 4-01-04 | 2 x 4 | 1-03-08 | 1-02-00<br>4-01-04 | 335.89<br>213.33 | | |
|  | 5 | J40<br>Jack-Open | 6 /12 | **2-09-08** | 2-06-12 | 2 x 4 | 1-03-08 | 1-02-00<br>2-06-12 | 46.74<br>30.00 | | |
|  | 3 | C40<br>Jack-Open | 6 /12 | **3-09-07** | 3-00-12 | 2 x 4 | 1-03-08<br>2-01-01 | 1-02-00<br>3-00-12 | 42.4<br>26.00 | | |
|  | 3 | C41<br>Jack-Open | 6 /12 | **1-09-07** | 2-00-12 | 2 x 4 | 1-03-08<br>4-01-01 | 1-02-00<br>2-00-12 | 34.75<br>22.00 | | |
|  | 5 | C42<br>Jack-Open | 6 /12 | **1-10-08** | 3-00-12 | 2 x 4 | 1-03-08<br>1-10-15 | 1-02-00<br>2-01-04 | 47.85<br>30.00 | | |
|  | 7 | C43<br>Jack-Open | 6 /12 | **1-09-07** | 2-00-12 | 2 x 4 | 1-03-08<br>1-01 | 1-02-00<br>2-00-12 | 49.15<br>32.67 | | |
|  | 2 | C44<br>Jack-Open | 6 /12 | **3-09-07** | 3-00-12 | 2 x 4 | 1-03-08<br>10-01 | 1-02-00<br>3-00-12 | 25.41<br>16.00 | | |
| | 2 | C45<br>Jack-Open | 6 /12 | **1-09-07** | 2-00-12 | 2 x 4 | 1-03-08<br>2-10-01 | 1-02-00<br>2-00-12 | 20.31<br>13.33 | | |
|  | 2 | C46<br>Jack-Open | 6 /12 | **1-09-07** | 2-00-12 | 2 x 4 | 1-03-08<br>1-00-01 | 1-02-00<br>2-00-12 | 16.13<br>10.67 | | |

TAMARACK
ROOF TRUSSES INC.
ALPA LUMBER GROUP

# DELIVERY SHIPLIST

| | | | |
|---|---|---|---|
| Lumber Yard: | TAMARACK LUMBER | Job Track: | 52166 |
| Builder: | GREENPARK HOMES | PlanLog: | 204501 |
| Project: | RUSSELL GARDENS PH.4 | Layout ID: | 417537 |
| Location: | HAMILTON | Ref # | |
| Model: | SPRINGFIELD 4 | Page: | 3 of 3 |
| Lot #: | | Date: | 03-24-2021 |
| Elevation: | 3-STD.OR OPT.5 BRM | Designer: | |
| | | Sales Rep: | William Garcia |

## Roof Trusses

| PROFILE | QTY PLY | MARK TYPE | PITCH | SPAN | HEIGHT | LUMBER | OVERHANG LEFT RIGHT | HEEL HEIGHT LEFT RIGHT | LBS. BFT. | BUNDLE # STACK # | LOAD BY REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|

TOTAL # TRUSS= **85** TOTAL BFT OF ALL TRUSSES= **3414.49** BFT. TOTAL WEIGHT OF ALL TRSSES **5551.37** LBS

## HARDWARE

| QTY | TYPE | MODEL | LENGTH |
|---|---|---|---|
| 2 | Hardware | HGUS26-2 | |
| 3 | Hardware | LJS26DS | |
| 2 | Hardware | LUS24 | |
| 1 | Hardware | LUS26-2 | |

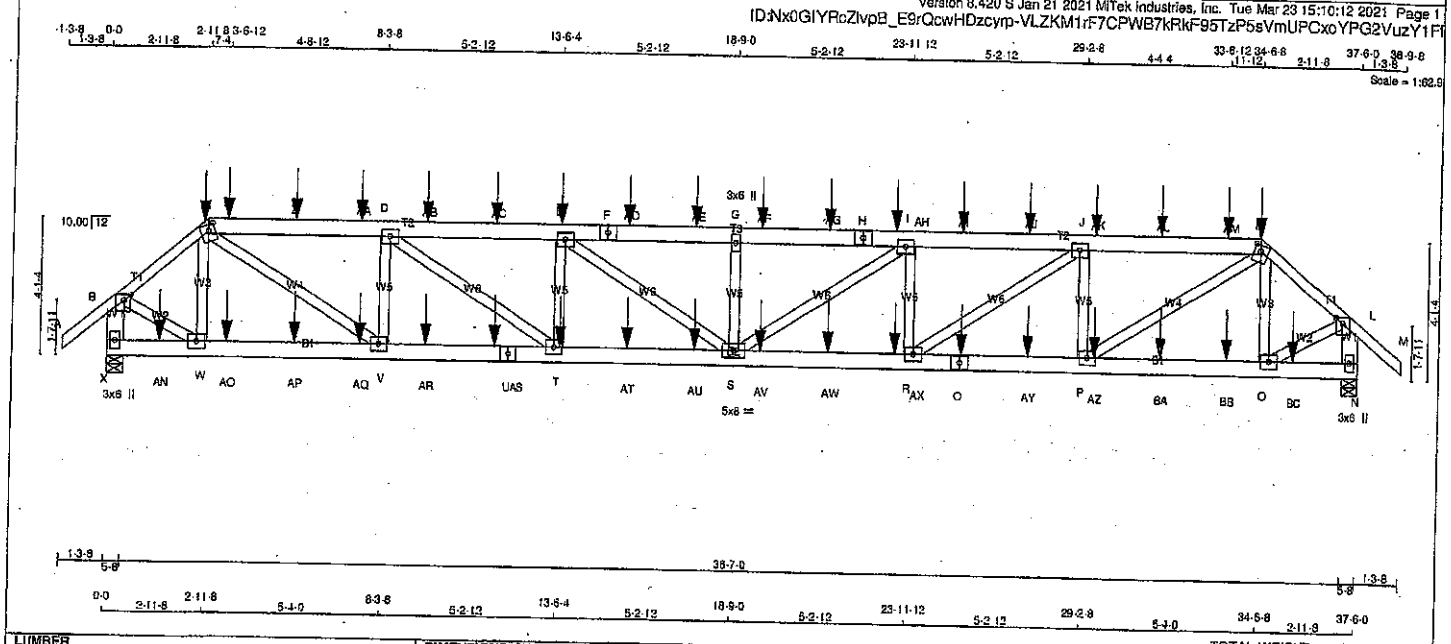
TOTAL NUMBER OF ITEMS= **8**

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T1 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Tue Mar 23 15:10:12 2021 Page 1

ID:Nx0GIYRcZlvpB_E9rQcwHDzcyrp-VLZKM1rF7CPWB7kRkF95TzP5sVmUPCxoYPG2VuzY1Ff




**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x6 | DRY | No.2 | SPF |
| F - H | 2x6 | DRY | No.2 | SPF |
| H - K | 2x6 | DRY | No.2 | SPF |
| K - M | 2x4 | DRY | No.2 | SPF |
| X - B | 2x6 | DRY | No.2 | SPF |
| N - L | 2x6 | DRY | No.2 | SPF |
| X - U | 2x6 | DRY | No.2 | SPF |
| U - Q | 2x6 | DRY | No.2 | SPF |
| Q - N | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A- C | 1 | 12 | SIDE(61.0) |
| K- M | 1 | 12 | SIDE(61.0) |
| C- F | 2 | 12 | SIDE(183.1) |
| F- H | 2 | 12 | SIDE(0.0) |
| H- K | 2 | 12 | SIDE(183.1) |
| X- B | 2 | 12 | TOP |
| N- L | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| X- U | 2 | 12 | SIDE(0.0) |
| U- Q | 2 | 12 | SIDE(183.1) |
| Q- N | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

Structural component only
DWG# T-2108621

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| X | 3568 | 0 | 3568 | 0 | 0 | 5-8 | 5-8 |
| N | 3532 | 0 | 3532 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| X | 2522 | 1662 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 860 / 0 | 0 / 0 |
| N | 2496 | 1644 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 852 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.95 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 CSI | MAX (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.07 (1) | | 10.00 |
| B- C | -3397 / 0 | -91.8 | -91.8 | 0.12 (1) | | 4.97 |
| C- Y | -6170 / 0 | -91.8 | -91.8 | 0.22 (1) | | 4.61 |
| Y- Z | -6170 / 0 | -91.8 | -91.8 | 0.22 (1) | | 4.61 |
| Z-AA | -6170 / 0 | -91.8 | -91.8 | 0.22 (1) | | 4.61 |
| AA- D | -6170 / 0 | -91.8 | -91.8 | 0.22 (1) | | 4.61 |
| D-AB | -8137 / 0 | -91.8 | -91.8 | 0.26 (1) | | 4.08 |
| AB-AC | -8137 / 0 | -91.8 | -91.8 | 0.26 (1) | | 4.08 |
| AC- E | -8137 / 0 | -91.8 | -91.8 | 0.26 (1) | | 4.08 |
| E- F | -8801 / 0 | -91.8 | -91.8 | 0.25 (1) | | 3.96 |
| F-AD | -8801 / 0 | -91.8 | -91.8 | 0.25 (1) | | 3.96 |
| AD-AE | -8801 / 0 | -91.8 | -91.8 | 0.25 (1) | | 3.96 |
| AE- G | -8801 / 0 | -91.8 | -91.8 | 0.25 (1) | | 3.96 |
| G-AF | -8801 / 0 | -91.8 | -91.8 | 0.25 (1) | | 3.95 |
| AF-AG | -8801 / 0 | -91.8 | -91.8 | 0.26 (1) | | 3.95 |
| AG- H | -8801 / 0 | -91.8 | -91.8 | 0.26 (1) | | 3.95 |
| H-AH | -8801 / 0 | -91.8 | -91.8 | 0.26 (1) | | 3.95 |
| AH- I | -8801 / 0 | -91.8 | -91.8 | 0.26 (1) | | 3.95 |
| I-AI | -8127 / 0 | -91.8 | -91.8 | 0.25 (1) | | 4.09 |
| AI-AJ | -8127 / 0 | -91.8 | -91.8 | 0.25 (1) | | 4.09 |
| AJ- J | -8127 / 0 | -91.8 | -91.8 | 0.25 (1) | | 4.09 |
| J-AK | -6150 / 0 | -91.8 | -91.8 | 0.21 (1) | | 4.63 |
| AK-AL | -6150 / 0 | -91.8 | -91.8 | 0.21 (1) | | 4.63 |
| AL-AM | -6150 / 0 | -91.8 | -91.8 | 0.21 (1) | | 4.63 |
| AM- K | -6150 / 0 | -91.8 | -91.8 | 0.21 (1) | | 4.63 |
| K- L | -3363 / 0 | -91.8 | -91.8 | 0.12 (1) | | 5.00 |
| L- M | 0 / 41 | -91.8 | -91.8 | 0.07 (1) | | 10.00 |
| X- B | -3562 / 0 | 0.0 | 0.0 | 0.13 (1) | | 7.43 |
| N- L | -3529 / 0 | 0.0 | 0.0 | 0.13 (1) | | 7.45 |
| X-AN | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | | 10.00 |
| AN- W | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | | 10.00 |
| W-AO | 0 / 2656 | -18.5 | -18.5 | 0.21 (1) | | 10.00 |
| AO-AP | 0 / 2656 | -18.5 | -18.5 | 0.21 (1) | | 10.00 |
| AP-AQ | 0 / 2656 | -18.5 | -18.5 | 0.21 (1) | | 10.00 |
| AQ- V | 0 / 2656 | -18.5 | -18.5 | 0.21 (1) | | 10.00 |
| V-AR | 0 / 6170 | -18.5 | -18.5 | 0.45 (1) | | 10.00 |
| AR-AS | 0 / 6170 | -18.5 | -18.5 | 0.45 (1) | | 10.00 |
| AS- U | 0 / 6170 | -18.5 | -18.5 | 0.45 (1) | | 10.00 |
| U- T | 0 / 6170 | -18.5 | -18.5 | 0.45 (1) | | 10.00 |
| T-AT | 0 / 8137 | -18.5 | -18.5 | 0.58 (1) | | 10.00 |
| AT-AU | 0 / 8137 | -18.5 | -18.5 | 0.58 (1) | | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| W- C | -955 / 0 | 0.08 (1) |
| C- V | 0 / 4284 | 0.38 (1) |
| V- D | -2261 / 0 | 0.19 (1) |
| D- T | 0 / 2398 | 0.21 (1) |
| T- E | -1205 / 0 | 0.10 (1) |
| E- S | 0 / 810 | 0.07 (1) |
| S- G | -775 / 0 | 0.07 (1) |
| S- I | 0 / 822 | 0.07 (1) |
| R- I | -1212 / 0 | 0.10 (1) |
| R- J | 0 / 2411 | 0.21 (1) |
| P- J | -2266 / 0 | 0.19 (1) |
| P- K | 0 / 4272 | 0.38 (1) |
| O- K | -945 / 0 | 0.08 (1) |
| B- W | 0 / 2854 | 0.25 (1) |
| O- L | 0 / 2825 | 0.25 (1) |

TOTAL WEIGHT = 2 X 213 = 426 lb (M)

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.22")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.41")

CSI: TC=0.28/1.00 (G-I:1) , BC=0.58/1.00 (R-S:1) , WB=0.38/1.00 (K-P:1) , SSI=0.16/1.00 (J-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90 )
JSI METAL= 0.57 (U) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T1 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington



**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 5.0 | 6.0 | 2.00 | 2.25 |
| C | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 2.25 |
| D, E, I, J | | | | | | |
| D | TMWW-t | MT20 | 5.0 | 6.0 | | |
| F | TS-t | MT20 | 5.0 | 6.0 | | |
| G | TMW+w | MT20 | 3.0 | 6.0 | | |
| H | TS-t | MT20 | 5.0 | 6.0 | | |
| K | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 2.25 |
| L | TMVW+p | MT20 | 5.0 | 6.0 | 2.00 | 2.25 |
| N | BMV1+p | MT20 | 3.0 | 6.0 | | |
| O, P, R, T, V, W | | | | | | |
| O | BMWW-t | MT20 | 5.0 | 6.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| S | BMWWW-t | MT20 | 5.0 | 6.0 | | |
| U | BS-t | MT20 | 5.0 | 6.0 | | |
| X | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| AU- S | 0 / 8137 | -18.5 | -18.5 | 0.58 (1) | 10.00 | |
| S-AV | 0 / 8127 | -18.5 | -18.5 | 0.58 (1) | 10.00 | |
| AV-AW | 0 / 8127 | -18.5 | -18.5 | 0.58 (1) | 10.00 | |
| AW-AX | 0 / 8127 | -18.5 | -18.5 | 0.58 (1) | 10.00 | |
| AX- R | 0 / 8127 | -18.5 | -18.5 | 0.58 (1) | 10.00 | |
| R- Q | 0 / 6150 | -18.5 | -18.5 | 0.45 (1) | 10.00 | |
| Q-AY | 0 / 6150 | -18.5 | -18.5 | 0.45 (1) | 10.00 | |
| AY- P | 0 / 6150 | -18.5 | -18.5 | 0.45 (1) | 10.00 | |
| P-AZ | 0 / 2629 | -18.5 | -18.5 | 0.20 (1) | 10.00 | |
| AZ-BA | 0 / 2629 | -18.5 | -18.5 | 0.20 (1) | 10.00 | |
| BA-BB | 0 / 2629 | -18.5 | -18.5 | 0.20 (1) | 10.00 | |
| BB- O | 0 / 2629 | -18.5 | -18.5 | 0.20 (1) | 10.00 | |
| O-BC | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 | |
| BC- N | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 2-11-8 | -30 | -30 | --- | FRONT | VERT | DEAD | --- | C1 |
| C | 2-11-8 | -125 | -125 | --- | FRONT | VERT | SNOW | --- | C1 |
| E | 13-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| K | 34-6-8 | -30 | -30 | --- | FRONT | VERT | DEAD | --- | C1 |
| K | 34-6-8 | -125 | -125 | --- | FRONT | VERT | SNOW | --- | C1 |
| Q | 25-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| T | 13-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Y | 3-6-12 | -89 | -89 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Z | 5-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AA | 7-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AB | 9-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AC | 11-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AD | 15-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AE | 17-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AF | 19-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AG | 21-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AH | 23-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AI | 25-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AJ | 27-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AK | 29-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AL | 31-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AM | 33-6-12 | -77 | -77 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AN | 1-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AO | 3-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AP | 5-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AQ | 7-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AR | 9-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AS | 11-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AT | 15-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AU | 17-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AV | 19-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AW | 21-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AX | 23-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AY | 27-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AZ | 29-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| BA | 31-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| BB | 33-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| BC | 35-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108621

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T1Z | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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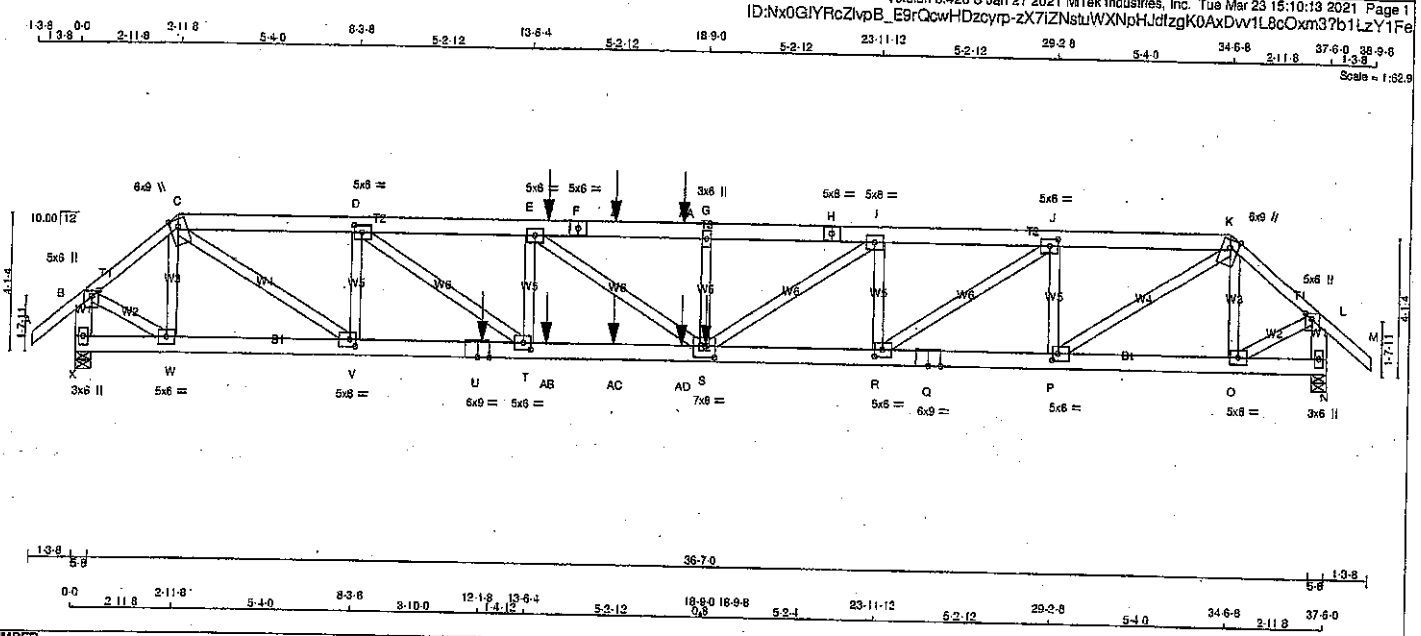


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x6 | DRY | No.2 | SPF |
| F - H | 2x6 | DRY | No.2 | SPF |
| H - K | 2x6 | DRY | No.2 | SPF |
| K - M | 2x4 | DRY | No.2 | SPF |
| X - B | 2x6 | DRY | No.2 | SPF |
| N - L | 2x6 | DRY | No.2 | SPF |
| X - U | 2x6 | DRY | No.2 | SPF |
| U - Q | 2x6 | DRY | No.2 | SPF |
| Q - N | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A- C | 1 | 12 | TOP |
| K- M | 1 | 12 | TOP |
| C- F | 2 | 12 | SIDE(0.0) |
| F- H | 2 | 12 | SIDE(0.0) |
| H- K | 2 | 12 | TOP |
| X- B | 2 | 12 | TOP |
| N- L | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| X- U | 2 | 12 | SIDE(0.0) |
| U- Q | 2 | 12 | SIDE(183.1) |
| Q- N | 2 | 12 | TOP |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| G- S | 1 | 5 | SIDE(357.2) |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108622 JL

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| X | 4219 | 0 | 4219 | 0 | 0 | 5-8 | 5-8 |
| N | 3760 | 0 | 3760 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LOASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| X | 2974 | 2007 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 967 / 0 | 0 / 0 |
| N | 2651 | 1784 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 867 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| B- C | -4046 / 0 | -91.8 | -91.8 | 0.14 (1) | 4.62 |
| C- D | -8361 / 0 | -91.8 | -91.8 | 0.23 (1) | 4.06 |
| D- E | -12082 / 0 | -91.8 | -91.8 | 0.34 (1) | 3.37 |
| E- Y | -13309 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.08 |
| Y- F | -13309 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.08 |
| F- Z | -13309 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.08 |
| Z- AA | -13309 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.08 |
| AA- G | -13309 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.08 |
| G- H | -13309 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.16 |
| H- I | -13309 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.16 |
| I- J | -10719 / 0 | -91.8 | -91.8 | 0.29 (1) | 3.61 |
| J- K | -7254 / 0 | -91.8 | -91.8 | 0.19 (1) | 4.35 |
| K- L | -3604 / 0 | -91.8 | -91.8 | 0.12 (1) | 4.85 |
| L- M | 0 / 41 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| X- B | -4193 / 0 | 0.0 | 0.0 | 0.15 (1) | 8.97 |
| N- L | -3764 / 0 | 0.0 | 0.0 | 0.14 (1) | 7.27 |
| X- W | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| W- V | 0 / 3171 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| V- U | 0 / 8360 | -18.5 | -18.5 | 0.88 (1) | 10.00 |
| U- T | 0 / 8360 | -18.5 | -18.5 | 0.88 (1) | 10.00 |
| T- AB | 0 / 12082 | -18.5 | -18.5 | 0.93 (1) | 10.00 |
| AB- AC | 0 / 12082 | -18.5 | -18.5 | 0.93 (1) | 10.00 |
| AC- AD | 0 / 12082 | -18.5 | -18.5 | 0.93 (1) | 10.00 |
| AD- S | 0 / 12082 | -18.5 | -18.5 | 0.93 (1) | 10.00 |
| S- R | 0 / 10719 | -18.5 | -18.5 | 0.80 (1) | 10.00 |
| R- Q | 0 / 7253 | -18.5 | -18.5 | 0.51 (1) | 10.00 |
| Q- P | 0 / 7253 | -18.5 | -18.5 | 0.51 (1) | 10.00 |
| P- O | 0 / 2820 | -18.5 | -18.5 | 0.21 (1) | 10.00 |
| O- N | 0 / 0 | -18.5 | -18.5 | 0.03 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| W- C | -1315 / 0 | 0.12 (1) |
| C- V | 0 / 6297 | 0.56 (1) |
| V- D | -3134 / 0 | 0.27 (1) |
| D- T | 0 / 4537 | 0.40 (1) |
| T- E | -1513 / 0 | 0.13 (1) |
| E- S | 0 / 1496 | 0.13 (1) |
| S- G | -637 / 0 | 0.05 (1) |
| S- I | 0 / 3158 | 0.28 (1) |
| R- I | -2261 / 0 | 0.19 (1) |
| R- J | 0 / 4225 | 0.37 (1) |
| P- J | -2981 / 0 | 0.25 (1) |
| P- K | 0 / 5379 | 0.48 (1) |
| O- K | -1072 / 0 | 0.09 (1) |
| B- W | 0 / 3399 | 0.30 (1) |
| O- L | 0 / 3028 | 0.27 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| S | 18-9-8 | -1457 | -1457 | --- | BACK | VERT | TOTAL | --- | C1 |
| U | 12-1-8 | -778 | -778 | --- | BACK | VERT | TOTAL | --- | C1 |
| Y | 14-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| Z | 16-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| AA | 18-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| AB | 14-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| AC | 16-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| AD | 18-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(65 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.33")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 761 (0.59")

CSI: TC=0.50/1.00 (E-G:1) , BC=0.93/1.00 (S-T:1) , WB=0.56/1.00 (C-V:1) , SSI=0.29/1.00 (T-V:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (V) (INPUT = 0.90 )
JSI METAL= 0.92 (U) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T1Z | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington


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**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 5.0 | 6.0 | 2.00 | 2.25 |
| C | TTWW+m | MT20 | 6.0 | 9.0 | Edge | |
| D | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| E | TMWW-t | MT20 | 5.0 | 6.0 | | |
| F | TS-t | MT20 | 5.0 | 6.0 | | |
| G | TMW+w | MT20 | 3.0 | 6.0 | | |
| H | TS-t | MT20 | 5.0 | 6.0 | | |
| I | TMWW-t | MT20 | 5.0 | 6.0 | | |
| J | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| K | TTWW+m | MT20 | 6.0 | 9.0 | Edge | |
| L | TMVW+p | MT20 | 5.0 | 6.0 | 2.00 | 2.25 |
| N | BMV1+p | MT20 | 3.0 | 6.0 | | |
| O | BMWW-t | MT20 | 5.0 | 6.0 | | |
| P | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| Q | BS-t | MT20 | 6.0 | 9.0 | | |
| R | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| S | BMWWW-t | MT20 | 7.0 | 6.0 | 4.00 | 4.00 |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| U | BS-t | MT20 | 6.0 | 9.0 | | |
| V | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| W | BMWW-t | MT20 | 5.0 | 6.0 | | |
| X | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108622

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T2 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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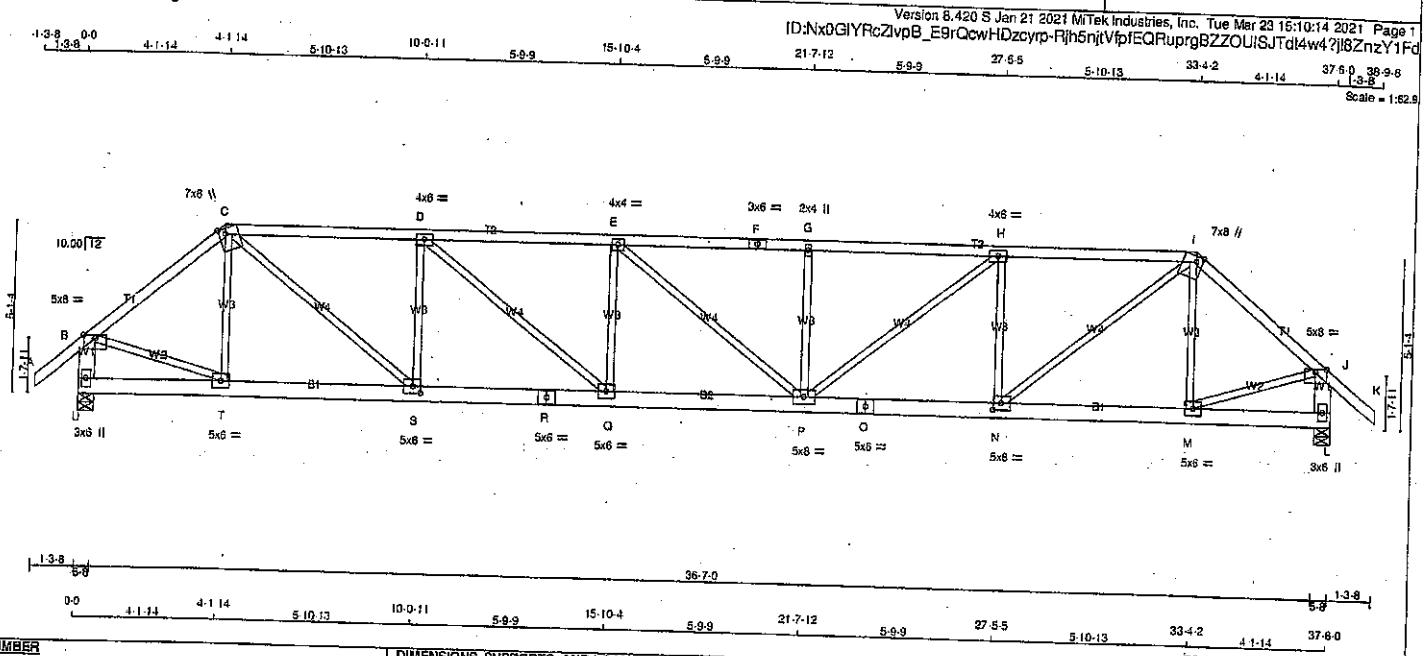


TOTAL WEIGHT = 2 X 178 = 356 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| I - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TTWW+m | MT20 | 7.0 | 8.0 | Edge | 2.25 |
| D | TMWW-t | MT20 | 4.0 | 6.0 | | |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMW+w | MT20 | 2.0 | 4.0 | | |
| H | TMWW-t | MT20 | 4.0 | 6.0 | | |
| I | TTWW+m | MT20 | 7.0 | 8.0 | Edge | 2.25 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M, Q, T | | | | | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| S | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

Structural component only
DWG# T-2108623

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| L | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

1ST LCASE MAX./MIN. COMPONENT REACTIONS

| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -2148 / 0 | -91.8 | -91.8 | 0.36 (1) | 4.28 |
| C- D | -3284 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.21 |
| D- E | -4049 / 0 | -91.8 | -91.8 | 0.89 (1) | 2.80 |
| E- F | -4041 / 0 | -91.8 | -91.8 | 0.73 (1) | 3.01 |
| F- G | -4041 / 0 | -91.8 | -91.8 | 0.73 (1) | 3.01 |
| G- H | -4041 / 0 | -91.8 | -91.8 | 0.89 (1) | 2.80 |
| H- I | -3286 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.20 |
| I- J | -2148 / 0 | -91.8 | -91.8 | 0.36 (1) | 4.28 |
| J- K | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| U- B | -2169 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.92 |
| L- J | -2169 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.92 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| T- S | 0 / 1638 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| S- R | 0 / 3284 | -18.5 | -18.5 | 0.44 (1) | 10.00 |
| R- Q | 0 / 3284 | -18.5 | -18.5 | 0.44 (1) | 10.00 |
| Q- P | 0 / 4049 | -18.5 | -18.5 | 0.54 (1) | 10.00 |
| P- O | 0 / 3286 | -18.5 | -18.5 | 0.45 (1) | 10.00 |
| O- N | 0 / 3286 | -18.5 | -18.5 | 0.45 (1) | 10.00 |
| N- M | 0 / 1638 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -359 / 0 | 0.13 (1) |
| C- S | 0 / 2105 | 0.47 (1) |
| S- D | -1217 / 0 | 0.44 (1) |
| D- Q | 0 / 988 | 0.22 (1) |
| Q- E | -512 / 0 | 0.18 (1) |
| E- P | -10 / 0 | 0.01 (1) |
| P- G | -514 / 0 | 0.18 (1) |
| P- H | 0 / 975 | 0.22 (1) |
| N- H | -1211 / 0 | 0.43 (1) |
| N- I | 0 / 2106 | 0.47 (1) |
| M- I | -355 / 0 | 0.13 (1) |
| B- T | 0 / 1712 | 0.39 (1) |
| M- J | 0 / 1712 | 0.39 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.45")

CSI: TC=0.89/1.00 (G-H:1) , BC=0.54/1.00 (P-Q:1) , WB=0.47/1.00 (I-N:1) , SSI=0.25/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (N) (INPUT = 0.90 )
JSI METAL= 0.63 (O) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T3 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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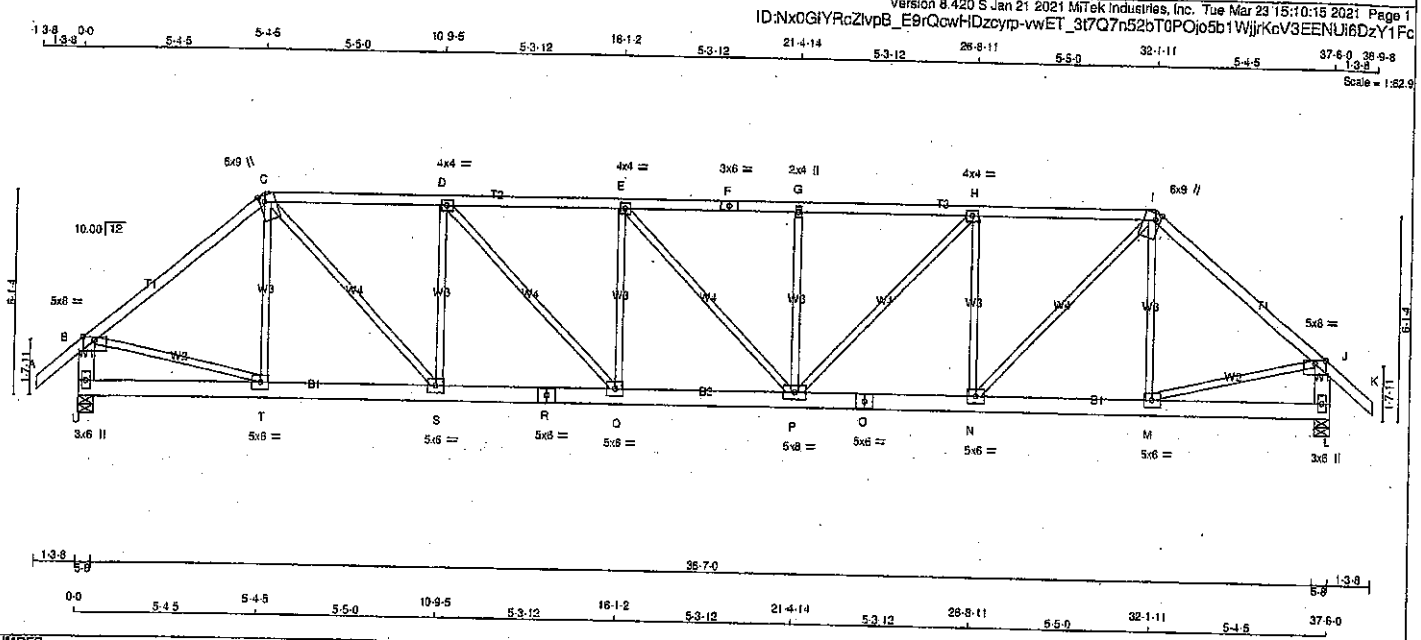


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| I - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| D, E, H | | | | | | |
| D | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMW+w | MT20 | 2.0 | 4.0 | | |
| I | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| J | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M, N, Q, S, T | | | | | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 6.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| L | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.29 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| B- C | -2189 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.94 | |
| C- D | -2818 / 0 | -91.8 | -91.8 | 0.57 (1) | 3.62 | |
| D- E | -3350 / 0 | -91.8 | -91.8 | 0.63 (1) | 3.29 | |
| E- F | -3344 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.45 | |
| F- G | -3344 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.45 | |
| G- H | -3344 / 0 | -91.8 | -91.8 | 0.63 (1) | 3.29 | |
| H- I | -2820 / 0 | -91.8 | -91.8 | 0.57 (1) | 3.61 | |
| I- J | -2189 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.94 | |
| J- K | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| U- B | -2153 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.94 | |
| L- J | -2153 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.94 | |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 | |
| T- S | 0 / 1674 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |
| S- R | 0 / 2819 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| R- Q | 0 / 2819 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| Q- P | 0 / 3350 | -18.5 | -18.5 | 0.45 (1) | 10.00 | |
| P- O | 0 / 2821 | -18.5 | -18.5 | 0.38 (1) | 10.00 | |
| O- N | 0 / 2821 | -18.5 | -18.5 | 0.38 (1) | 10.00 | |
| N- M | 0 / 1673 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -257 / 0 | 0.14 (1) |
| C- S | 0 / 1663 | 0.37 (1) |
| S- D | -1118 / 0 | 0.61 (1) |
| D- Q | 0 / 780 | 0.18 (1) |
| Q- E | -469 / 0 | 0.26 (1) |
| E- P | -9 / 0 | 0.01 (1) |
| P- G | -471 / 0 | 0.26 (1) |
| P- H | 0 / 769 | 0.17 (1) |
| N- H | -1109 / 0 | 0.61 (1) |
| N- I | 0 / 1666 | 0.37 (1) |
| M- I | -259 / 0 | 0.14 (1) |
| B- T | 0 / 1720 | 0.39 (1) |
| M- J | 0 / 1720 | 0.39 (1) |

TOTAL WEIGHT = 2 X 187 = 374 lb
[M]

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.67/1.00 (B-C:1) , BC=0.45/1.00 (P-Q:1) , WB=0.61/1.00 (D-S:1) , SSI=0.23/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (T) (INPUT = 0.90 )
JSI METAL= 0.54 (O) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108624

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T4 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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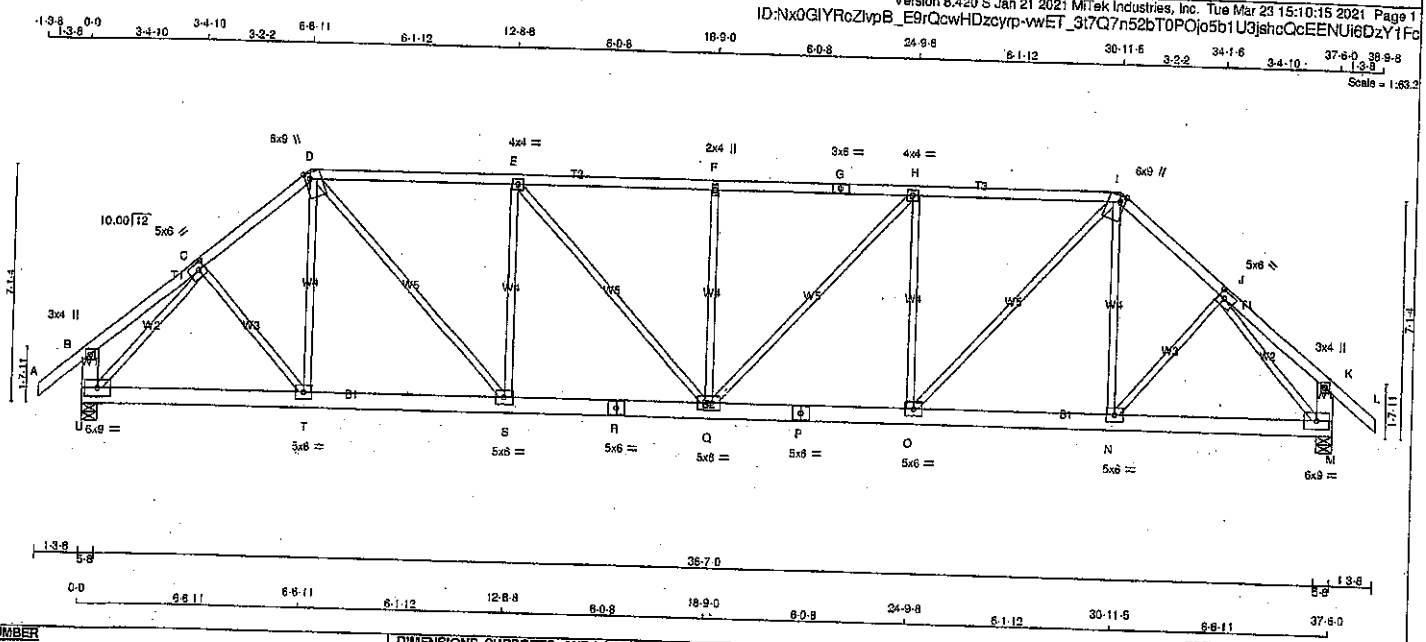


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - P | 2x6 | DRY | No.2 | SPF |
| P - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.25 |
| D | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TMV+w | MT20 | 2.0 | 4.0 | | |
| G | TS-t | MT20 | 3.0 | 6.0 | | |
| H | TMWW-t | MT20 | 4.0 | 4.0 | | |
| I | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| J | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.25 |
| K | TMV+p | MT20 | 3.0 | 4.0 | | |
| M | BMVW1-t | MT20 | 6.0 | 9.0 | | |
| N, O, S, T | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| U | BMVW1-t | MT20 | 6.0 | 9.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108625

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 192 = 385 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| M | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

MAX./MIN. COMPONENT REACTIONS

| JT | 1ST LCASE COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| M | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| B- C | 0 / 19 | -91.8 | -91.8 | 0.14 (1) | 10.00 | |
| C- D | -2211 / 0 | -91.8 | -91.8 | 0.21 (1) | 4.41 | |
| D- E | -2639 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.51 | |
| E- F | -2913 / 0 | -91.8 | -91.8 | 0.77 (1) | 3.32 | |
| F- G | -2913 / 0 | -91.8 | -91.8 | 0.77 (1) | 3.32 | |
| G- H | -2913 / 0 | -91.8 | -91.8 | 0.77 (1) | 3.32 | |
| H- I | -2639 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.51 | |
| I- J | -2211 / 0 | -91.8 | -91.8 | 0.21 (1) | 4.41 | |
| J- K | 0 / 19 | -91.8 | -91.8 | 0.14 (1) | 10.00 | |
| K- L | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| U- B | -246 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | |
| M- K | -246 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | |
| U- T | 0 / 1569 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |
| T- S | 0 / 1679 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| S- R | 0 / 2639 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| R- Q | 0 / 2639 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| Q- P | 0 / 2639 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| P- O | 0 / 2639 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| O- N | 0 / 1679 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| N- M | 0 / 1569 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- T | 0 / 167 | 0.04 (1) |
| T- D | 0 / 77 | 0.03 (4) |
| D- S | 0 / 1421 | 0.32 (1) |
| S- E | -935 / 0 | 0.77 (1) |
| E- Q | 0 / 410 | 0.09 (1) |
| Q- F | -510 / 0 | 0.42 (1) |
| Q- H | 0 / 410 | 0.09 (1) |
| O- H | -935 / 0 | 0.77 (1) |
| O- I | 0 / 1421 | 0.32 (1) |
| N- I | 0 / 77 | 0.03 (4) |
| N- J | 0 / 167 | 0.04 (1) |
| U- C | -2462 / 0 | 0.96 (1) |
| J- M | -2462 / 0 | 0.96 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.77/1.00 (F-H:1) , BC=0.36/1.00 (Q-S:1) , WB=0.96/1.00 (C-U:1) , SSI=0.27/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (J) (INPUT = 0.90 )
JSI METAL= 0.55 (J) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T5 | 2 | 1 | GREENPARK HOMES | |
| Tamarack Roof Truss, Burlington | | | | TRUSS DESC. | |

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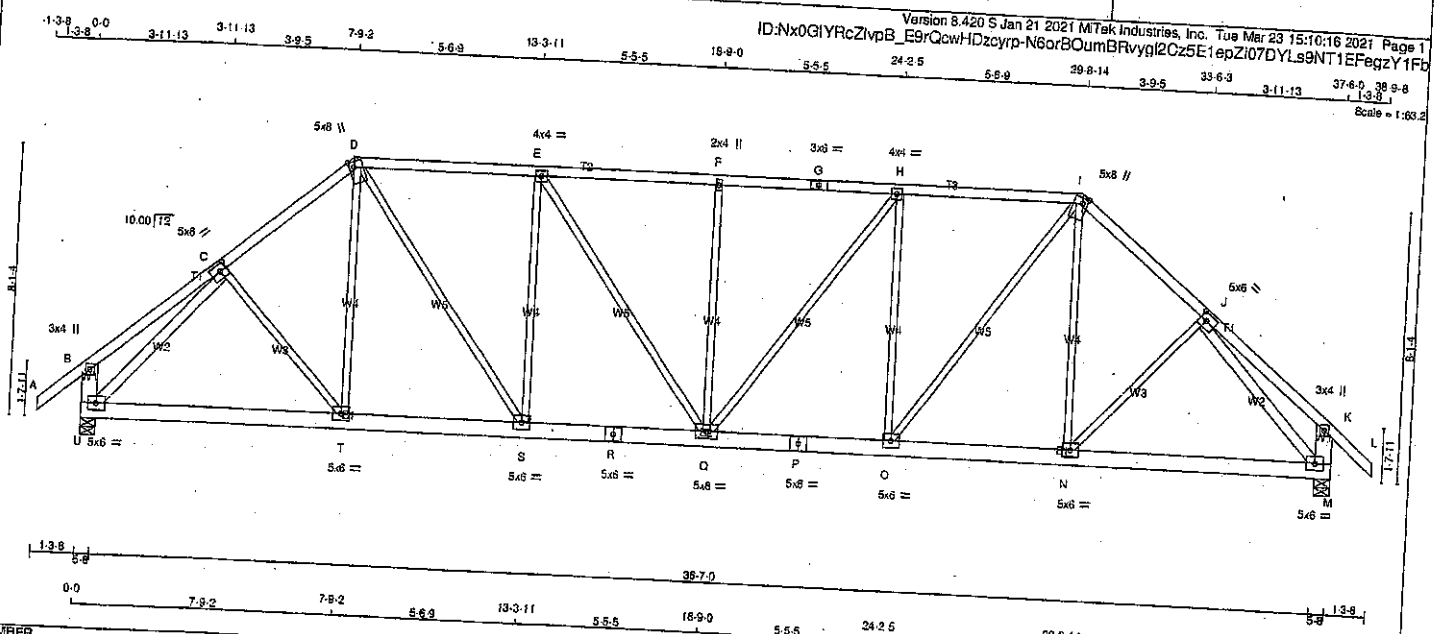


TOTAL WEIGHT = 2 X 205 = 409 lb (M)

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - P | 2x6 | DRY | No.2 | SPF |
| P - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| U - C | 2x4 | DRY | No.2 | SPF |
| J - M | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 2.50 |
| D | TTWW+m | MT20 | 5.0 | 8.0 | 2.00 | 1.75 |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TS-t | MT20 | 3.0 | 6.0 | | |
| H | TMWW-t | MT20 | 4.0 | 4.0 | | |
| I | TTWW+m | MT20 | 5.0 | 8.0 | 2.00 | 1.75 |
| J | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| K | TMV+p | MT20 | 3.0 | 4.0 | | |
| M | BMVW1-t | MT20 | 5.0 | 6.0 | | |
| N, O, S, T | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 6.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| U | BMVW1-t | MT20 | 5.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| M | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 0 | 519 0 | 0 / 0 |
| M | 1549 | 1030 / 0 | 0 / 0 | 0 0 | 0 0 | 519 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) |
|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) |
| B- C | 0 / 26 | -91.8 | -91.8 | 0.21 (1) |
| C- D | -2194 / 0 | -91.8 | -91.8 | 0.30 (1) |
| D- E | -2337 / 0 | -91.8 | -91.8 | 0.55 (1) |
| E- F | -2529 / 0 | -91.8 | -91.8 | 0.57 (1) |
| F- G | -2529 / 0 | -91.8 | -91.8 | 0.57 (1) |
| G- H | -2529 / 0 | -91.8 | -91.8 | 0.57 (1) |
| H- I | -2337 / 0 | -91.8 | -91.8 | 0.55 (1) |
| I- J | -2194 / 0 | -91.8 | -91.8 | 0.30 (1) |
| J- K | 0 / 26 | -91.8 | -91.8 | 0.21 (1) |
| K- L | 0 / 41 | -91.8 | -91.8 | 0.13 (1) |
| U- B | -264 / 0 | 0.0 | 0.0 | 0.02 (1) |
| M- K | -264 / 0 | 0.0 | 0.0 | 0.02 (1) |
| U- T | 0 / 1625 | -18.5 | -18.5 | 0.26 (1) |
| T- S | 0 / 1663 | -18.5 | -18.5 | 0.26 (1) |
| S- R | 0 / 2337 | -18.5 | -18.5 | 0.32 (1) |
| R- Q | 0 / 2337 | -18.5 | -18.5 | 0.32 (1) |
| Q- P | 0 / 2337 | -18.5 | -18.5 | 0.32 (1) |
| P- O | 0 / 2337 | -18.5 | -18.5 | 0.32 (1) |
| O- N | 0 / 1663 | -18.5 | -18.5 | 0.26 (1) |
| N- M | 0 / 1625 | -18.5 | -18.5 | 0.26 (1) |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|
| C- T | 0 / 67 | 0.02 (4) | 10.00 |
| T- D | 0 / 117 | 0.04 (4) | 10.00 |
| D- S | 0 / 1153 | 0.26 (1) | 4.33 |
| S- E | -841 / 0 | 1.00 (1) | 3.92 |
| E- Q | 0 / 334 | 0.08 (1) | 3.77 |
| Q- F | -459 / 0 | 0.55 (1) | 3.77 |
| Q- H | 0 / 334 | 0.08 (1) | 3.77 |
| O- H | -841 / 0 | 1.00 (1) | 3.92 |
| O- I | 0 / 1153 | 0.26 (1) | 4.33 |
| N- I | 0 / 117 | 0.04 (4) | 10.00 |
| N- J | 0 / 67 | 0.02 (4) | 10.00 |
| U- C | -2477 / 0 | 0.95 (1) | 7.81 |
| J- M | -2477 / 0 | 0.95 (1) | 7.81 |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.57/1.00 (E-F:1) , BC=0.32/1.00 (Q-S:1) , WB=1.00/1.00 (H-O:1) , SSI=0.24/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90 )
JSI METAL= 0.56 (C) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108626

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T6 | 2 | 1 | GREENPARK HOMES | |
| Tamarack Roof Truss, Burlington | | | | TRUSS DESC. | |

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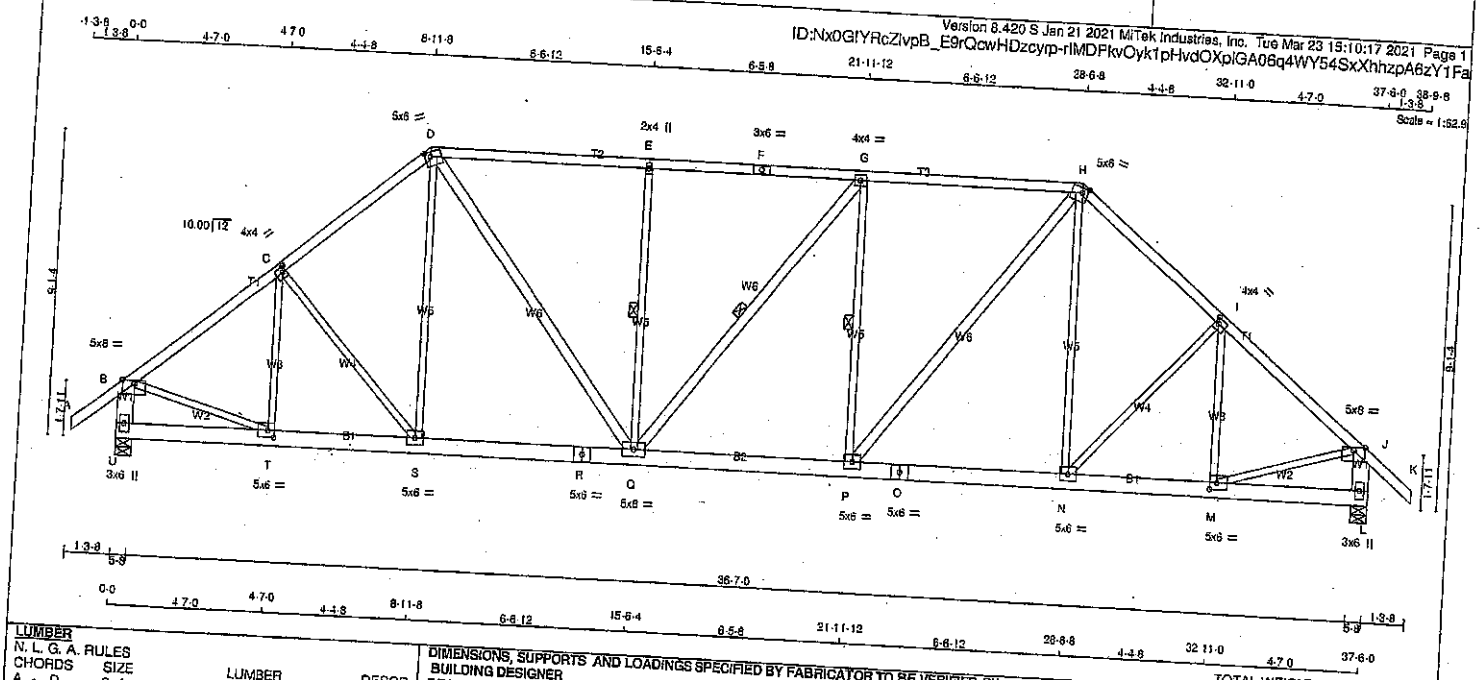


TOTAL WEIGHT = 2 X 213 = 425 lb

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| D - Q | 2x4 | DRY | No.2 | SPF |
| Q - G | 2x4 | DRY | No.2 | SPF |
| P - H | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 1.75 | 2.00 |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMWW-t | MT20 | 4.0 | 4.0 | | |
| H | TTWW-m | MT20 | 5.0 | 6.0 | 1.75 | 2.00 |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| N, P, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES (1)
1)

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | IN-SX | IN-SX |
| L | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| | | | | | | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Q, G-Q, G-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**

TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -2168 / 0 | -91.8 | -91.8 | 0.42 (1) | 4.23 |
| C- D | -2151 / 0 | -91.8 | -91.8 | 0.41 (1) | 4.24 |
| D- E | -2201 / 0 | -91.8 | -91.8 | 0.73 (1) | 3.80 |
| E- F | -2201 / 0 | -91.8 | -91.8 | 0.73 (1) | 3.77 |
| F- G | -2201 / 0 | -91.8 | -91.8 | 0.73 (1) | 3.77 |
| G- H | -2205 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.77 |
| H- I | -2150 / 0 | -91.8 | -91.8 | 0.41 (1) | 4.24 |
| I- J | -2168 / 0 | -91.8 | -91.8 | 0.43 (1) | 4.23 |
| J- K | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| U- B | -2147 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.94 |
| L- J | -2147 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.94 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |
| T- S | 0 / 1689 | -18.5 | -18.5 | 0.24 (1) | 10.00 |
| S- R | 0 / 1626 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| R- Q | 0 / 1626 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| Q- P | 0 / 2205 | -18.5 | -18.5 | 0.30 (1) | 10.00 |
| P- O | 0 / 1625 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| O- N | 0 / 1625 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| N- M | 0 / 1689 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -390 / 0 | 0.16 (1) |
| C- S | -97 / 0 | 0.08 (1) |
| S- D | 0 / 197 | 0.05 (4) |
| D- Q | 0 / 954 | 0.15 (1) |
| Q- E | -647 / 0 | 0.33 (1) |
| Q- G | -7 / 0 | 0.00 (1) |
| P- G | -644 / 0 | 0.33 (1) |
| P- H | 0 / 963 | 0.15 (1) |
| N- H | 0 / 191 | 0.05 (4) |
| N- I | -99 / 0 | 0.08 (1) |
| M- I | -387 / 0 | 0.16 (1) |
| B- T | 0 / 1747 | 0.39 (1) |
| M- J | 0 / 1748 | 0.39 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING =** 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.74/1.00 (G-H:1) , BC=0.30/1.00 (P-Q:1) , WB=0.39/1.00 (J-M:1) , SSI=0.28/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (H) (INPUT = 0.90 )
JSI METAL= 0.43 (D) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108627

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T7 | 7 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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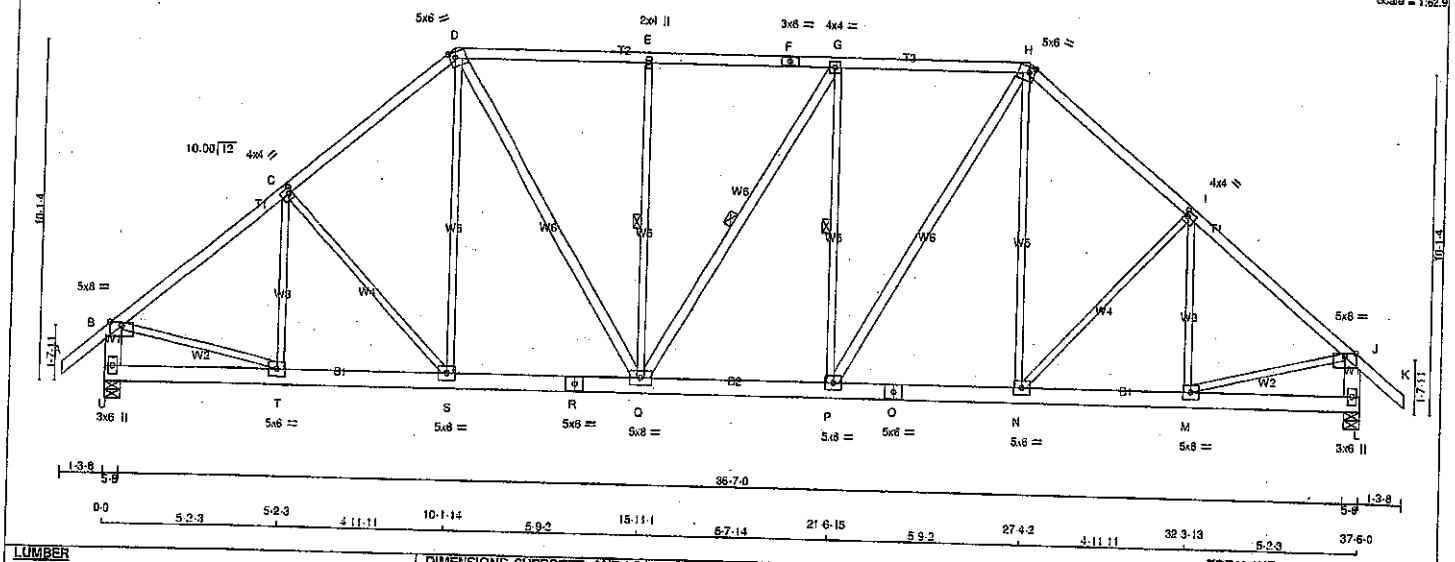


TOTAL WEIGHT = 7 X 221 = 1547 lb

[M][F]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| D - Q | 2x4 | DRY | No.2 | SPF |
| Q - G | 2x4 | DRY | No.2 | SPF |
| P - H | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMWW-t | MT20 | 4.0 | 4.0 | | |
| H | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M, N, P, S, T | | | | | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108628

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| L | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Q, G-Q, G-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -2200 / 0 | -91.8 | -91.8 | 0.40 (1) | 4.24 |
| C- D | -2098 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.34 |
| D- E | -1978 / 0 | -91.8 | -91.8 | 0.41 (1) | 4.39 |
| E- F | -1978 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.44 |
| F- G | -1978 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.44 |
| G- H | -1982 / 0 | -91.8 | -91.8 | 0.41 (1) | 4.39 |
| H- I | -2097 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.34 |
| I- J | -2200 / 0 | -91.8 | -91.8 | 0.40 (1) | 4.24 |
| J- K | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| U- B | -2145 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.95 |
| L- J | -2145 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.95 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |
| T- S | 0 / 1717 | -18.5 | -18.5 | 0.24 (1) | 10.00 |
| S- R | 0 / 1583 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| R- Q | 0 / 1583 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| Q- P | 0 / 1982 | -18.5 | -18.5 | 0.27 (1) | 10.00 |
| P- O | 0 / 1582 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| O- N | 0 / 1582 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| N- M | 0 / 1717 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -322 / 0 | 0.17 (1) |
| C- S | -202 / 0 | 0.22 (1) |
| S- D | 0 / 266 | 0.06 (1) |
| D- Q | 0 / 773 | 0.12 (1) |
| Q- E | -565 / 0 | 0.38 (1) |
| Q- G | -8 / 0 | 0.01 (1) |
| P- G | -562 / 0 | 0.38 (1) |
| P- H | 0 / 783 | 0.13 (1) |
| N- H | 0 / 258 | 0.06 (1) |
| N- I | -203 / 0 | 0.22 (1) |
| M- I | -320 / 0 | 0.16 (1) |
| B- T | 0 / 1764 | 0.40 (1) |
| M- J | 0 / 1764 | 0.40 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.41/1.00 (G-H:1) , BC=0.27/1.00 (P-Q:1) , WB=0.40/1.00 (J-M:1) , SSI=0.25/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 768 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (H) (INPUT = 0.90 )
JSI METAL= 0.40 (D) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T8 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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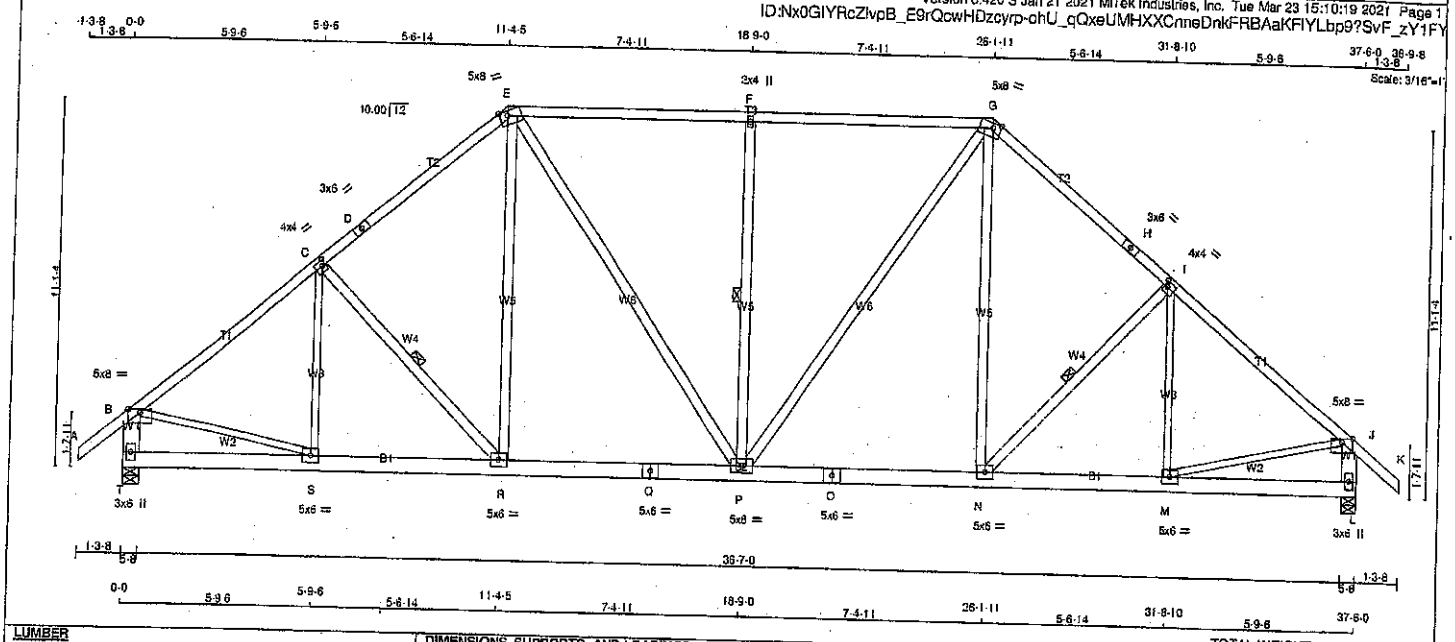


TOTAL WEIGHT = 2 X 226 = 453 lb.
[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| G - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| T - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| T - Q | 2x6 | DRY | No.2 | SPF |
| Q - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |
| S - C | 2x3 | DRY | No.2 | SPF |
| M - I | 2x3 | DRY | No.2 | SPF |
| B - S | 2x3 | DRY | No.2 | SPF |
| M - J | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TTWW-m | MT20 | 5.0 | 8.0 | Edge | 3.00 |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TTWW-m | MT20 | 5.0 | 8.0 | Edge | 3.00 |
| H | TS-t | MT20 | 3.0 | 6.0 | | |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M, N, R, S | | | | | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1)

Structural component only
DWG# T-2108629

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| T | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |
| L | 2194 | 0 | 2194 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| T | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-R, F-P, I-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -2219 / 0 | -91.8 | -91.8 | 0.52 (1) | 4.10 |
| C- D | -2039 / 0 | -91.8 | -91.8 | 0.48 (1) | 4.28 |
| D- E | -2039 / 0 | -91.8 | -91.8 | 0.48 (1) | 4.28 |
| E- F | -1869 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.91 |
| F- G | -1869 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.91 |
| G- H | -2039 / 0 | -91.8 | -91.8 | 0.48 (1) | 4.28 |
| H- I | -2039 / 0 | -91.8 | -91.8 | 0.48 (1) | 4.28 |
| I- J | -2219 / 0 | -91.8 | -91.8 | 0.52 (1) | 4.10 |
| J- K | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| T- B | -2142 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| L- J | -2142 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| T- S | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |
| S- R | 0 / 1735 | -18.5 | -18.5 | 0.25 (1) | 10.00 |
| R- Q | 0 / 1536 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| Q- P | 0 / 1536 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| P- O | 0 / 1536 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| O- N | 0 / 1536 | -18.5 | -18.5 | 0.23 (1) | 10.00 |
| N- M | 0 / 1735 | -18.5 | -18.5 | 0.25 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| S- C | -269 / 0 | 0.17 (1) |
| C- R | -297 / 0 | 0.10 (1) |
| R- E | 0 / 347 | 0.06 (1) |
| E- P | 0 / 587 | 0.09 (1) |
| P- F | -834 / 0 | 0.51 (1) |
| P- G | 0 / 587 | 0.09 (1) |
| N- G | 0 / 347 | 0.06 (1) |
| N- I | -297 / 0 | 0.10 (1) |
| M- I | -269 / 0 | 0.17 (1) |
| B- S | 0 / 1774 | 0.40 (1) |
| M- J | 0 / 1774 | 0.40 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.74/1.00 (E-F:1) , BC=0.25/1.00 (R-S:1) , WB=0.51/1.00 (F-P:1) , SSI=0.33/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (S) (INPUT = 0.90 )
JSI METAL= 0.39 (S) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T9 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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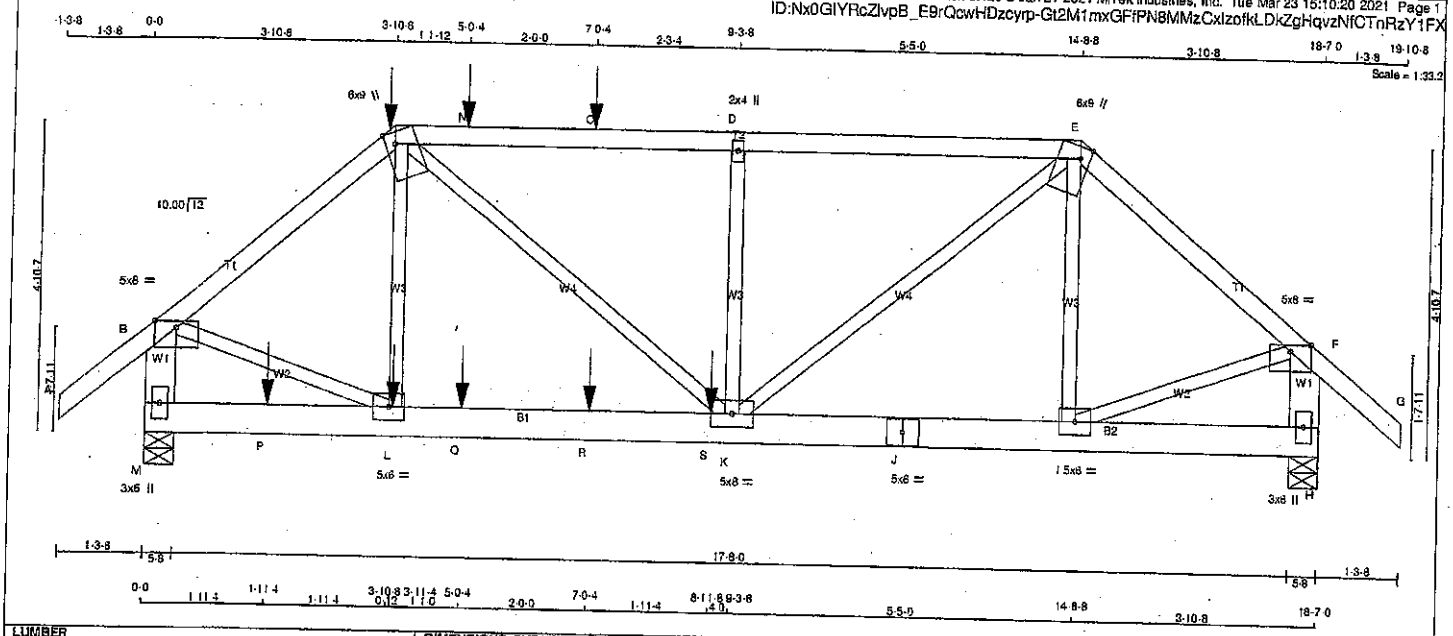


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| M - B | 2x6 | DRY | No.2 | SPF |
| H - F | 2x6 | DRY | No.2 | SPF |
| M - J | 2x6 | DRY | No.2 | SPF |
| J - H | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW+m | MT20 | 6.0 | 9.0 | Edge | 1.75 |
| F | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| H | BMV1+p | MT20 | 3.0 | 6.0 | | |
| I | BMWW-t | MT20 | 5.0 | 6.0 | | |
| J | BS-t | MT20 | 5.0 | 6.0 | | |
| K | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| L | BMWW-t | MT20 | 5.0 | 6.0 | | |
| M | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

TOTAL WEIGHT = 92 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| M | 1994 | 0 | 1994 | 0 | 0 | 5-8 | 5-8 |
| H | 1741 | 0 | 1741 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| M | 1405 | 953 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 452 / 0 | 0 / 0 |
| H | 1225 | 836 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 390 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, H

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.47 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.14 (1) | 10.00 |
| B- C | -1908 / 0 | -91.8 | -91.8 | 0.34 (1) | 4.49 |
| C- N | -2379 / 0 | -91.8 | -91.8 | 0.75 (1) | 3.47 |
| N- O | -2379 / 0 | -91.8 | -91.8 | 0.75 (1) | 3.47 |
| O- D | -2379 / 0 | -91.8 | -91.8 | 0.75 (1) | 3.47 |
| D- E | -2378 / 0 | -91.8 | -91.8 | 0.75 (1) | 3.47 |
| E- F | -1602 / 0 | -91.8 | -91.8 | 0.32 (1) | 4.84 |
| F- G | 0 / 41 | -91.8 | -91.8 | 0.14 (1) | 10.00 |
| M- B | -1980 / 0 | 0.0 | 0.0 | 0.15 (1) | 7.13 |
| H- F | -1711 / 0 | 0.0 | 0.0 | 0.13 (1) | 7.54 |
| M- P | 0 / 0 | -18.5 | -18.5 | 0.09 (1) | 10.00 |
| P- L | 0 / 0 | -18.5 | -18.5 | 0.09 (1) | 10.00 |
| L- Q | 0 / 1457 | -18.5 | -18.5 | 0.37 (1) | 10.00 |
| Q- R | 0 / 1457 | -18.5 | -18.5 | 0.37 (1) | 10.00 |
| R- S | 0 / 1457 | -18.5 | -18.5 | 0.37 (1) | 10.00 |
| S- K | 0 / 1457 | -18.5 | -18.5 | 0.37 (1) | 10.00 |
| K- J | 0 / 1220 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| J- I | 0 / 1220 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| L- C | -214 / 43 | 0.07 (1) |
| C- K | 0 / 1195 | 0.30 (1) |
| K- D | -664 / 0 | 0.23 (1) |
| K- E | 0 / 1502 | 0.37 (1) |
| I- E | -293 / 0 | 0.10 (1) |
| B- L | 0 / 1529 | 0.38 (1) |
| I- F | 0 / 1264 | 0.32 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 3-10-8 | -145 | -145 | --- | FRONT | VERT | TOTAL | --- | C1 |
| L | 3-11-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| N | 5-0-4 | -59 | -59 | --- | FRONT | VERT | TOTAL | --- | C1 |
| O | 7-0-4 | -59 | -59 | --- | FRONT | VERT | TOTAL | --- | C1 |
| P | 1-11-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Q | 5-0-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| R | 7-0-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| S | 8-11-8 | -687 | -687 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.75/1.00 (C-D:1) , BC=0.37/1.00 (K-L:1) , WB=0.38/1.00 (B-L:1) , SSI=0.65/1.00 (K-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (L) (INPUT = 0.90 )
JSI METAL= 0.29 (J) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108630

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T10 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Trues, Burlington

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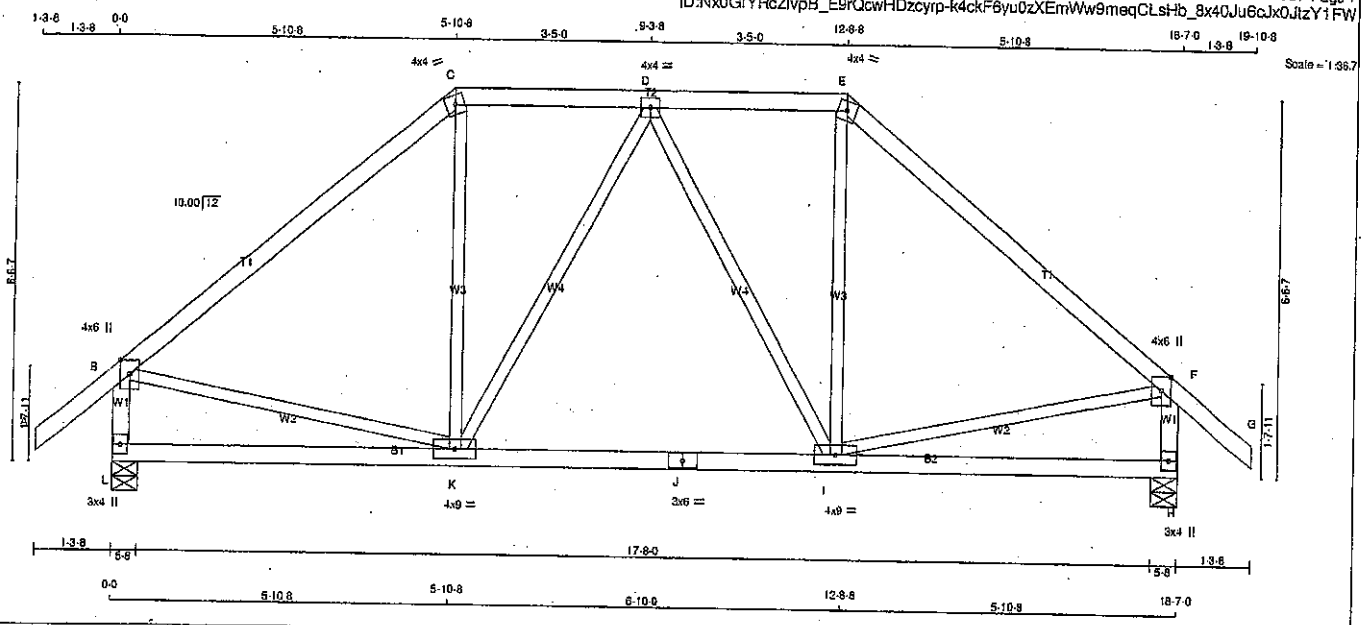


TOTAL WEIGHT = 84 lb
[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMW+p | MT20 | 4.0 | 6.0 | Edge | |
| C | TTW-m | MT20 | 4.0 | 4.0 | | |
| D | TMWW-t | MT20 | 4.0 | 4.0 | | |
| E | TTW-m | MT20 | 4.0 | 4.0 | | |
| F | TMW+p | MT20 | 4.0 | 6.0 | Edge | |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |
| I | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| J | BS-t | MT20 | 3.0 | 6.0 | | |
| K | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| L | 1152 | 0 | 1152 | 0 | 0 | 5-8 | 5-8 |
| H | 1152 | 0 | 1152 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |
| H | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.96 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| B- C | -880 / 0 | -91.8 | -91.8 | 0.43 (1) | 5.96 | |
| C- D | -679 / 0 | -91.8 | -91.8 | 0.14 (1) | 6.25 | |
| D- E | -679 / 0 | -91.8 | -91.8 | 0.14 (1) | 6.25 | |
| E- F | -880 / 0 | -91.8 | -91.8 | 0.43 (1) | 5.96 | |
| F- G | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| L- B | -1107 / 0 | 0.0 | 0.0 | 0.12 (1) | 7.52 | |
| H- F | -1107 / 0 | 0.0 | 0.0 | 0.12 (1) | 7.52 | |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.17 (4) | 10.00 | |
| K- J | 0 / 777 | -18.5 | -18.5 | 0.23 (4) | 10.00 | |
| J- I | 0 / 777 | -18.5 | -18.5 | 0.23 (4) | 10.00 | |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.17 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| K- C | 0 / 170 | 0.04 (4) |
| K- D | -213 / 0 | 0.20 (1) |
| D- I | -213 / 0 | 0.20 (1) |
| I- E | 0 / 170 | 0.04 (4) |
| B- K | 0 / 690 | 0.16 (1) |
| I- F | 0 / 690 | 0.16 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.43/1.00 (B-C:1) , BC=0.23/1.00 (I-K:4) , WB=0.20/1.00 (D-K:1) , SSI=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (B) (INPUT = 0.90 )
JSI METAL= 0.47 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108631

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T11 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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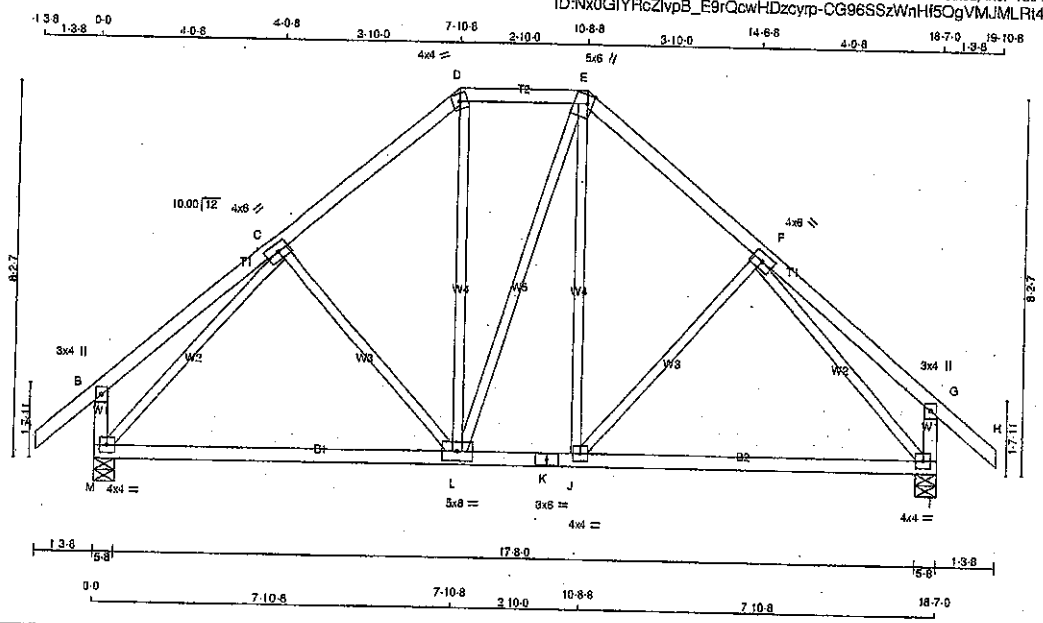


TOTAL WEIGHT = 92 lb (M)(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - H | 2x4 | DRY | No.2 | SPF |
| M - B | 2x4 | DRY | No.2 | SPF |
| I - G | 2x4 | DRY | No.2 | SPF |
| M - K | 2x4 | DRY | No.2 | SPF |
| K - I | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 6.0 | | |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| F | TMWW-t | MT20 | 4.0 | 6.0 | | |
| G | TMV+p | MT20 | 3.0 | 4.0 | | |
| I | BMVW1-t | MT20 | 4.0 | 4.0 | | |
| J | BMWW-t | MT20 | 4.0 | 4.0 | | |
| K | BS-t | MT20 | 3.0 | 6.0 | | |
| L | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| M | BMVW1-t | MT20 | 4.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| M | 1152 | 0 | 1152 | 0 | 0 | 5-8 | 5-8 |
| I | 1152 | 0 | 1152 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| M | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |
| I | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, I

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | 0 / 27 | -91.8 | -91.8 | 0.23 (1) | 10.00 |
| C- D | -809 / 0 | -91.8 | -91.8 | 0.18 (1) | 6.25 |
| D- E | -602 / 0 | -91.8 | -91.8 | 0.10 (1) | 6.25 |
| E- F | -809 / 0 | -91.8 | -91.8 | 0.18 (1) | 6.25 |
| F- G | 0 / 27 | -91.8 | -91.8 | 0.23 (1) | 10.00 |
| G- H | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| M- B | -264 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| I- G | -264 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| M- L | 0 / 708 | -18.5 | -18.5 | 0.29 (4) | 10.00 |
| L- K | 0 / 602 | -18.5 | -18.5 | 0.29 (4) | 10.00 |
| K- J | 0 / 602 | -18.5 | -18.5 | 0.29 (4) | 10.00 |
| J- I | 0 / 707 | -18.5 | -18.5 | 0.29 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- L | -163 / 0 | 0.11 (1) |
| L- D | 0 / 232 | 0.05 (1) |
| L- E | 0 / 2 | 0.00 (1) |
| J- E | 0 / 230 | 0.05 (1) |
| J- F | -164 / 0 | 0.11 (1) |
| M- C | -1088 / 0 | 0.67 (1) |
| F- I | -1087 / 0 | 0.67 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.23/1.00 (F-G:1) , BC=0.29/1.00 (I-J:4) , WB=0.67/1.00 (C-M:1) , SSI=0.13/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (M) (INPUT = 0.90 )
JSI METAL= 0.50 (K) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108632

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T12 | 3 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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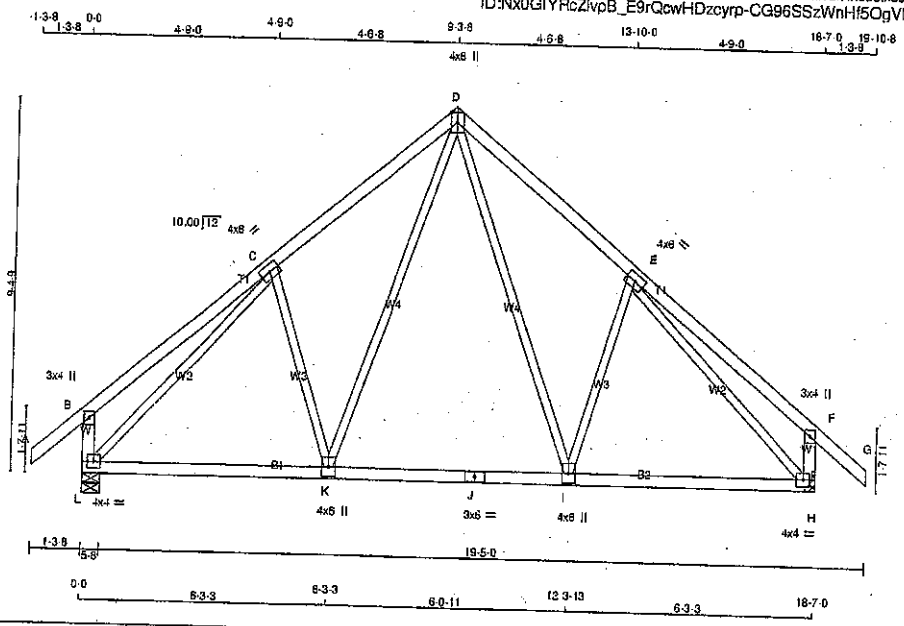


TOTAL WEIGHT = 3 X 90 = 270 lb
(M)(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 6.0 | | |
| D | TTWW+p | MT20 | 4.0 | 6.0 | Edge | |
| E | TMWW-t | MT20 | 4.0 | 6.0 | | |
| F | TMV+p | MT20 | 3.0 | 4.0 | | |
| H | BMVW1-t | MT20 | 4.0 | 4.0 | | |
| I | BMWW+t | MT20 | 4.0 | 6.0 | | |
| J | BS-t | MT20 | 3.0 | 6.0 | | |
| K | BMWW+t | MT20 | 4.0 | 6.0 | | |
| L | BMVW1-t | MT20 | 4.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| L | 1152 | 0 | 1152 | 0 | 0 | 5-8 | 5-8 |
| H | 1152 | 0 | 1152 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |
| H | 812 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | 0 / 33 | -91.8 | -91.8 | 0.32 (1) | 10.00 |
| C- D | -878 / 0 | -91.8 | -91.8 | 0.26 (1) | 6.23 |
| D- E | -878 / 0 | -91.8 | -91.8 | 0.26 (1) | 6.23 |
| E- F | 0 / 33 | -91.8 | -91.8 | 0.32 (1) | 10.00 |
| F- G | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| L- B | -287 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| H- F | -287 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| L- K | 0 / 731 | -18.5 | -18.5 | 0.22 (4) | 10.00 |
| K- J | 0 / 524 | -18.5 | -18.5 | 0.20 (4) | 10.00 |
| J- I | 0 / 524 | -18.5 | -18.5 | 0.20 (4) | 10.00 |
| I- H | 0 / 731 | -18.5 | -18.5 | 0.22 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| D- I | 0 / 397 | 0.09 (1) |
| I- E | -265 / 0 | 0.14 (1) |
| K- D | 0 / 397 | 0.09 (1) |
| C- K | -265 / 0 | 0.14 (1) |
| L- C | -1096 / 0 | 0.96 (1) |
| E- H | -1096 / 0 | 0.96 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.32/1.00 (B-C:1) , BC=0.22/1.00 (K-L:4) , WB=0.96/1.00 (E-H:1) , SSI=0.16/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (H) (INPUT = 0.90 )
JSI METAL= 0.27 (C) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108633

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T13 | 3 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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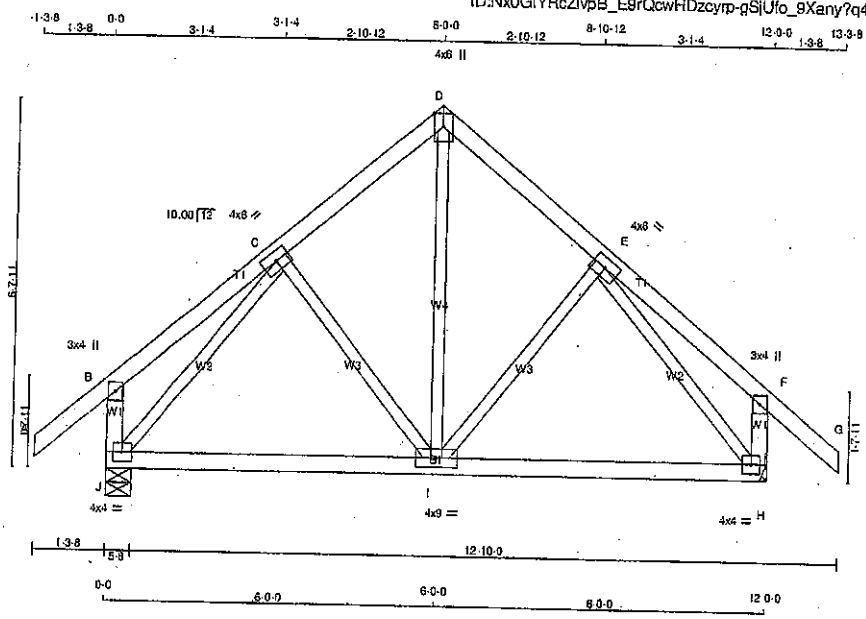


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| J - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 6.0 | | |
| D | TTW+p | MT20 | 4.0 | 6.0 | Edge | |
| E | TMWW-t | MT20 | 4.0 | 6.0 | | |
| F | TMV+p | MT20 | 3.0 | 4.0 | | |
| H | BMVW1-t | MT20 | 4.0 | 4.0 | | |
| I | BMVWW-t | MT20 | 4.0 | 9.0 | | |
| J | BMVW1-t | MT20 | 4.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| J | 789 | 0 | 789 | 0 | 0 | 5-8 | 5-8 |
| H | 789 | 0 | 789 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 1-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX.MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| J | 555 | 378 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 177 / 0 | 0 / 0 |
| H | 555 | 378 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 177 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | 0 / 20 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| C- D | -445 / 0 | -91.8 | -91.8 | 0.10 (1) | 6.25 |
| D- E | -445 / 0 | -91.8 | -91.8 | 0.10 (1) | 6.25 |
| E- F | 0 / 20 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| F- G | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| J- B | -232 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| H- F | -232 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| J- I | 0 / 404 | -18.5 | -18.5 | 0.22 (4) | 10.00 |
| I- H | 0 / 404 | -18.5 | -18.5 | 0.22 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| I- D | 0 / 328 | 0.07 (1) |
| I- E | -123 / 0 | 0.05 (1) |
| C- I | -123 / 0 | 0.05 (1) |
| J- C | -553 / 0 | 0.24 (1) |
| E- H | -553 / 0 | 0.24 (1) |

TOTAL WEIGHT = 3 X 58 = 174 lb
[M][F]

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.13/1.00 (E-F:1) , BC=0.22/1.00 (H-I:4) , WB=0.24/1.00 (E-H:t) , SSI=0.10/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (H) (INPUT = 0.90 )
JSI METAL= 0.15 (E) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108634

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | G13 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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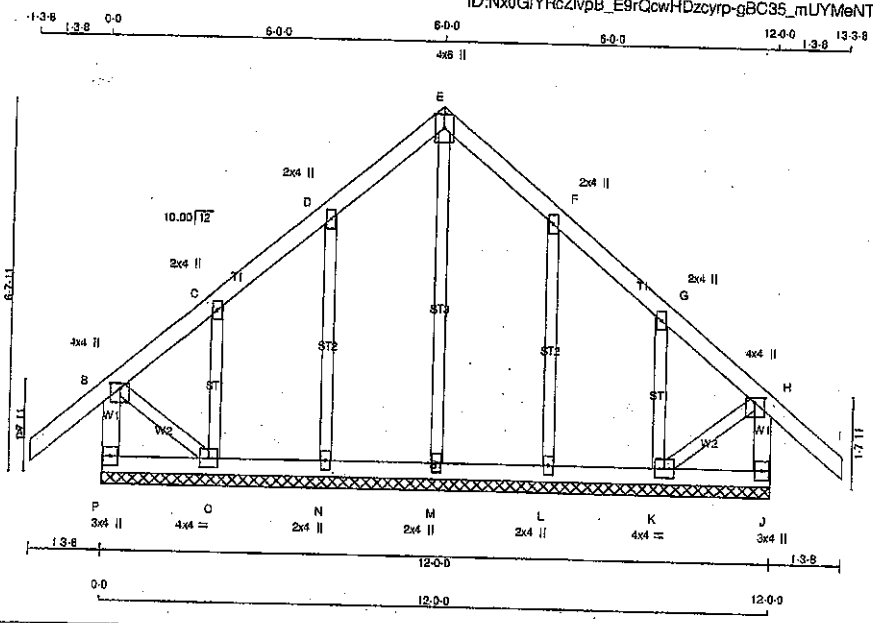


TOTAL WEIGHT = 58 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| P - B | 2x4 | DRY | No.2 | SPF |
| A - E | 2x4 | DRY | No.2 | SPF |
| E - I | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| P - J | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| ALL GABLE WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| C, D, F, G | | | | | | |
| C | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTW+p | MT20 | 4.0 | 6.0 | Edge | |
| H | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| J | BMV1+p | MT20 | 3.0 | 4.0 | | |
| K | BMWW1-t | MT20 | 4.0 | 4.0 | | |
| L, M, N | | | | | | |
| L | BMW1+w | MT20 | 2.0 | 4.0 | | |
| O | BMWW1-t | MT20 | 4.0 | 4.0 | | |
| P | BMV1+p | MT20 | 3.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| P- B | -282 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -50 / 0 | -91.8 | -91.8 | 0.12 (1) | 6.25 |
| C- D | -10 / 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| D- E | -27 / 0 | -91.8 | -91.8 | 0.08 (1) | 6.25 |
| E- F | -27 / 0 | -91.8 | -91.8 | 0.08 (1) | 6.25 |
| F- G | -10 / 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| G- H | -50 / 0 | -91.8 | -91.8 | 0.12 (1) | 6.25 |
| H- I | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| J- H | -282 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| P- O | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| O- N | 0 / 15 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| N- M | 0 / 11 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| M- L | 0 / 11 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| L- K | 0 / 15 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| K- J | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| M- E | -133 / 0 | 0.09 (1) |
| N- D | -219 / 0 | 0.08 (1) |
| O- C | -122 / 0 | 0.02 (1) |
| L- F | -219 / 0 | 0.08 (1) |
| K- G | -122 / 0 | 0.02 (1) |
| B- O | 0 / 23 | 0.01 (1) |
| K- H | 0 / 23 | 0.01 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (A-B:1) , BC=0.02/1.00 (K-L:4) , WB=0.09/1.00 (E-M:1) , SSI=0.08/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90 )
JSI METAL= 0.12 (F) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J/G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108615

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T14 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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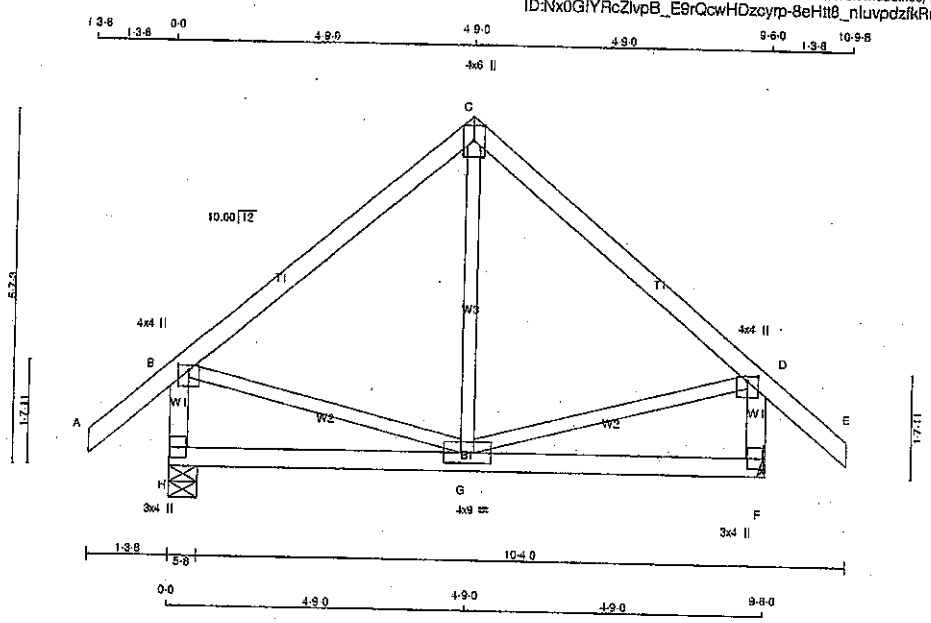


TOTAL WEIGHT = 2 X 43 = 87 lb
(M)(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| H - B | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| C | TTW+p | MT20 | 4.0 | 6.0 | Edge | |
| D | TMWW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |
| G | BMWWW+ | MT20 | 4.0 | 9.0 | | |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| H | 651 | 0 | 651 | 0 | 0 | 5-8 | 5-8 |
| F | 651 | 0 | 651 | 0 | 0 | IN-SX | IN-SX |
| | | | | | | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| H | 458 | 314 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 144 / 0 | 0 / 0 |
| F | 458 | 314 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 144 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -320 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| C- D | -320 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| D- E | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| H- B | -617 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 |
| F- D | -617 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 |
| H- G | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 |
| G- F | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| G- C | -27 / 72 | 0.02 (4) |
| B- G | 0 / 255 | 0.06 (1) |
| G- D | 0 / 255 | 0.06 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.27/1.00 (C-D:1) , BC=0.12/1.00 (G-H:4) , WB=0.06/1.00 (B-G:1) , SSI=0.13/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 850 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.50 (B) (INPUT = 0.90 )
JSI METAL= 0.14 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108635

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | G14 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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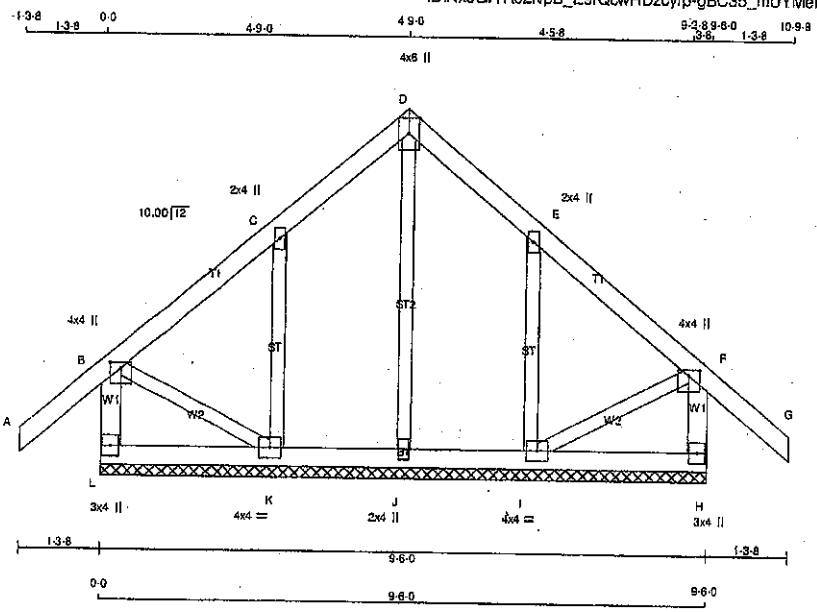


TOTAL WEIGHT = 46 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| L - B | 2x4 | DRY | No.2 | SPF |
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| ALL GABLE WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| C | TMW+w | MT20 | 2.0 | 4.0 | | |
| D | TTW+p | MT20 | 4.0 | 6.0 | Edge | |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |
| I | BMWW1-t | MT20 | 4.0 | 4.0 | | |
| J | BMW1+w | MT20 | 2.0 | 4.0 | | |
| K | BMWW1-t | MT20 | 4.0 | 4.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| L- B | -248 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B- C | -7 / 0 | -91.8 | -91.8 | 0.09 (1) | 10.00 |
| C- D | -34 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| D- E | -34 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| E- F | -7 / 0 | -91.8 | -91.8 | 0.09 (1) | 10.00 |
| F- G | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| H- F | -248 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.03 (4) | 10.00 |
| K- J | 0 / 11 | -18.5 | -18.5 | 0.03 (4) | 10.00 |
| J- I | 0 / 11 | -18.5 | -18.5 | 0.03 (4) | 10.00 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.03 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| J- D | -112 / 0 | 0.05 (1) |
| K- C | -268 / 0 | 0.06 (1) |
| I- E | -268 / 0 | 0.06 (1) |
| B- K | 0 / 20 | 0.00 (1) |
| I- F | 0 / 20 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (A-B:1) , BC=0.03/1.00 (I-J:4) , WB=0.06/1.00 (E-I:1) , SSI=0.09/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (C) (INPUT = 0.90 )
JSI METAL= 0.14 (C) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108616

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T15 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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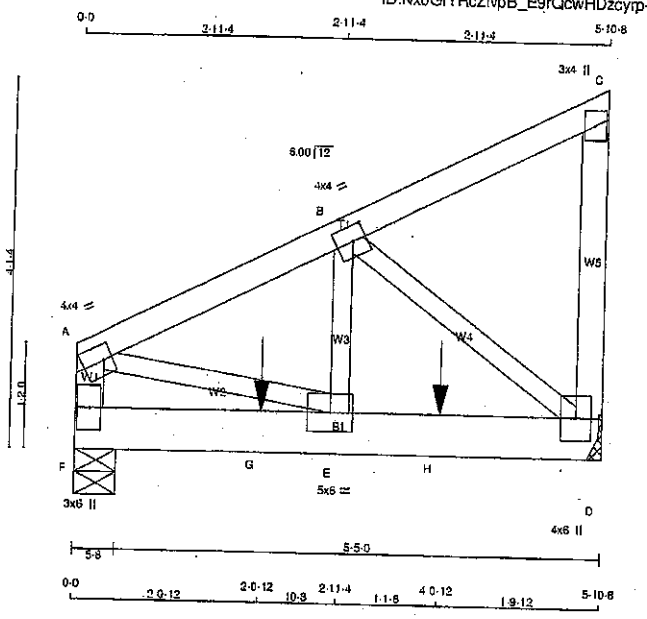


TOTAL WEIGHT = 2 X 29 = 58 lb (M)

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - A | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- A | 1 | 12 | TOP |
| A- C | 1 | 12 | TOP |
| C- D | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- D | 2 | 12 | SIDE(0.0) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| B | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| C | TMV+p | MT20 | 3.0 | 4.0 | | |
| D | BMWW1+p | MT20 | 4.0 | 6.0 | | |
| E | BMWW-t | MT20 | 5.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108636

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| F | 1061 | 0 | 1061 | 0 | 0 | 5-8 | 5-8 |
| D | 1127 | 0 | 1127 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX. MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 747 | 512 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 234 / 0 | 0 / 0 |
| D | 793 | 544 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 248 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- A | -903 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | |
| A- B | -1150 / 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 | |
| B- C | -11 / 0 | -91.8 | -91.8 | 0.05 (1) | 6.25 | |
| D- C | -109 / 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 | |
| F- G | 0 / 0 | -18.5 | -18.5 | 0.11 (1) | 10.00 | |
| G- E | 0 / 0 | -18.5 | -18.5 | 0.11 (1) | 10.00 | |
| E- H | 0 / 1039 | -18.5 | -18.5 | 0.21 (1) | 10.00 | |
| H- D | 0 / 1039 | -18.5 | -18.5 | 0.21 (1) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- E | 0 / 1074 | 0.13 (1) |
| E- B | 0 / 993 | 0.12 (1) |
| B- D | -1307 / 0 | 0.16 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| G | 2-0-12 | -541 | -541 | --- | FRONT | VERT | TOTAL | --- | C1 |
| H | 4-0-12 | -541 | -541 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.06/1.00 (A-B:1) , BC=0.21/1.00 (D-E:1) , WB=0.16/1.00 (B-D:1) , SSI=0.22/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1967 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90 )
JSI METAL= 0.23 (D) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T15 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| F | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108636

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T15Z | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Tue Mar 23 15:10:25 2021 Page 1
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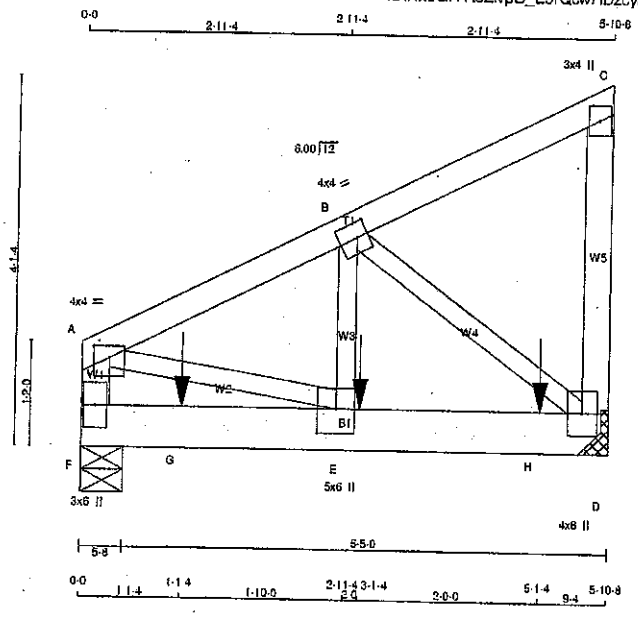


TOTAL WEIGHT = 2 X 29 = 58 lb
[M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - A | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- A | 1 | 12 | TOP |
| A- C | 1 | 12 | TOP |
| C- D | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- D | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| B- E | 1 | 6 | SIDE(112.5) |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMVW-p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| B | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| C | TMV+p | MT20 | 3.0 | 4.0 | | |
| D | BMVW1+p | MT20 | 4.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108637

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| F | 1959 | 0 | 1959 | 0 | 0 | IN-SX | IN-SX |
| D | 2089 | 0 | 2089 | 0 | 0 | 5-8 | 5-8 |
| | | | | | | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

**UNFACTORED REACTIONS**

1ST LCASE MAX./MIN. COMPONENT REACTIONS

| JT | COMBINED | SNOW | LIVE | PERM LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 1380 | 939 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 441 / 0 | 0 / 0 |
| D | 1471 | 1001 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 471 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- A | -1314 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 |
| A- B | -1746 / 0 | -91.8 | -91.8 | 0.08 (1) | 6.25 |
| B- C | -9 / 0 | -91.8 | -91.8 | 0.05 (1) | 10.00 |
| D- C | -114 / 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 |
| F- G | 0 / 0 | -18.5 | -18.5 | 0.26 (1) | 10.00 |
| G- E | 0 / 0 | -18.5 | -18.5 | 0.26 (1) | 10.00 |
| E- H | 0 / 1572 | -18.5 | -18.5 | 0.32 (1) | 10.00 |
| H- D | 0 / 1572 | -18.5 | -18.5 | 0.32 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- E | 0 / 1626 | 0.20 (1) |
| E- B | 0 / 1675 | 0.21 (1) |
| B- D | -1978 / 0 | 0.24 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| E | 3-1-4 | -797 | -797 | --- | BACK | VERT | TOTAL | --- | C1 |
| G | 1-1-4 | -797 | -797 | --- | BACK | VERT | TOTAL | --- | C1 |
| H | 5-1-4 | -799 | -799 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.07/1.00 (A-F:1) , BC=0.32/1.00 (D-E:1) , WB=0.24/1.00 (B-D:1) , SSI=0.26/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90 )
JSI METAL= 0.35 (D) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T15Z | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| E | BMWW+t | MT20 | 5.0 | 6.0 | 3.25 | 2.50 |
| F | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108637

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T15Z3 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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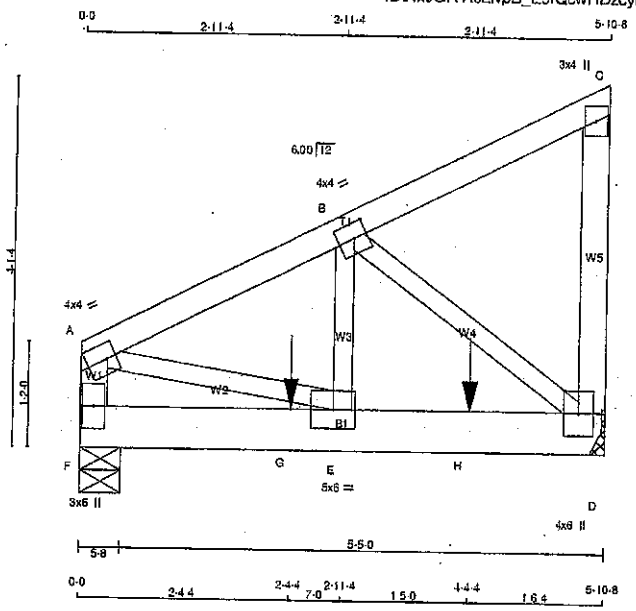


TOTAL WEIGHT = 2 X 29 = 58 lb

[M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - A | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- A | 1 | 12 | TOP |
| A- C | 1 | 12 | TOP |
| C- D | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- D | 2 | 12 | SIDE(0.0) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| B | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| C | TMV+p | MT20 | 3.0 | 4.0 | | |
| D | BMVW1+p | MT20 | 4.0 | 6.0 | | |
| E | BMWW-t | MT20 | 5.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108673

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| F | 876 | 0 | 876 | 0 | 0 | IN-SX | IN-SX |
| D | 1058 | 0 | 1058 | 0 | 0 | 5-8 | 5-8 |
| | | | | | | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

**UNFACTORED REACTIONS**

MAX./MIN. COMPONENT REACTIONS

| JT | 1ST LCASE COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 618 | 414 0 | 0 0 | 0 0 | 0 0 | 204 0 | 0 0 |
| D | 746 | 501 0 | 0 0 | 0 0 | 0 0 | 245 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- A | -791 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 |
| A- B | -988 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| B- C | -12 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| D- C | -108 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 |
| F- G | 0 0 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| G- E | 0 0 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| E- H | 0 894 | -18.5 | -18.5 | 0.20 (1) | 10.00 |
| H- D | 0 894 | -18.5 | -18.5 | 0.20 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- E | 0 925 | 0.11 (1) |
| E- B | 0 808 | 0.10 (1) |
| B- D | -1125 0 | 0.13 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| G | 2-4-4 | -453 | -453 | --- | FRONT | VERT | TOTAL | -- | C1 |
| H | 4-4-4 | -453 | -453 | --- | FRONT | VERT | TOTAL | -- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.06/1.00 (A-B:1) , BC=0.20/1.00 (D-E:1) , WB=0.13/1.00 (B-D:1) , SSI=0.20/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.77 (A) (INPUT = 0.90 )
JSI METAL= 0.20 (D) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T15Z3 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| F | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108673

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T15Z4 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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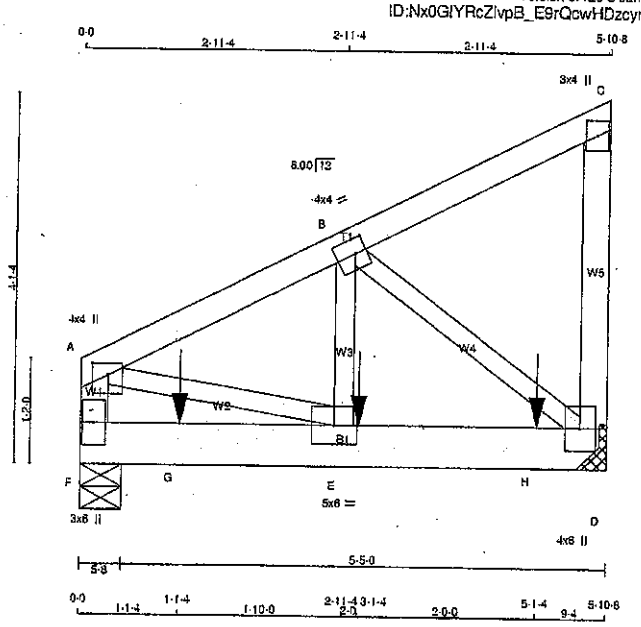


TOTAL WEIGHT = 2 X 29 = 58 lb

[M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - A | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- A | 1 | 12 | TOP |
| A- C | 1 | 12 | TOP |
| C- D | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- D | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| B- E | 1 | 6 | SIDE(79.3) |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMWW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| B | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| C | TMV+p | MT20 | 3.0 | 4.0 | | |
| D | BMWW1+p | MT20 | 4.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108674

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| F | 1776 | 0 | 1776 | 0 | 0 | 5-8 | 5-8 |
| D | 1892 | 0 | 1892 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 1254 | 837 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 417 / 0 | 0 / 0 |
| D | 1335 | 890 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 445 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- A | -1200 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 | |
| A- B | -1582 / 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 | |
| B- C | -10 / 0 | -91.8 | -91.8 | 0.05 (1) | 10.00 | |
| D- C | -113 / 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 | |
| F- G | 0 / 0 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |
| G- E | 0 / 0 | -18.5 | -18.5 | 0.23 (1) | 10.00 | |
| E- H | 0 / 1424 | -18.5 | -18.5 | 0.29 (1) | 10.00 | |
| H- D | 0 / 1424 | -18.5 | -18.5 | 0.29 (1) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- E | 0 / 1472 | 0.18 (1) |
| E- B | 0 / 1485 | 0.18 (1) |
| B- D | -1791 / 0 | 0.21 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| E | 3-1-4 | -710 | -710 | --- | BACK | VERT | TOTAL | --- | C1 |
| G | 1-1-4 | -710 | -710 | --- | BACK | VERT | TOTAL | --- | C1 |
| H | 5-1-4 | -711 | -711 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.07/1.00 (A-F:1) , BC=0.29/1.00 (D-E:1) , WB=0.21/1.00 (B-D:1) , SSI=0.23/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (A) (INPUT = 0.90 )
JSI METAL= 0.32 (D) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T15Z4 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| E | BMWW-t | MT20 | 5.0 | 6.0 | | |
| F | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108674

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | T16 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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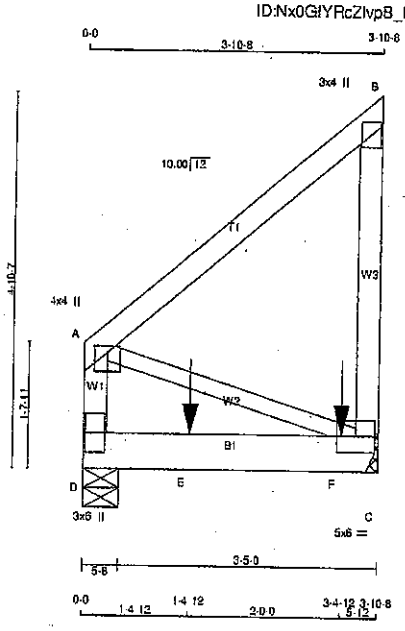


TOTAL WEIGHT = 2 X 22 = 43 lb

[M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| D - A | 2x4 | DRY | No.2 | SPF |
| A - B | 2x4 | DRY | No.2 | SPF |
| C - B | 2x4 | DRY | No.2 | SPF |
| D - C | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| D- A | 1 | 12 | TOP |
| A- B | 1 | 12 | TOP |
| B- C | 1 | 12 | SIDE(44.2) |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| D- C | 2 | 12 | SIDE(122.0) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMWW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | BMWW1-t | MT20 | 5.0 | 6.0 | | |
| D | BMV1+p | MT20 | 3.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108638

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| D | 697 | 0 | 697 | 0 | 0 | 5-8 | 5-8 |
| C | 1000 | 0 | 1000 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 2-0.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX.-MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| D | 490 | 339 0 | 0 0 | 0 0 | 0 0 | 151 0 | 0 0 |
| C | 702 | 487 0 | 0 0 | 0 0 | 0 0 | 215 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| D- A | -178 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 |
| A- B | 0 0 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| C- B | -178 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| D- E | 0 0 | -18.5 | -18.5 | 0.26 (1) | 10.00 |
| E- F | 0 0 | -18.5 | -18.5 | 0.26 (1) | 10.00 |
| F- C | 0 0 | -18.5 | -18.5 | 0.26 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- C | 0 0 | 0.00 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| E | 1-4-12 | -443 | -443 | --- | FRONT | VERT | TOTAL | --- | C1 |
| F | 3-4-12 | -447 | -447 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.26/1.00 (C-D:1) , WB=0.00/1.00 (A-C:1) , SSI=0.27/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 550 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.07 (A) (INPUT = 0.90 )
JSI METAL= 0.03 (B) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T20 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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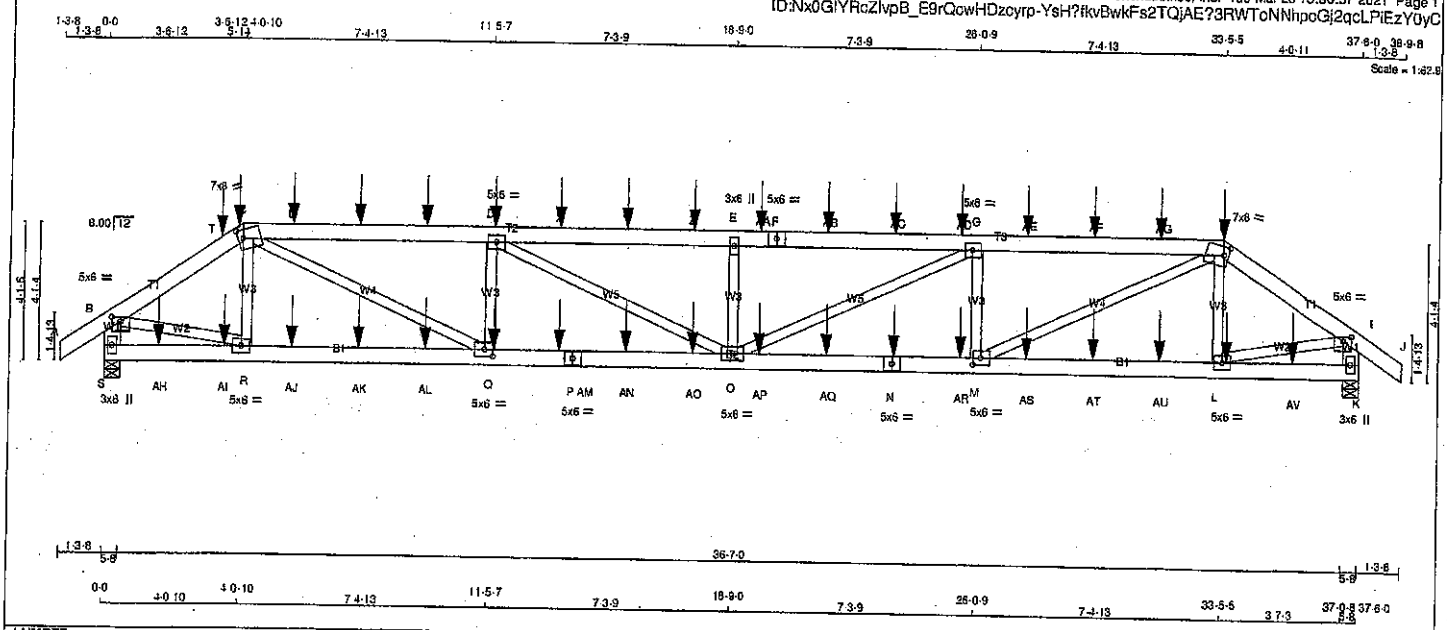


TOTAL WEIGHT = 2 X 208 = 416 lb

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x6 | DRY | No.2 | SPF |
| C - F | 2x6 | DRY | No.2 | SPF |
| F - H | 2x6 | DRY | No.2 | SPF |
| H - J | 2x6 | DRY | No.2 | SPF |
| S - B | 2x6 | DRY | No.2 | SPF |
| K - I | 2x6 | DRY | No.2 | SPF |
| S - P | 2x6 | DRY | No.2 | SPF |
| P - N | 2x6 | DRY | No.2 | SPF |
| N - K | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A- C | 2 | 12 | SIDE(122.0) |
| C- F | 2 | 12 | SIDE(183.1) |
| F- H | 2 | 12 | SIDE(61.0) |
| H- J | 2 | 12 | SIDE(122.0) |
| S- B | 2 | 12 | TOP |
| K- I | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| S- P | 2 | 12 | SIDE(183.1) |
| P- N | 2 | 12 | SIDE(0.0) |
| N- K | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108650 JN

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| S | 3659 | 0 | 3659 | 0 | 0 | 5-8 | 5-8 |
| K | 3621 | 0 | 3621 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| S | 2585 | 1713 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 872 / 0 | 0 / 0 |
| K | 2558 | 1692 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 867 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 36 | -91.8 | -91.8 | 0.04 (1) | 10.00 |
| B- T | -4460 / 0 | -91.8 | -91.8 | 0.11 (1) | 5.35 |
| T- C | -4460 / 0 | -91.8 | -91.8 | 0.11 (1) | 5.35 |
| C- U | -7818 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| U- V | -7818 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| V- W | -7818 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| W- D | -7818 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| D- X | -9044 / 0 | -91.8 | -91.8 | 0.46 (1) | 3.70 |
| X- Y | -9044 / 0 | -91.8 | -91.8 | 0.46 (1) | 3.70 |
| Y- Z | -9044 / 0 | -91.8 | -91.8 | 0.46 (1) | 3.70 |
| Z- E | -9044 / 0 | -91.8 | -91.8 | 0.46 (1) | 3.70 |
| E-AA | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| AA- F | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| F-AB | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| AB-AC | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| AC-AD | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| AD- G | -9044 / 0 | -91.8 | -91.8 | 0.47 (1) | 3.70 |
| G-AE | -7808 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| AE-AF | -7808 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| AF-AG | -7808 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| AG- H | -7808 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.99 |
| H- I | -4468 / 0 | -91.8 | -91.8 | 0.10 (1) | 5.35 |
| I-AJ | 0 / 36 | -91.8 | -91.8 | 0.04 (1) | 10.00 |
| S- B | -3634 / 0 | 0.0 | 0.0 | 0.13 (1) | 7.37 |
| K- I | -3600 / 0 | 0.0 | 0.0 | 0.13 (1) | 7.40 |
| S-AH | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| AH-AI | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| AI- R | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| R-AJ | 0 / 3702 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AJ-AK | 0 / 3702 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AK-AL | 0 / 3702 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AL- Q | 0 / 3702 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| Q-AM | 0 / 7819 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AM- P | 0 / 7819 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| P-AN | 0 / 7819 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AN-AO | 0 / 7819 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AO- O | 0 / 7819 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| O-AP | 0 / 7808 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AP-AQ | 0 / 7808 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AQ- N | 0 / 7808 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| N-AR | 0 / 7808 | -18.5 | -18.5 | 0.58 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| R- C | -564 / 0 | 0.05 (1) |
| C- Q | 0 / 4583 | 0.41 (1) |
| Q- D | -1804 / 0 | 0.15 (1) |
| D- O | 0 / 1369 | 0.12 (1) |
| O- E | -995 / 0 | 0.09 (1) |
| O- G | 0 / 1361 | 0.12 (1) |
| M- G | -1807 / 0 | 0.15 (1) |
| M- H | 0 / 4590 | 0.41 (1) |
| L- H | -559 / 0 | 0.05 (1) |
| B- R | 0 / 3809 | 0.34 (1) |
| L- I | 0 / 3791 | 0.34 (1) |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/999 (0.44")

CSI: TC=0.47/1.00 (E-G:1) , BC=0.58/1.00 (O-Q:1) , WB=0.41/1.00 (H-M:1) , SSI=0.20/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (H) (INPUT = 0.90 )
JSI METAL= 0.74 (P) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T20 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington


ID:Nx0GlYRcZlvpB_E9rQcwHDzcvrp-YsH?fkvBwkFs2TQjAE?3RWToNNhpcGj2qcLPlEzY0yC

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 6.0 | 1.50 | 3.00 |
| C | TTWW-m | MT20 | 7.0 | 8.0 | 3.00 | 1.75 |
| D | TMWW-t | MT20 | 5.0 | 6.0 | | |
| E | TMW+w | MT20 | 3.0 | 6.0 | | |
| F | TS-t | MT20 | 5.0 | 6.0 | | |
| G | TMWW-t | MT20 | 5.0 | 6.0 | | |
| H | TTWW-m | MT20 | 7.0 | 8.0 | 3.00 | 1.75 |
| I | TMVW-p | MT20 | 5.0 | 6.0 | 1.50 | 3.00 |
| K | BMV1+p | MT20 | 3.0 | 6.0 | | |
| L | BMWW-t | MT20 | 5.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| N | BS-t | MT20 | 5.0 | 6.0 | | |
| O | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| R | BMWW-t | MT20 | 5.0 | 6.0 | | |
| S | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| AR- M | 0 / 7808 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| M-AS | 0 / 3685 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AS-AT | 0 / 3685 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AT-AU | 0 / 3685 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| AU- L | 0 / 3685 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| L-AV | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |
| AV- K | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 4-0-10 | -40 | -40 | --- | FRONT | VERT | DEAD | --- | C1 |
| C | 4-0-10 | -171 | -171 | --- | FRONT | VERT | SNOW | --- | C1 |
| D | 11-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| H | 33-5-5 | -40 | -40 | --- | FRONT | VERT | DEAD | --- | C1 |
| H | 33-5-5 | -81 | -81 | --- | FRONT | VERT | TOTAL | --- | C1 |
| H | 33-5-5 | -171 | -171 | --- | FRONT | VERT | SNOW | --- | C1 |
| L | 33-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| N | 23-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Q | 11-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| T | 3-6-12 | -92 | -92 | --- | FRONT | VERT | TOTAL | --- | C1 |
| U | 5-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| V | 7-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| W | 9-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| X | 13-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Y | 15-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Z | 17-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AA | 19-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AB | 21-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AC | 23-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AD | 25-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AE | 27-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AF | 29-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AG | 31-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AH | 1-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AI | 3-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AJ | 5-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AK | 7-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AL | 9-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AM | 13-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AN | 15-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AO | 17-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AP | 19-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AQ | 21-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AR | 25-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AS | 27-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AT | 29-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AU | 31-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AV | 35-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108650

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T21 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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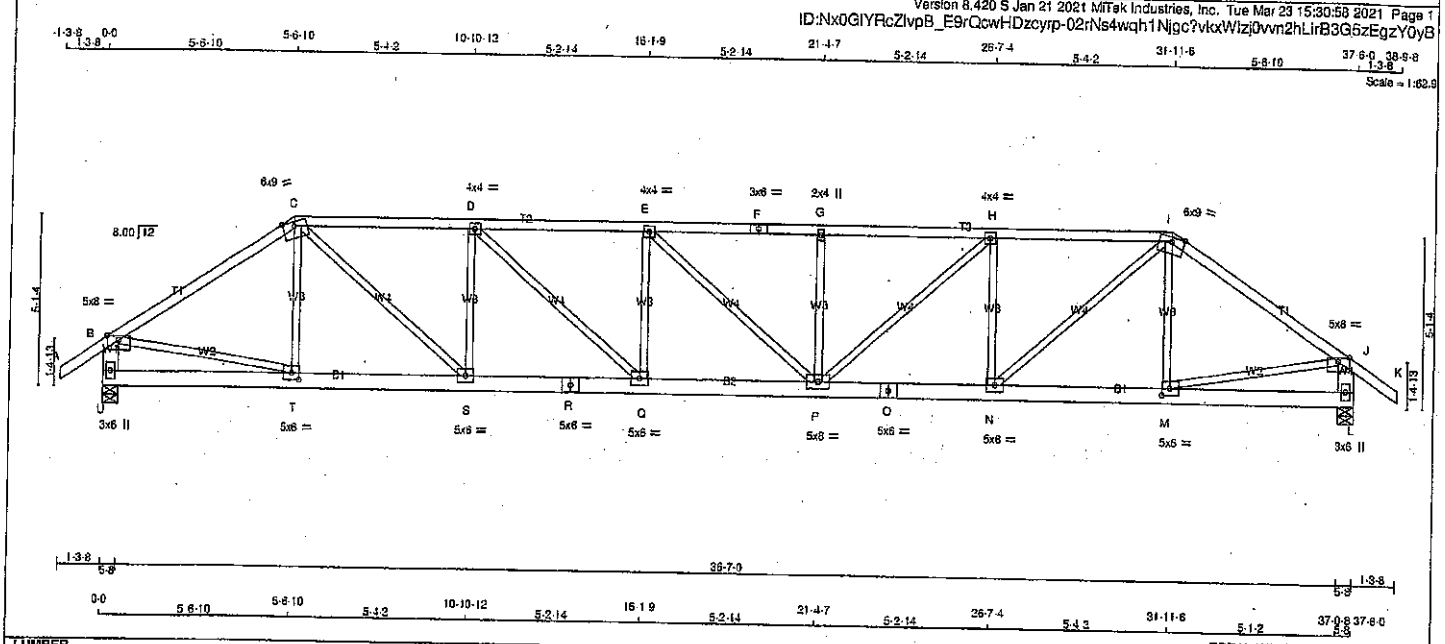


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| I - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TTWW-m | MT20 | 6.0 | 9.0 | Edge | |
| D, E, H | | | | | | |
| D | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMW+w | MT20 | 2.0 | 4.0 | | |
| I | TTWW-m | MT20 | 6.0 | 9.0 | Edge | |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| N, Q, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108651

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| L | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -2515 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.61 |
| C- D | -3431 / 0 | -91.8 | -91.8 | 0.63 (1) | 3.27 |
| D- E | -4056 / 0 | -91.8 | -91.8 | 0.71 (1) | 2.95 |
| E- F | -4048 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.10 |
| F- G | -4048 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.10 |
| G- H | -4048 / 0 | -91.8 | -91.8 | 0.72 (1) | 2.94 |
| H- I | -3433 / 0 | -91.8 | -91.8 | 0.63 (1) | 3.27 |
| I- J | -2515 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.61 |
| J- K | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| U- B | -2148 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.94 |
| L- J | -2148 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.94 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| T- S | 0 / 2084 | -18.5 | -18.5 | 0.28 (1) | 10.00 |
| S- R | 0 / 3431 | -18.5 | -18.5 | 0.45 (1) | 10.00 |
| R- Q | 0 / 3431 | -18.5 | -18.5 | 0.45 (1) | 10.00 |
| Q- P | 0 / 4056 | -18.5 | -18.5 | 0.54 (1) | 10.00 |
| P- O | 0 / 3433 | -18.5 | -18.5 | 0.46 (1) | 10.00 |
| O- N | 0 / 3433 | -18.5 | -18.5 | 0.46 (1) | 10.00 |
| N- M | 0 / 2085 | -18.5 | -18.5 | 0.28 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -251 / 2 | 0.09 (1) |
| C- S | 0 / 1798 | 0.40 (1) |
| S- D | -1101 / 0 | 0.39 (1) |
| D- Q | 0 / 842 | 0.19 (1) |
| Q- E | -462 / 0 | 0.17 (1) |
| E- P | -11 / 0 | 0.01 (1) |
| P- G | -464 / 0 | 0.17 (1) |
| P- H | 0 / 828 | 0.19 (1) |
| N- H | -1094 / 0 | 0.39 (1) |
| N- I | 0 / 1799 | 0.40 (1) |
| M- I | -253 / 2 | 0.09 (1) |
| B- T | 0 / 2122 | 0.48 (1) |
| M- J | 0 / 2122 | 0.48 (1) |

TOTAL WEIGHT = 2 X 177 = 353 lb
[M]

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.44")

CSI: TC=0.74/1.00 (I-J:1) , BC=0.54/1.00 (P-Q:1) , WB=0.46/1.00 (J-M:1) , SSI=0.23/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (T) (INPUT = 0.90 )
JSI METAL= 0.66 (O) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T22 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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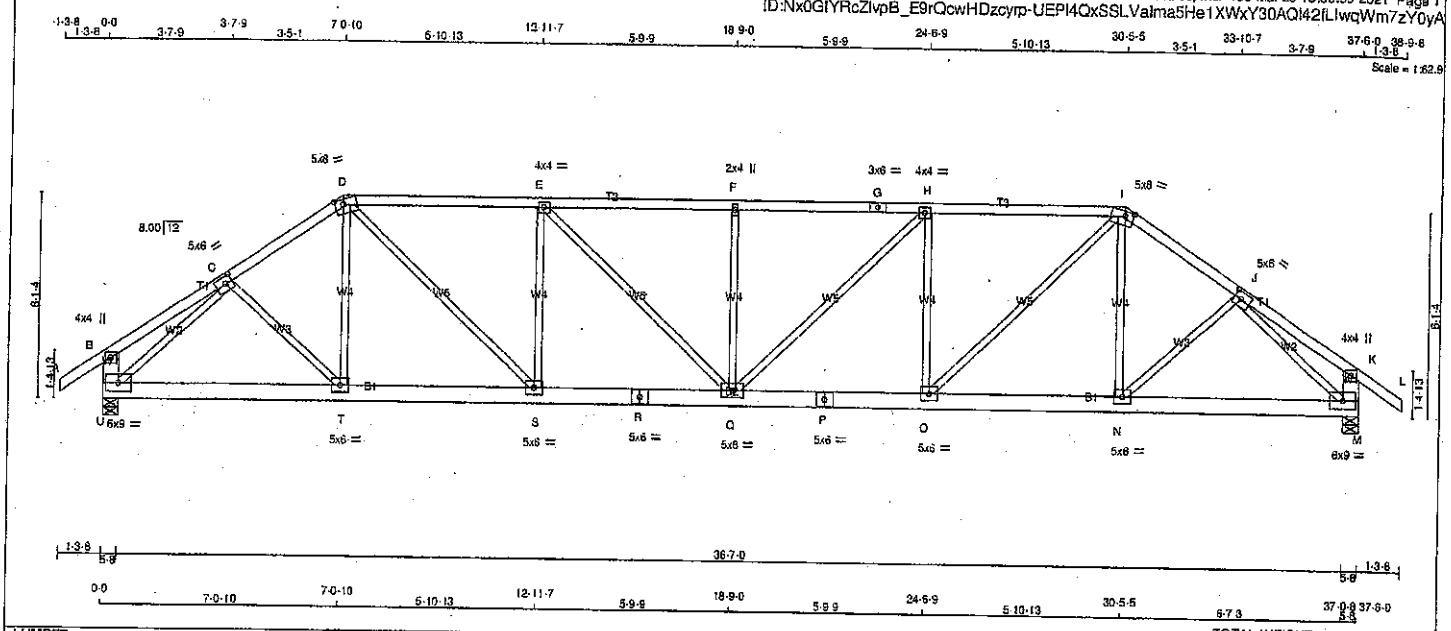


TOTAL WEIGHT = 2 X 182 = 364 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - P | 2x6 | DRY | No.2 | SPF |
| P - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 4.0 | 4.0 | | |
| C | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| D | TTWW-m | MT20 | 5.0 | 8.0 | 1.75 | 3.00 |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TS-t | MT20 | 3.0 | 6.0 | | |
| H | TMWW-t | MT20 | 4.0 | 4.0 | | |
| I | TTWW-m | MT20 | 5.0 | 8.0 | 1.75 | 3.00 |
| J | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| K | TMV+p | MT20 | 4.0 | 4.0 | | |
| M | BMWW1-t | MT20 | 5.0 | 9.0 | | |
| N, O, S, T | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| U | BMWW1-t | MT20 | 6.0 | 9.0 | | |

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| M | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| M | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | 0 / 18 | -91.8 | -91.8 | 0.16 (1) | 10.00 |
| C- D | -2527 / 0 | -91.8 | -91.8 | 0.25 (1) | 4.13 |
| D- E | -3119 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.28 |
| E- F | -3416 / 0 | -91.8 | -91.8 | 0.78 (1) | 3.10 |
| F- G | -3416 / 0 | -91.8 | -91.8 | 0.78 (1) | 3.10 |
| G- H | -3416 / 0 | -91.8 | -91.8 | 0.78 (1) | 3.10 |
| H- I | -3119 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.28 |
| I- J | -2527 / 0 | -91.8 | -91.8 | 0.25 (1) | 4.13 |
| J- K | 0 / 18 | -91.8 | -91.8 | 0.16 (1) | 10.00 |
| K- L | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| U- B | -255 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| M- K | -255 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| U- T | 0 / 1979 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| T- S | 0 / 2084 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| S- R | 0 / 3119 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| R- Q | 0 / 3119 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| Q- P | 0 / 3119 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| P- O | 0 / 3119 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| O- N | 0 / 2085 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| N- M | 0 / 1980 | -18.5 | -18.5 | 0.29 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- T | 0 / 142 | 0.03 (4) |
| T- D | 0 / 91 | 0.03 (4) |
| D- S | 0 / 1441 | 0.32 (1) |
| S- E | -899 / 0 | 0.49 (1) |
| E- Q | 0 / 417 | 0.09 (1) |
| Q- F | -489 / 0 | 0.27 (1) |
| Q- H | 0 / 417 | 0.09 (1) |
| O- H | -899 / 0 | 0.49 (1) |
| O- I | 0 / 1440 | 0.32 (1) |
| N- I | 0 / 91 | 0.03 (4) |
| N- J | 0 / 141 | 0.03 (4) |
| U- C | -2731 / 0 | 0.95 (1) |
| J- M | -2731 / 0 | 0.95 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.78/1.00 (F-H:1) , BC=0.42/1.00 (O-Q:1) , WB=0.95/1.00 (J-M:1) , SSI=0.25/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.90 )
JSI METAL= 0.62 (C) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108652

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T23 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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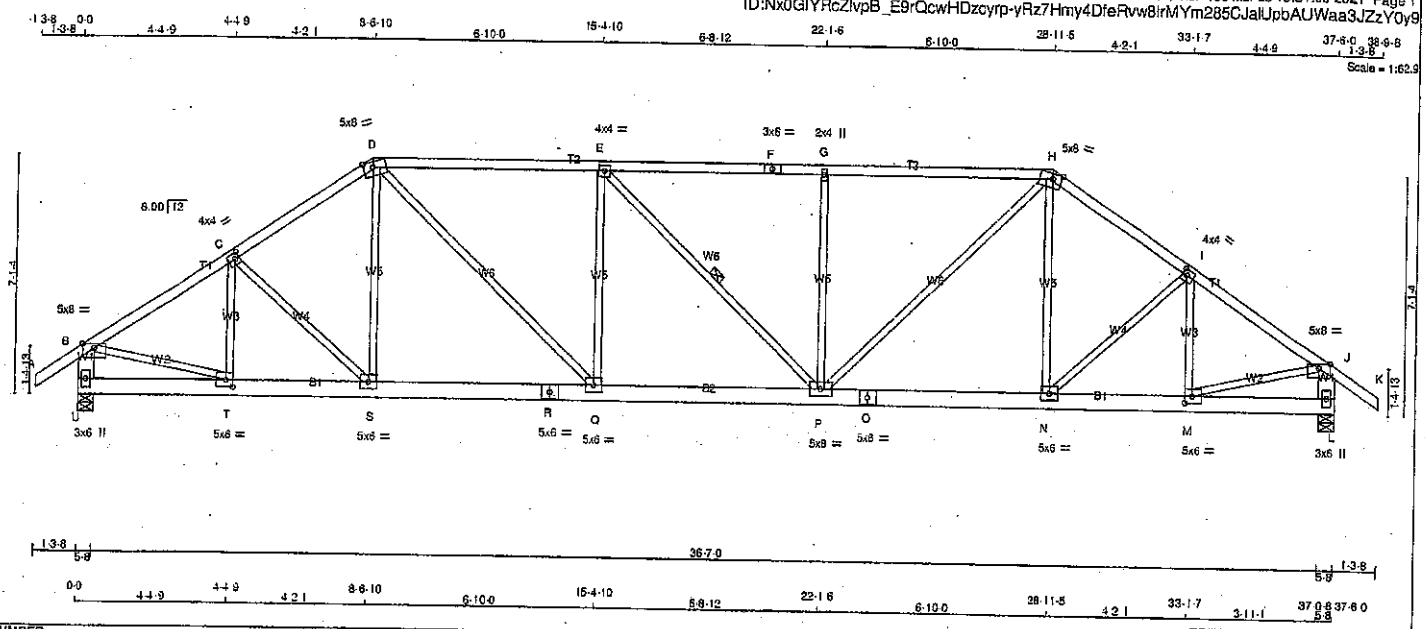


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D | TTWW-m | MT20 | 5.0 | 8.0 | 2.00 | 3.25 |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMW+w | MT20 | 2.0 | 4.0 | | |
| H | TTWW-m | MT20 | 5.0 | 8.0 | 2.00 | 3.25 |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| N, Q, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.50 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108653

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

TOTAL WEIGHT = 2 X 185 = 370 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| L | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 CSI (LC) | MAX UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -2471 / 0 | -91.8 | -91.8 | 0.39 (1) | 4.03 |
| C- D | -2483 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.02 |
| D- E | -2855 / 0 | -91.8 | -91.8 | 0.94 (1) | 3.19 |
| E- F | -2850 / 0 | -91.8 | -91.8 | 0.92 (1) | 3.19 |
| F- G | -2850 / 0 | -91.8 | -91.8 | 0.92 (1) | 3.19 |
| G- H | -2850 / 0 | -91.8 | -91.8 | 0.92 (1) | 3.21 |
| H- I | -2485 / 0 | -91.8 | -91.8 | 0.38 (1) | 4.02 |
| I- J | -2471 / 0 | -91.8 | -91.8 | 0.39 (1) | 4.03 |
| J- K | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| U- B | -2140 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| L- J | -2140 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.05 (1) | 10.00 |
| T- S | 0 / 2076 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| S- R | 0 / 2044 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| R- Q | 0 / 2044 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| Q- P | 0 / 2855 | -18.5 | -18.5 | 0.39 (1) | 10.00 |
| P- O | 0 / 2046 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| O- N | 0 / 2046 | -18.5 | -18.5 | 0.29 (1) | 10.00 |
| N- M | 0 / 2076 | -18.5 | -18.5 | 0.30 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.05 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -434 / 0 | 0.11 (1) |
| C- S | -47 / 0 | 0.03 (1) |
| S- D | 0 / 166 | 0.04 (4) |
| D- Q | 0 / 1137 | 0.26 (1) |
| Q- E | -673 / 0 | 0.55 (1) |
| E- P | -6 / 0 | 0.00 (1) |
| P- G | -675 / 0 | 0.55 (1) |
| P- H | 0 / 1128 | 0.25 (1) |
| N- H | 0 / 173 | 0.05 (4) |
| N- I | -45 / 0 | 0.03 (1) |
| M- I | -436 / 0 | 0.11 (1) |
| B- T | 0 / 2129 | 0.48 (1) |
| M- J | 0 / 2129 | 0.48 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT. CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")

CSI: TC=0.94/1.00 (D-E:1) , BC=0.39/1.00 (P-Q:1) , WB=0.55/1.00 (G-P:1) , SSI=0.29/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 786 | 1987 | 1373 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (H) (INPUT = 0.90 )
JSI METAL= 0.47 (M) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T24 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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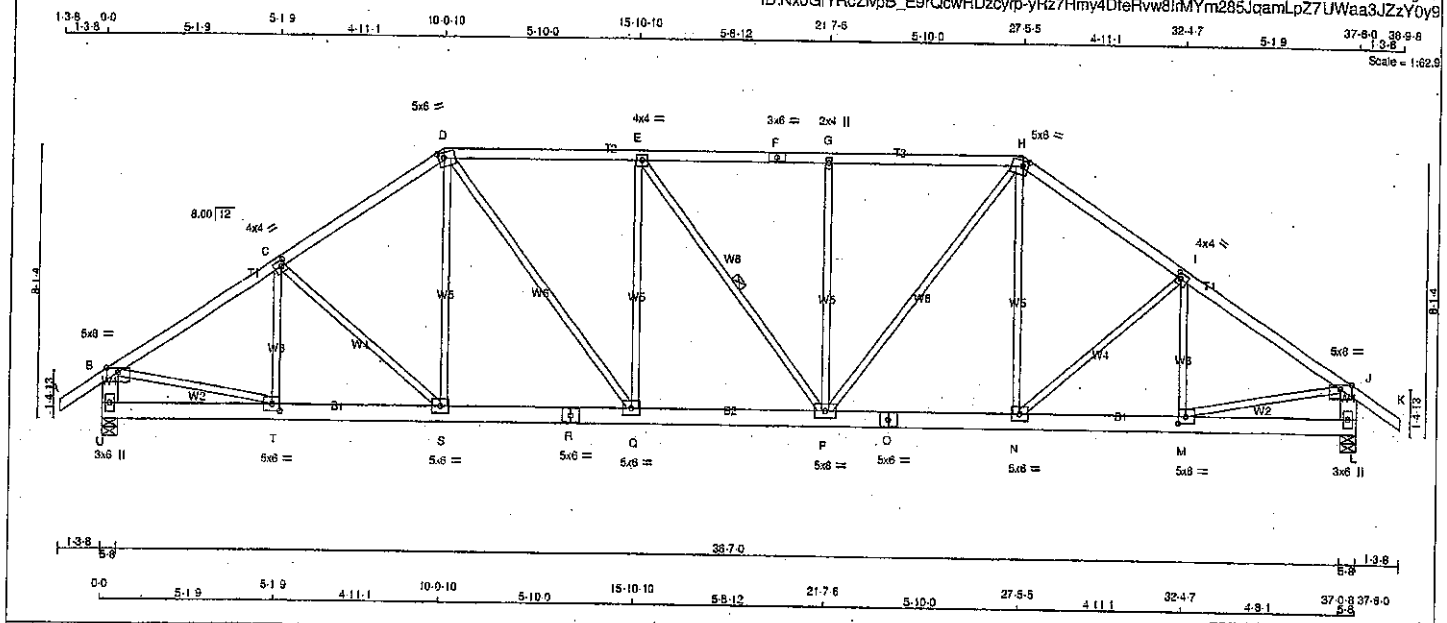


TOTAL WEIGHT = 2 X 193 = 385 lb
[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| E | TMWW-t | MT20 | 4.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMW+w | MT20 | 2.0 | 4.0 | | |
| H | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| N, Q, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108654

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| L | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 CSI (LC) | MAX | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | | 10.00 |
| B- C | -2526 / 0 | -91.8 | -91.8 | 0.40 (1) | | 4.00 |
| C- D | -2409 / 0 | -91.8 | -91.8 | 0.38 (1) | | 4.09 |
| D- E | -2492 / 0 | -91.8 | -91.8 | 0.46 (1) | | 3.94 |
| E- F | -2487 / 0 | -91.8 | -91.8 | 0.42 (1) | | 3.99 |
| F- G | -2487 / 0 | -91.8 | -91.8 | 0.42 (1) | | 3.99 |
| G- H | -2487 / 0 | -91.8 | -91.8 | 0.46 (1) | | 3.94 |
| H- I | -2411 / 0 | -91.8 | -91.8 | 0.38 (1) | | 4.09 |
| I- J | -2527 / 0 | -91.8 | -91.8 | 0.40 (1) | | 4.00 |
| J- K | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | | 10.00 |
| U- B | -2140 / 0 | 0.0 | 0.0 | 0.14 (1) | | 6.96 |
| L- J | -2139 / 0 | 0.0 | 0.0 | 0.14 (1) | | 6.96 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | | 10.00 |
| T- S | 0 / 2126 | -18.5 | -18.5 | 0.29 (1) | | 10.00 |
| S- R | 0 / 1980 | -18.5 | -18.5 | 0.27 (1) | | 10.00 |
| R- Q | 0 / 1980 | -18.5 | -18.5 | 0.27 (1) | | 10.00 |
| Q- P | 0 / 2492 | -18.5 | -18.5 | 0.33 (1) | | 10.00 |
| P- O | 0 / 1981 | -18.5 | -18.5 | 0.28 (1) | | 10.00 |
| O- N | 0 / 1981 | -18.5 | -18.5 | 0.28 (1) | | 10.00 |
| N- M | 0 / 2127 | -18.5 | -18.5 | 0.29 (1) | | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -343 / 0 | 0.11 (1) |
| C- S | -200 / 0 | 0.16 (1) |
| S- D | 0 / 253 | 0.06 (1) |
| D- Q | 0 / 850 | 0.19 (1) |
| Q- E | -571 / 0 | 0.68 (1) |
| E- P | -8 / 0 | 0.00 (1) |
| P- G | -573 / 0 | 0.68 (1) |
| P- H | 0 / 840 | 0.19 (1) |
| N- H | 0 / 260 | 0.06 (1) |
| N- I | -199 / 0 | 0.16 (1) |
| M- I | -345 / 0 | 0.11 (1) |
| B- T | 0 / 2166 | 0.49 (1) |
| M- J | 0 / 2166 | 0.49 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.46/1.00 (D-E:1) , BC=0.33/1.00 (P-Q:1) , WB=0.68/1.00 (G-P:1) , SSI=0.25/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (T) (INPUT = 0.90 )
JSI METAL= 0.48 (M) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T25 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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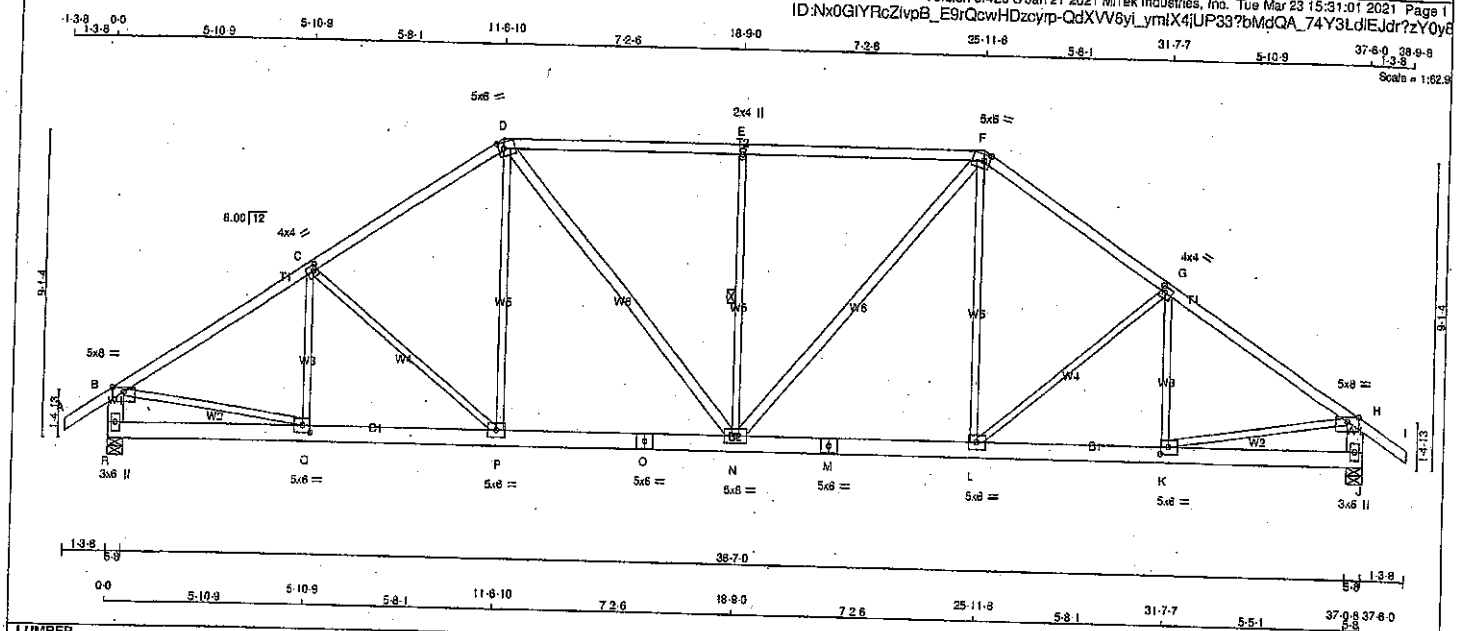


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| R - B | 2x6 | DRY | No.2 | SPF |
| J - H | 2x6 | DRY | No.2 | SPF |
| R - Q | 2x6 | DRY | No.2 | SPF |
| Q - M | 2x6 | DRY | No.2 | SPF |
| M - J | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| D - N | 2x4 | DRY | No.2 | SPF |
| N - F | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| G | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| H | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| J | BMV1+p | MT20 | 3.0 | 6.0 | | |
| K | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| L | BMWW-t | MT20 | 5.0 | 6.0 | | |
| M | BS-t | MT20 | 5.0 | 6.0 | | |
| N | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWW-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| R | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108655

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

TOTAL WEIGHT = 2 X 196 = 391 lb [Mj(F)

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| R | 2193 | 0 | 2193 | 0 | 0 | IN-SX | IN-SX |
| J | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| R | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| J | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**

TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -2556 / 0 | -91.8 | -91.8 | 0.54 (1) | 3.83 |
| C- D | -2323 / 0 | -91.8 | -91.8 | 0.50 (1) | 4.02 |
| D- E | -2293 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.61 |
| E- F | -2293 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.61 |
| F- G | -2323 / 0 | -91.8 | -91.8 | 0.50 (1) | 4.02 |
| G- H | -2557 / 0 | -91.8 | -91.8 | 0.54 (1) | 3.83 |
| H- I | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| R- B | -2137 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| J- H | -2137 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 |
| R- Q | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |
| Q- P | 0 / 2156 | -18.5 | -18.5 | 0.30 (1) | 10.00 |
| P- O | 0 / 1905 | -18.5 | -18.5 | 0.27 (1) | 10.00 |
| O- N | 0 / 1905 | -18.5 | -18.5 | 0.27 (1) | 10.00 |
| N- M | 0 / 1905 | -18.5 | -18.5 | 0.27 (1) | 10.00 |
| M- L | 0 / 1905 | -18.5 | -18.5 | 0.27 (1) | 10.00 |
| L- K | 0 / 2157 | -18.5 | -18.5 | 0.30 (1) | 10.00 |
| K- J | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| Q- C | -275 / 0 | 0.11 (1) |
| C- P | -335 / 0 | 0.38 (1) |
| F- D | 0 / 353 | 0.08 (1) |
| D- N | 0 / 609 | 0.10 (1) |
| N- E | -812 / 0 | 0.42 (1) |
| N- F | 0 / 608 | 0.10 (1) |
| L- F | 0 / 353 | 0.08 (1) |
| L- G | -335 / 0 | 0.38 (1) |
| K- G | -274 / 0 | 0.11 (1) |
| B- Q | 0 / 2187 | 0.49 (1) |
| K- H | 0 / 2187 | 0.49 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING =** 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA O86-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=0.74/1.00 (D-E:1) , BC=0.30/1.00 (K-L:1) , WB=0.49/1.00 (H-K:1) , SSI=0.32/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (Q) (INPUT = 0.90 )
JSI METAL= 0.49 (Q) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T26 | 8 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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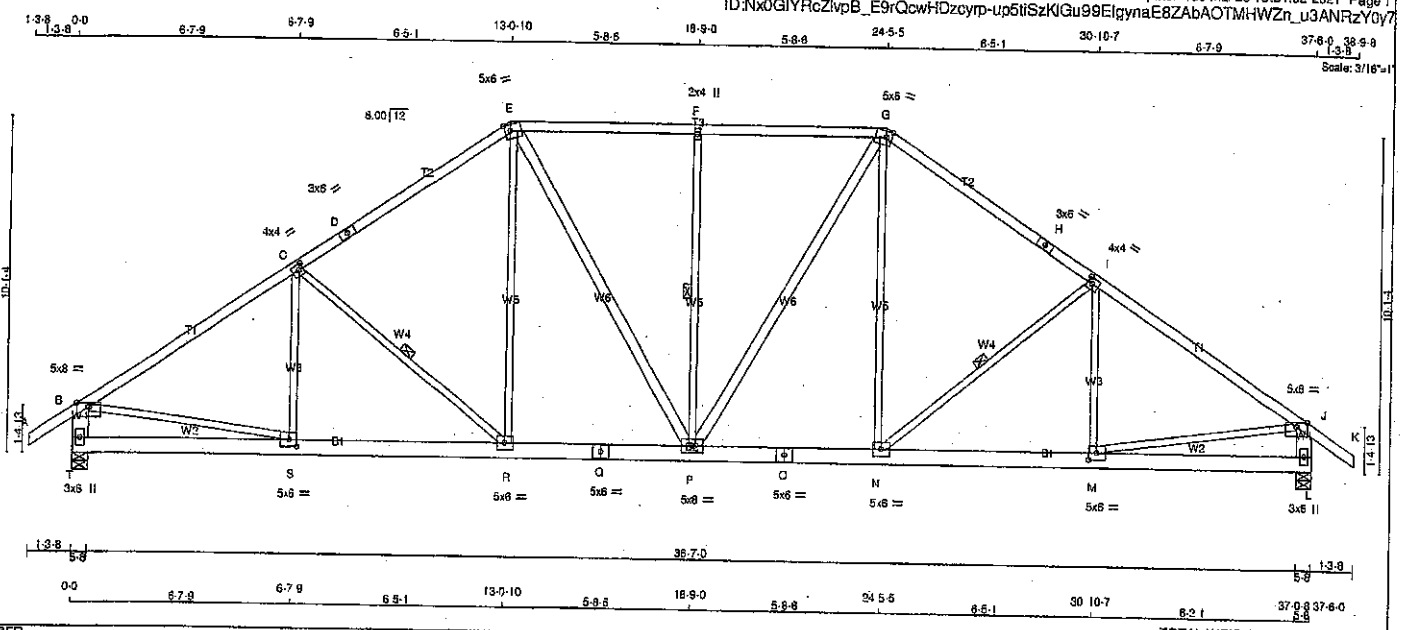


TOTAL WEIGHT = 8 X 202 = 1617 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| G - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| T - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| T - Q | 2x6 | DRY | No.2 | SPF |
| Q - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| E - P | 2x4 | DRY | No.2 | SPF |
| P - G | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| H | TS-t | MT20 | 3.0 | 6.0 | | |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| J | TMW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| R | BMWW-t | MT20 | 5.0 | 6.0 | | |
| S | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| T | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1)

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108656

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| T | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| L | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| T | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-R, F-P, I-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | -2572 / 0 | -91.8 | -91.8 | 0.72 (1) | 3.61 | |
| C- D | -2222 / 0 | -91.8 | -91.8 | 0.65 (1) | 3.91 | |
| D- E | -2222 / 0 | -91.8 | -91.8 | 0.65 (1) | 3.91 | |
| E- F | -2031 / 0 | -91.8 | -91.8 | 0.44 (1) | 4.29 | |
| F- G | -2031 / 0 | -91.8 | -91.8 | 0.44 (1) | 4.29 | |
| G- H | -2222 / 0 | -91.8 | -91.8 | 0.65 (1) | 3.91 | |
| H- I | -2222 / 0 | -91.8 | -91.8 | 0.65 (1) | 3.91 | |
| I- J | -2573 / 0 | -91.8 | -91.8 | 0.72 (1) | 3.61 | |
| J- K | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| T- B | -2134 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 | |
| L- J | -2134 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.96 | |
| T- S | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 | |
| S- R | 0 / 2173 | -18.5 | -18.5 | 0.30 (1) | 10.00 | |
| R- Q | 0 / 1817 | -18.5 | -18.5 | 0.25 (1) | 10.00 | |
| Q- P | 0 / 1817 | -18.5 | -18.5 | 0.25 (1) | 10.00 | |
| P- O | 0 / 1817 | -18.5 | -18.5 | 0.25 (1) | 10.00 | |
| O- N | 0 / 1817 | -18.5 | -18.5 | 0.25 (1) | 10.00 | |
| N- M | 0 / 2174 | -18.5 | -18.5 | 0.30 (1) | 10.00 | |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| S- C | -209 / 38 | 0.10 (1) |
| C- R | -468 / 0 | 0.23 (1) |
| R- E | 0 / 423 | 0.10 (1) |
| E- P | 0 / 424 | 0.07 (1) |
| P- F | -638 / 0 | 0.43 (1) |
| P- G | 0 / 423 | 0.07 (1) |
| N- G | 0 / 423 | 0.10 (1) |
| N- I | -469 / 0 | 0.23 (1) |
| M- I | -209 / 39 | 0.10 (1) |
| B- S | 0 / 2197 | 0.49 (1) |
| M- J | 0 / 2198 | 0.49 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ASC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.72/1.00 (I-J:1) , BC=0.30/1.00 (M-N:1) , WB=0.49/1.00 (J-M:1) , SSI=0.25/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (S) (INPUT = 0.90 )
JSI METAL= 0.49 (S) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T27 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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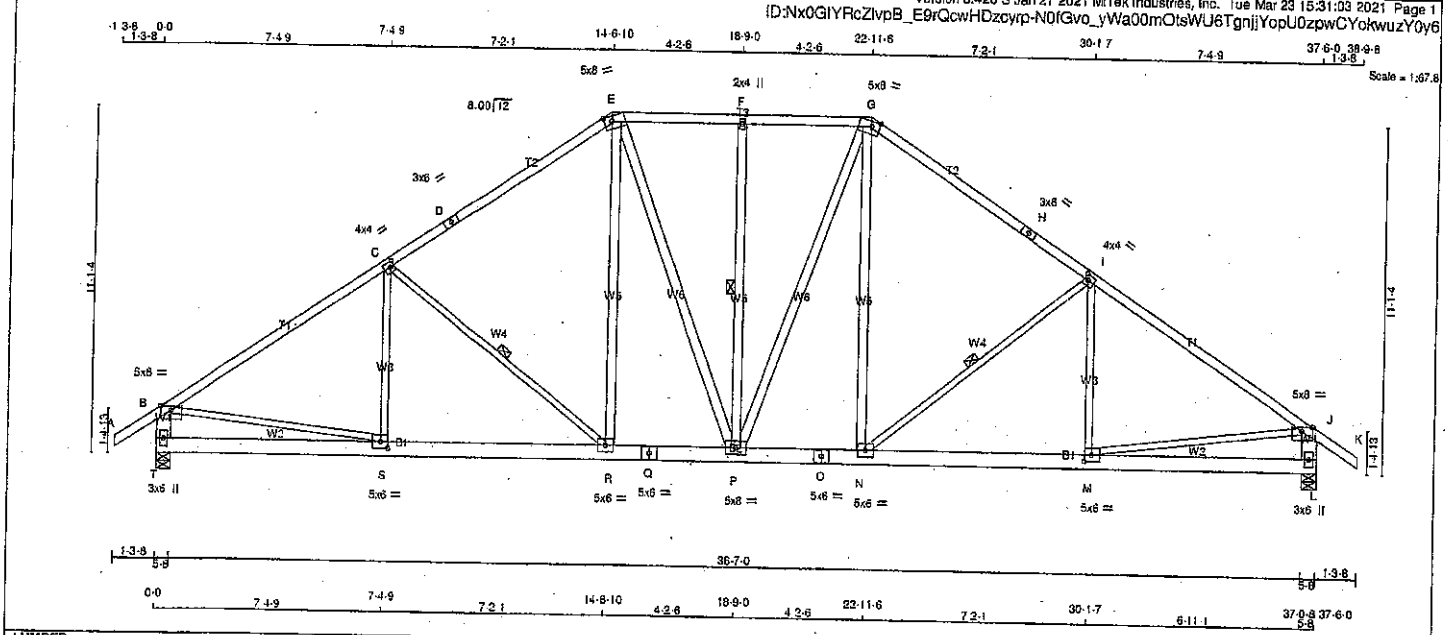


TOTAL WEIGHT = 2 X 219 = 439 lb
[MI(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| G - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| T - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| T - Q | 2x6 | DRY | No.2 | SPF |
| Q - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| R - E | 2x4 | DRY | No.2 | SPF |
| E - P | 2x4 | DRY | No.2 | SPF |
| P - F | 2x4 | DRY | No.2 | SPF |
| F - G | 2x4 | DRY | No.2 | SPF |
| N - G | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TTWW-m | MT20 | 5.0 | 8.0 | 2.00 | 3.00 |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TTWW-m | MT20 | 5.0 | 8.0 | 2.00 | 3.00 |
| H | TS-t | MT20 | 3.0 | 6.0 | | |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| R | BMWW-t | MT20 | 5.0 | 6.0 | | |
| S | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| T | BMV1+p | MT20 | 3.0 | 6.0 | | |

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108657

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| T | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |
| L | 2193 | 0 | 2193 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| T | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1549 | 1030 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-R, F-P, I-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | -2573 / 0 | -91.8 | -91.8 | 0.94 (1) | 3.28 | |
| C- D | -2112 / 0 | -91.8 | -91.8 | 0.82 (1) | 3.70 | |
| D- E | -2112 / 0 | -91.8 | -91.8 | 0.82 (1) | 3.70 | |
| E- F | -1824 / 0 | -91.8 | -91.8 | 0.24 (1) | 4.74 | |
| F- G | -1824 / 0 | -91.8 | -91.8 | 0.24 (1) | 4.74 | |
| G- H | -2112 / 0 | -91.8 | -91.8 | 0.82 (1) | 3.70 | |
| H- I | -2112 / 0 | -91.8 | -91.8 | 0.82 (1) | 3.70 | |
| I- J | -2574 / 0 | -91.8 | -91.8 | 0.94 (1) | 3.28 | |
| J- K | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| T- B | -2131 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| L- J | -2131 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| T- S | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 | |
| S- R | 0 / 2178 | -18.5 | -18.5 | 0.31 (1) | 10.00 | |
| R- Q | 0 / 1724 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| Q- P | 0 / 1724 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| P- O | 0 / 1725 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| O- N | 0 / 1725 | -18.5 | -18.5 | 0.24 (1) | 10.00 | |
| N- M | 0 / 2179 | -18.5 | -18.5 | 0.31 (1) | 10.00 | |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| S- C | -155 / 71 | 0.09 (1) |
| C- R | -593 / 0 | 0.36 (1) |
| R- E | 0 / 494 | 0.08 (1) |
| E- P | 0 / 273 | 0.04 (1) |
| P- F | -462 / 0 | 0.28 (1) |
| P- G | 0 / 273 | 0.04 (1) |
| N- G | 0 / 494 | 0.08 (1) |
| N- I | -593 / 0 | 0.36 (1) |
| M- I | -155 / 71 | 0.09 (1) |
| B- S | 0 / 2198 | 0.49 (1) |
| M- J | 0 / 2199 | 0.49 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.94/1.00 (I-J:1) , BC=0.31/1.00 (M-N:1) , WB=0.49/1.00 (J-M:1) , SSI=0.27/1.00 (I-J:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (S) (INPUT = 0.90 )
JSI METAL= 0.50 (S) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T28 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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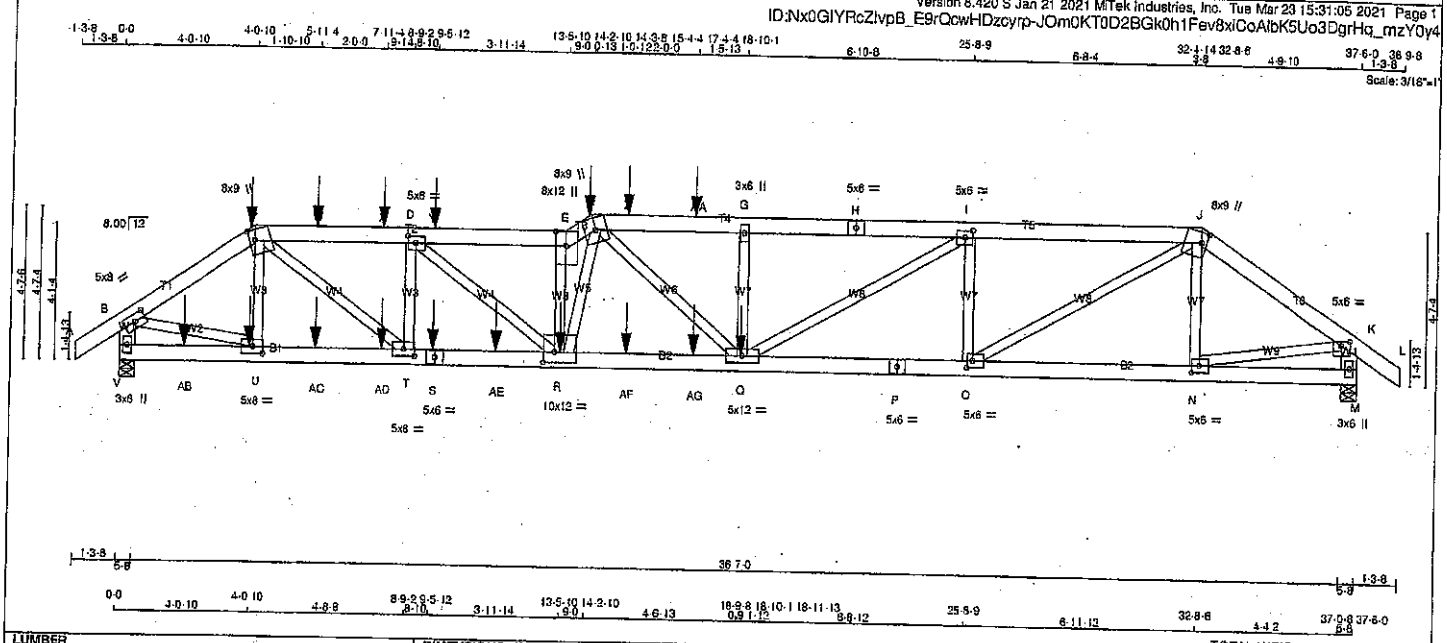


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x6 | DRY | No.2 | SPF |
| C - E | 2x6 | DRY | No.2 | SPF |
| E - F | 2x6 | DRY | No.2 | SPF |
| F - H | 2x6 | DRY | No.2 | SPF |
| H - J | 2x6 | DRY | No.2 | SPF |
| J - L | 2x6 | DRY | No.2 | SPF |
| V - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| V - S | 2x6 | DRY | No.2 | SPF |
| S - P | 2x6 | DRY | No.2 | SPF |
| P - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A-C | 2 | 12 | SIDE(122.0) |
| C-E | 2 | 12 | SIDE(61.0) |
| E-F | 2 | 12 | SIDE(0.0) |
| F-H | 2 | 12 | SIDE(0.0) |
| H-J | 2 | 12 | TOP |
| J-L | 2 | 12 | TOP |
| V-B | 2 | 12 | TOP |
| M-K | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| V-S | 2 | 12 | SIDE(183.1) |
| S-P | 2 | 12 | SIDE(183.1) |
| P-M | 2 | 12 | TOP |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x4 | 1 | 6 | |
| G-Q | 1 | 4 | SIDE(461.2) |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108658 JR

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| V | 5285 | 0 | 5285 | 0 | 0 | 5-8 | 5-8 |
| M | 4223 | 0 | 4223 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| V | 3720 | 2537 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 1184 / 0 | 0 / 0 |
| M | 2974 | 2019 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 955 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.72 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A-B | 0 / 36 | -91.8 | -91.8 | 0.04 (1) | 10.00 |
| B-C | -8695 / 0 | -91.8 | -91.8 | 0.13 (1) | 4.53 |
| C-W | -10551 / 0 | -91.8 | -91.8 | 0.28 (1) | 3.58 |
| W-X | -10551 / 0 | -91.8 | -91.8 | 0.28 (1) | 3.58 |
| X-D | -10551 / 0 | -91.8 | -91.8 | 0.28 (1) | 3.58 |
| D-Y | -14043 / 0 | -91.8 | -91.8 | 0.41 (1) | 2.98 |
| Y-E | -14043 / 0 | -184.8 | -184.8 | 0.41 (1) | 2.98 |
| E-F | -17124 / 0 | -91.8 | -91.8 | 0.36 (1) | 2.72 |
| F-Z | -13822 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.05 |
| Z-AA | -13822 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.05 |
| AA-G | -13822 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.05 |
| G-H | -13822 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.02 |
| H-I | -13822 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.02 |
| I-J | -9874 / 0 | -91.8 | -91.8 | 0.34 (1) | 3.68 |
| J-K | -5435 / 0 | -91.8 | -91.8 | 0.15 (1) | 4.92 |
| K-L | 0 / 36 | -91.8 | -91.8 | 0.04 (1) | 10.00 |
| V-B | -5240 / 0 | 0.0 | 0.0 | 0.19 (1) | 6.38 |
| M-K | -4197 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.97 |
| V-AB | 0 / 0 | -18.5 | -18.5 | 0.03 (4) | 10.00 |
| AB-U | 0 / 0 | -18.5 | -18.5 | 0.03 (4) | 10.00 |
| U-AC | 0 / 5514 | -18.5 | -18.5 | 0.38 (1) | 10.00 |
| AC-AD | 0 / 5514 | -18.5 | -18.5 | 0.38 (1) | 10.00 |
| AD-T | 0 / 5514 | -18.5 | -18.5 | 0.38 (1) | 10.00 |
| T-S | 0 / 10551 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| S-AE | 0 / 10551 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| AE-R | 0 / 10551 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| R-AF | 0 / 12700 | -18.5 | -18.5 | 1.00 (1) | 10.00 |
| AF-AG | 0 / 12700 | -18.5 | -18.5 | 1.00 (1) | 10.00 |
| AG-Q | 0 / 12700 | -18.5 | -18.5 | 1.00 (1) | 10.00 |
| Q-P | 0 / 9874 | -18.5 | -18.5 | 0.69 (1) | 10.00 |
| P-O | 0 / 9874 | -18.5 | -18.5 | 0.69 (1) | 10.00 |
| O-N | 0 / 4489 | -18.5 | -18.5 | 0.33 (1) | 10.00 |
| N-M | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| U-C | -1032 / 0 | 0.09 (1) |
| C-T | 0 / 6356 | 0.56 (1) |
| T-D | -3634 / 0 | 0.31 (1) |
| D-R | 0 / 4489 | 0.40 (1) |
| R-E | -9705 / 0 | 0.83 (1) |
| R-F | 0 / 7843 | 0.68 (1) |
| Q-G | -553 / 0 | 0.06 (1) |
| N-J | -662 / 0 | 0.07 (1) |
| B-U | 0 / 5682 | 0.50 (1) |
| N-K | 0 / 4565 | 0.41 (1) |
| F-Q | 0 / 1518 | 0.13 (1) |
| O-J | 0 / 6250 | 0.55 (1) |
| Q-I | 0 / 4814 | 0.41 (1) |
| O-I | -3091 / 0 | 0.32 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 4-0-10 | -40 | -40 | --- | FRONT | VERT | DEAD | --- | C1 |
| C | 4-0-10 | -81 | -81 | --- | BACK | VERT | TOTAL | --- | C1 |
| C | 4-0-10 | -171 | -171 | --- | FRONT | VERT | SNOW | --- | C1 |
| F | 14-3-8 | -58 | -58 | --- | FRONT | VERT | DEAD | --- | C1 |
| F | 14-3-8 | -246 | -246 | --- | FRONT | VERT | SNOW | --- | C1 |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.38")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 658 (0.68")

CSI: TC=0.51/1.00 (G-I:1) , BC=1.00/1.00 (Q-R:1) , WB=0.83/1.00 (E-R:1) , SSI=0.18/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90 )
JSI METAL= 0.95 (S) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T28 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington



**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-t | MT20 | 5.0 | 8.0 | 2.50 | 3.75 |
| C | TTWW+m | MT20 | 8.0 | 9.0 | 3.75 | 2.00 |
| D | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| E | TTW+p | MT20 | 8.0 | 12.0 | 5.50 | 3.75 |
| F | TTWW+m | MT20 | 8.0 | 9.0 | | |
| G | TMW+w | MT20 | 3.0 | 6.0 | | |
| H | TS-t | MT20 | 5.0 | 6.0 | | |
| I | TMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 2.75 |
| J | TTWW+m | MT20 | 8.0 | 9.0 | 3.75 | 1.75 |
| K | TMVW-p | MT20 | 5.0 | 6.0 | 1.50 | 3.00 |
| M | BMV1+p | MT20 | 3.0 | 6.0 | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| O | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 12.0 | | |
| R | BMWWW-t | MT20 | 10.0 | 12.0 | 3.75 | 4.00 |
| S | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 3.75 |
| U | BMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 3.75 |
| V | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| Q | 18-9-8 | -1737 | -1737 | --- | BACK | VERT | TOTAL | --- | C1 |
| R | 13-4-4 | -143 | -143 | --- | BACK | VERT | TOTAL | --- | C1 |
| S | 9-5-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| U | 3-11-4 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| W | 5-11-4 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| X | 7-11-4 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| Y | 9-5-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| Z | 15-4-4 | -47 | -47 | --- | BACK | VERT | TOTAL | --- | C1 |
| AA | 17-4-4 | -47 | -47 | --- | BACK | VERT | TOTAL | --- | C1 |
| AB | 1-11-4 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| AC | 5-11-4 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| AD | 7-11-4 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| AE | 11-4-4 | -143 | -143 | --- | BACK | VERT | TOTAL | --- | C1 |
| AF | 15-4-4 | -143 | -143 | --- | BACK | VERT | TOTAL | --- | C1 |
| AG | 17-4-4 | -143 | -143 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108658

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T29 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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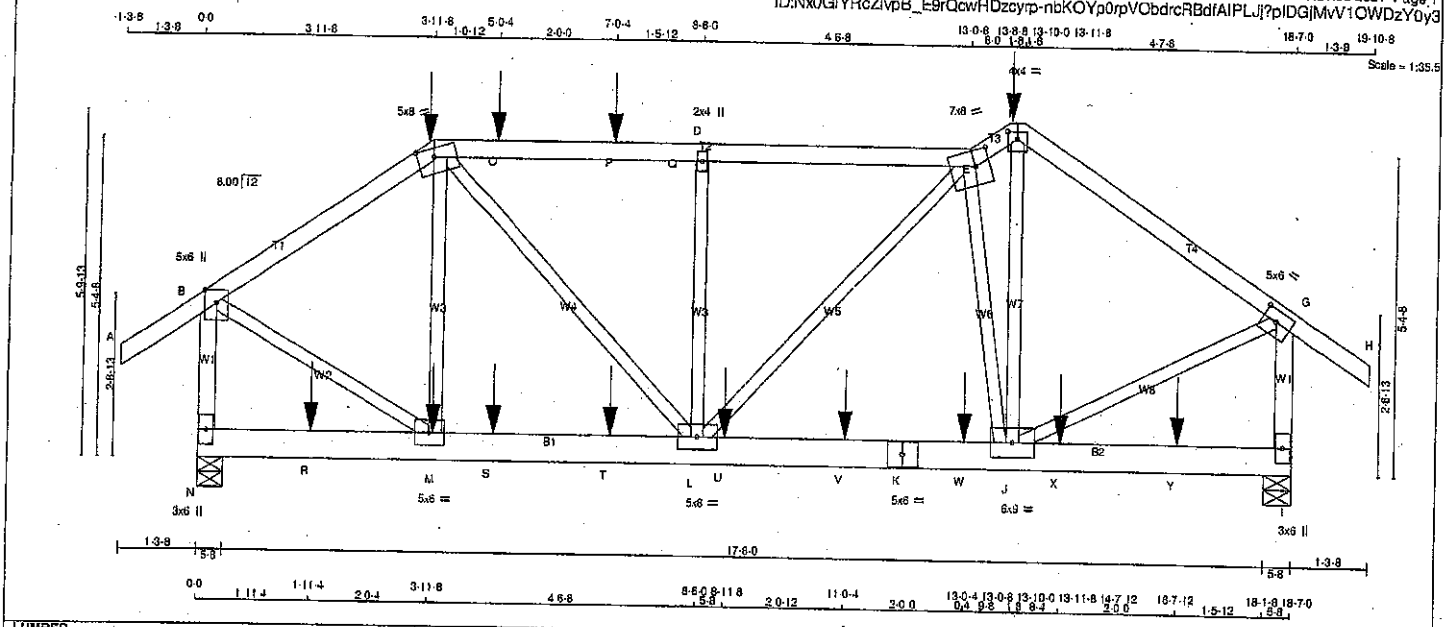


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| N - B | 2x4 | DRY | No.2 | SPF |
| I - G | 2x4 | DRY | No.2 | SPF |
| N - K | 2x6 | DRY | No.2 | SPF |
| K - I | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 5.0 | 6.0 | Edge | |
| C | TTWW-m | MT20 | 5.0 | 8.0 | 1.75 | 3.50 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW-m | MT20 | 7.0 | 8.0 | 3.25 | 3.00 |
| F | TTW-p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| G | TMVW-t | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| I | BMV1+p | MT20 | 3.0 | 6.0 | | |
| J | BMWWW-t | MT20 | 6.0 | 9.0 | | |
| K | BS-t | MT20 | 5.0 | 6.0 | | |
| L | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| N | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108659

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 99 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| N | 2031 | 0 | 2031 | 0 | 0 | 5-8 | 5-8 |
| I | 2174 | 0 | 2174 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX.MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| N | 1429 | 980 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 449 / 0 | 0 / 0 |
| I | 1529 | 1052 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 477 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, I

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.78 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.14 (1) | 10.00 |
| B- C | -1632 / 0 | -91.8 | -91.8 | 0.33 (1) | 4.79 |
| C- O | -2175 / 0 | -91.8 | -91.8 | 0.62 (1) | 3.78 |
| O- P | -2175 / 0 | -91.8 | -91.8 | 0.62 (1) | 3.78 |
| P- Q | -2175 / 0 | -91.8 | -91.8 | 0.62 (1) | 3.78 |
| Q- D | -2175 / 0 | -138.3 | -138.3 | 0.62 (1) | 3.78 |
| D- E | -2176 / 0 | -138.3 | -138.3 | 0.62 (1) | 3.78 |
| E- F | -1853 / 0 | -91.8 | -91.8 | 0.05 (1) | 4.88 |
| F- G | -1853 / 0 | -91.8 | -91.8 | 0.50 (1) | 4.33 |
| G- H | 0 / 35 | -91.8 | -91.8 | 0.14 (1) | 10.00 |
| N- B | -1993 / 0 | 0.0 | 0.0 | 0.29 (1) | 5.92 |
| I- G | -2128 / 0 | 0.0 | 0.0 | 0.31 (1) | 5.76 |
| N- R | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |
| R- M | 0 / 0 | -18.5 | -18.5 | 0.05 (4) | 10.00 |
| M- S | 0 / 1342 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| S- T | 0 / 1342 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| T- L | 0 / 1342 | -18.5 | -18.5 | 0.22 (1) | 10.00 |
| L- U | 0 / 1798 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| U- V | 0 / 1798 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| V- K | 0 / 1798 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| K- W | 0 / 1798 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| W- J | 0 / 1798 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| J- X | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| X- Y | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| Y- I | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| M- C | -647 / 0 | 0.27 (1) |
| C- L | 0 / 1236 | 0.31 (1) |
| L- D | -765 / 0 | 0.32 (1) |
| L- E | 0 / 558 | 0.14 (1) |
| B- M | 0 / 1562 | 0.39 (1) |
| J- G | 0 / 1717 | 0.43 (1) |
| J- F | 0 / 1180 | 0.29 (1) |
| E- J | -1736 / 0 | 0.74 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 3-11-8 | -151 | -151 | --- | FRONT | VERT | TOTAL | --- | C1 |
| F | 13-10-0 | -431 | -431 | --- | FRONT | VERT | TOTAL | --- | C1 |
| M | 4-0-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| O | 5-0-4 | -62 | -62 | --- | FRONT | VERT | TOTAL | --- | C1 |
| P | 7-0-4 | -62 | -62 | --- | FRONT | VERT | TOTAL | --- | C1 |
| R | 1-11-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| S | 5-0-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| T | 7-0-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| U | 8-11-8 | -332 | -332 | --- | FRONT | VERT | TOTAL | --- | C1 |
| V | 11-0-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| W | 13-0-4 | -19 | -19 | --- | FRONT | VERT | TOTAL | --- | C1 |
| X | 14-7-12 | -19 | -19 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Y | 16-7-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.62/1.00 (D-E:1) , BC=0.38/1.00 (J-L:1) , WB=0.74/1.00 (E-J:1) , SSI=0.33/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90 )
JSI METAL= 0.86 (B) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T30 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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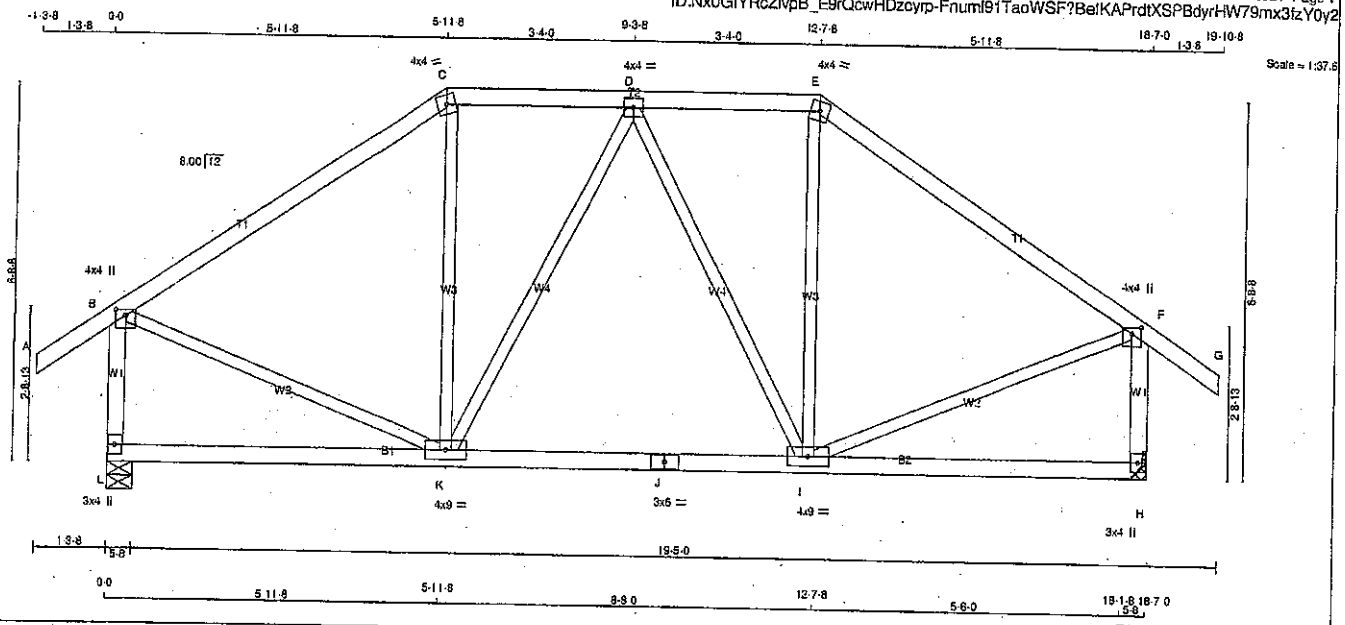


TOTAL WEIGHT = 2 X 85 = 171 lb
[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| C | TTW-m | MT20 | 4.0 | 4.0 | | |
| D | TMWW-t | MT20 | 4.0 | 4.0 | | |
| E | TTW-m | MT20 | 4.0 | 4.0 | | |
| F | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |
| I | BMVWW-t | MT20 | 4.0 | 9.0 | | |
| J | BS-t | MT20 | 3.0 | 6.0 | | |
| K | BMVWW-t | MT20 | 4.0 | 9.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| L | 1150 | 0 | 1150 | 0 | 0 | 5-8 | 5-8 |
| H | 1150 | 0 | 1150 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 811 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |
| H | 811 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -796 / 0 | -91.8 | -91.8 | 0.43 (1) | 6.16 |
| C- D | -662 / 0 | -91.8 | -91.8 | 0.13 (1) | 6.25 |
| D- E | -662 / 0 | -91.8 | -91.8 | 0.13 (1) | 6.25 |
| E- F | -796 / 0 | -91.8 | -91.8 | 0.43 (1) | 6.16 |
| F- G | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| L- B | -1105 / 0 | 0.0 | 0.0 | 0.16 (1) | 7.53 |
| H- F | -1105 / 0 | 0.0 | 0.0 | 0.16 (1) | 7.53 |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.17 (4) | 10.00 |
| K- J | 0 / 756 | -18.5 | -18.5 | 0.23 (4) | 10.00 |
| J- I | 0 / 756 | -18.5 | -18.5 | 0.23 (4) | 10.00 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.17 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| K- C | 0 / 83 | 0.03 (4) |
| K- D | -208 / 0 | 0.21 (1) |
| D- I | -208 / 0 | 0.21 (1) |
| I- E | 0 / 83 | 0.03 (4) |
| B- K | 0 / 712 | 0.16 (1) |
| I- F | 0 / 712 | 0.16 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.43/1.00 (B-C:1) , BC=0.23/1.00 (I-K:4) , WB=0.21/1.00 (D-I:1) , SSI=0.18/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 660 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (F) (INPUT = 0.90 )
JSI METAL= 0.28 (J) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108660

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T31 | 3 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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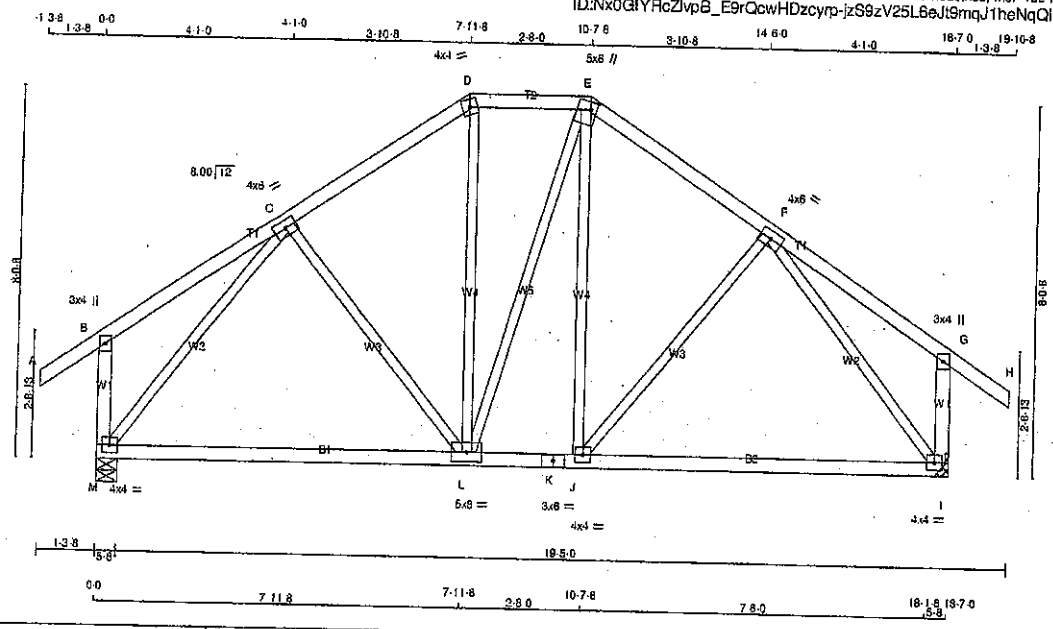


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - H | 2x4 | DRY | No.2 | SPF |
| M - B | 2x4 | DRY | No.2 | SPF |
| I - G | 2x4 | DRY | No.2 | SPF |
| M - K | 2x4 | DRY | No.2 | SPF |
| K - I | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 6.0 | | |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TTWW+m | MT20 | 5.0 | 6.0 | 2.00 | 1.50 |
| F | TMWW-t | MT20 | 4.0 | 6.0 | | |
| G | TMV+p | MT20 | 3.0 | 4.0 | | |
| I | BMVW1-t | MT20 | 4.0 | 4.0 | | |
| J | BMWW-t | MT20 | 4.0 | 4.0 | | |
| K | BS-t | MT20 | 3.0 | 6.0 | | |
| L | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| M | BMVW1-t | MT20 | 4.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X-I SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| M | 1150 | 0 | 1150 | 0 | 0 | 5-8 | 5-8 |
| I | 1150 | 0 | 1150 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| M | 811 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |
| I | 811 | 546 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LCT | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | 0 / 24 | -91.8 | -91.8 | 0.24 (1) | 10.00 | |
| C- D | -763 / 0 | -91.8 | -91.8 | 0.19 (1) | 6.25 | |
| D- E | -616 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 | |
| E- F | -763 / 0 | -91.8 | -91.8 | 0.19 (1) | 6.25 | |
| F- G | 0 / 24 | -91.8 | -91.8 | 0.24 (1) | 10.00 | |
| G- H | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| M- B | -266 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | |
| I- G | -266 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | |
| M- L | 0 / 647 | -18.5 | -18.5 | 0.30 (4) | 10.00 | |
| L- K | 0 / 616 | -18.5 | -18.5 | 0.30 (4) | 10.00 | |
| K- J | 0 / 616 | -18.5 | -18.5 | 0.30 (4) | 10.00 | |
| J- I | 0 / 646 | -18.5 | -18.5 | 0.29 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- L | -52 / 32 | 0.04 (1) |
| L- D | 0 / 150 | 0.03 (4) |
| I- E | 0 / 1 | 0.00 (1) |
| J- E | 0 / 149 | 0.03 (4) |
| J- F | -52 / 32 | 0.04 (1) |
| M- C | -1046 / 0 | 0.75 (1) |
| F- I | -1046 / 0 | 0.75 (1) |

TOTAL WEIGHT = 3 X 94 = 281 lb

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.24/1.00 (F-G:1) , BC=0.30/1.00 (J-L:4) , WB=0.75/1.00 (C-M:1) , SSI=0.15/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (K) (INPUT = 0.90 )
JSI METAL= 0.53 (K) (INPUT = 1.00 )

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03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108661

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T32 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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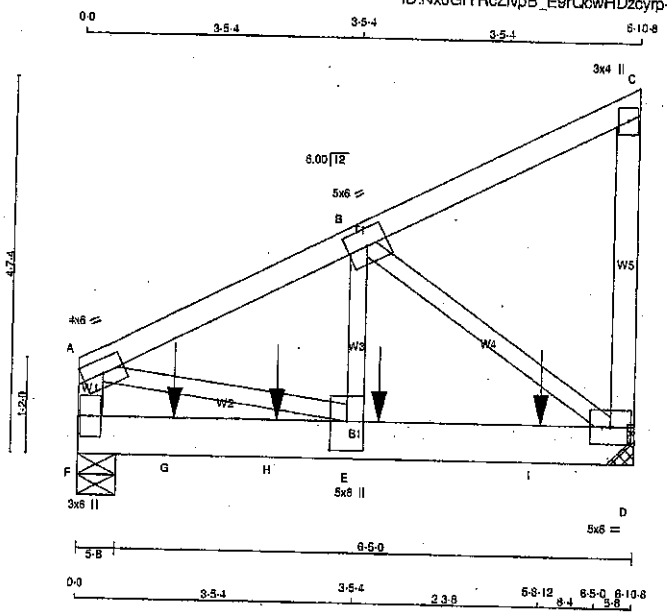


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - A | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- A | 1 | 12 | TOP |
| A- C | 1 | 12 | TOP |
| C- D | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| F- D | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| B- E | 1 | 6 | SIDE(112.2) |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMVW-t | MT20 | 4.0 | 6.0 | | Edge |
| B | TMWW-t | MT20 | 5.0 | 6.0 | | |
| C | TMV+p | MT20 | 3.0 | 4.0 | | |
| D | BMVW1-I | MT20 | 5.0 | 6.0 | | |

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Structural component only
DWG# T-2108662 1/2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| F | 2797 | 0 | 2797 | 0 | 0 | 5-8 | 5-8 |
| D | 2488 | 0 | 2488 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX. MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 1969 | 1342 0 | 0 0 | 0 0 | 0 0 | 628 0 | 0 0 |
| D | 1752 | 1193 0 | 0 0 | 0 0 | 0 0 | 559 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.47 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- A | -1890 0 | 0.0 | 0.0 | 0.10 (1) | 7.81 | |
| A- B | -2697 0 | -91.8 | -91.8 | 0.10 (1) | 5.47 | |
| B- C | -11 0 | -91.8 | -91.8 | 0.07 (1) | 6.25 | |
| D- C | -133 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | |
| F- G | 0 0 | -18.5 | -18.5 | 0.39 (1) | 10.00 | |
| G- H | 0 0 | -18.5 | -18.5 | 0.39 (1) | 10.00 | |
| H- E | 0 0 | -18.5 | -18.5 | 0.39 (1) | 10.00 | |
| E- I | 0 2422 | -18.5 | -18.5 | 0.41 (1) | 10.00 | |
| I- D | 0 2422 | -18.5 | -18.5 | 0.41 (1) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- E | 0 2483 | 0.31 (1) |
| E- B | 0 2603 | 0.32 (1) |
| B- D | -2992 0 | 0.44 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| E | 3-8-12 | -796 | -796 | --- | BACK | VERT | TOTAL | --- | C1 |
| G | 1-2-4 | -796 | -796 | --- | BACK | VERT | TOTAL | --- | C1 |
| H | 2-5-8 | -796 | -796 | --- | BACK | VERT | TOTAL | --- | C1 |
| I | 5-8-12 | -796 | -796 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TOTAL WEIGHT = 2 X 34 = 67 lb [M]

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.10/1.00 (A-F:1) , BC=0.41/1.00 (D-E:1) , WB=0.44/1.00 (B-D:1) , SSI=0.47/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (B) (INPUT = 0.90 )
JSI METAL= 0.44 (E) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T32 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| E | BMWW+I | MT20 | 5.0 | 8.0 | 4.25 | 2.50 |
| F | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

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100009024
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DWG# T-2108662

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | T33 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

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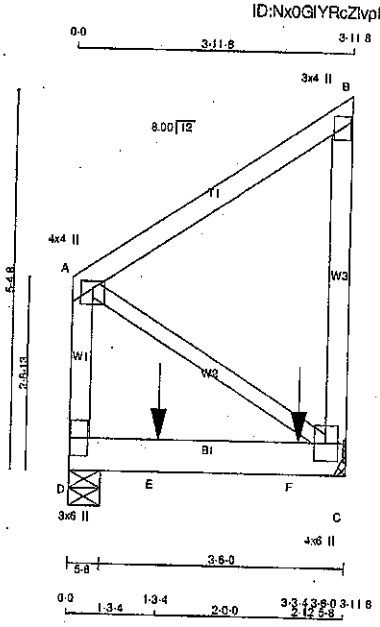


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| D - A | 2x4 | DRY | No.2 | SPF |
| A - B | 2x4 | DRY | No.2 | SPF |
| C - B | 2x4 | DRY | No.2 | SPF |
| D - C | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| D- A | 1 | 12 | TOP |
| A- B | 1 | 12 | TOP |
| B- C | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| D- C | 2 | 12 | SIDE(0.0) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | BMVW1+p | MT20 | 4.0 | 6.0 | | |
| D | BMV1+p | MT20 | 3.0 | 6.0 | | |

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108663

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| D | 328 | 0 | 328 | 0 | 0 | 5-8 | 5-8 |
| C | 497 | 0 | 497 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 2-0.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| D | 230 | 161 0 | 0 0 | 0 0 | 0 0 | 68 0 | 0 0 |
| C | 347 | 254 0 | 0 0 | 0 0 | 0 0 | 92 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| D- A | -182 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 |
| A- B | 0 0 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| C- B | -182 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 |
| D- E | 0 0 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| E- F | 0 0 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| F- C | 0 0 | -18.5 | -18.5 | 0.08 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- C | 0 0 | 0.00 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| E | 1-3-4 | -57 | -57 | --- | FRONT | VERT | TOTAL | --- | C1 |
| F | 3-3-4 | -210 | -210 | --- | TOP | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TOTAL WEIGHT = 2 X 24 = 47 lb (M)

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.08/1.00 (C-D:1) , WB=0.00/1.00 (A-C:1) , SSI=0.10/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.06 (A) (INPUT = 0.90 )
JSI METAL= 0.03 (B) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T40 | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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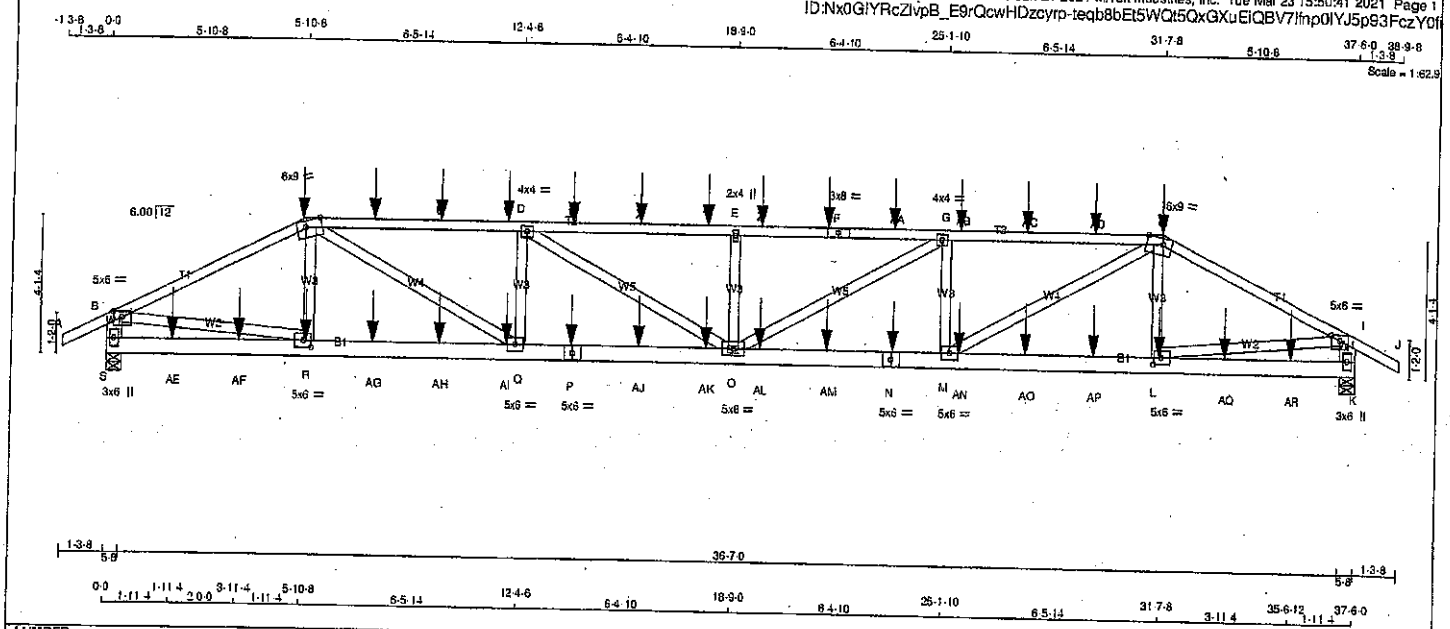


**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | 2100F 1.8E | SPF |
| F - H | 2x4 | DRY | 2100F 1.8E | SPF |
| H - J | 2x4 | DRY | No.2 | SPF |
| S - B | 2x6 | DRY | No.2 | SPF |
| K - I | 2x6 | DRY | No.2 | SPF |
| S - P | 2x6 | DRY | No.2 | SPF |
| P - N | 2x6 | DRY | No.2 | SPF |
| N - K | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A-C | 1 | 12 | SIDE(61.0) |
| C-F | 1 | 12 | SIDE(65.9) |
| F-H | 1 | 12 | SIDE(65.9) |
| H-J | 1 | 12 | SIDE(61.0) |
| S-B | 2 | 12 | TOP |
| K-I | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| S-P | 2 | 12 | SIDE(183.1) |
| P-N | 2 | 12 | SIDE(0.0) |
| N-K | 2 | 12 | SIDE(183.1) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108675 1/2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 181 = 361 lb

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| S | 3457 | 0 | 3457 | 0 | 0 | 5-8 | 5-8 |
| K | 3459 | 0 | 3459 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| S | 2447 | 1595 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 652 / 0 | 0 / 0 |
| K | 2448 | 1596 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 852 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A-B | 0 / 28 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| B-C | -5308 / 0 | -91.8 | -91.8 | 0.54 (1) | 3.78 |
| C-T | -7870 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| T-U | -7870 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| U-V | -7870 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| V-D | -7870 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| D-W | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| W-X | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| X-Y | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| Y-E | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| E-Z | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| Z-F | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| F-AA | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| AA-G | -8801 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.73 |
| G-AB | -7877 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| AB-AC | -7877 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| AC-AD | -7877 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| AD-H | -7877 / 0 | -91.8 | -91.8 | 0.51 (1) | 3.94 |
| H-I | -5311 / 0 | -91.8 | -91.8 | 0.54 (1) | 3.78 |
| I-J | 0 / 28 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| S-B | -3384 / 0 | 0.0 | 0.0 | 0.12 (1) | 7.57 |
| K-I | -3385 / 0 | 0.0 | 0.0 | 0.12 (1) | 7.57 |
| S-AE | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| AE-AF | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| AF-R | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| R-AG | 0 / 4729 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AG-AH | 0 / 4729 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AH-AI | 0 / 4729 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AI-Q | 0 / 4729 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| Q-P | 0 / 7871 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| P-AJ | 0 / 7871 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AJ-AK | 0 / 7871 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AK-O | 0 / 7871 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| O-AL | 0 / 7877 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AL-AM | 0 / 7877 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| AM-N | 0 / 7877 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| N-M | 0 / 7877 | -18.5 | -18.5 | 0.58 (1) | 10.00 |
| M-AN | 0 / 4732 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AN-AO | 0 / 4732 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AO-AP | 0 / 4732 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| AP-L | 0 / 4732 | -18.5 | -18.5 | 0.36 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| R-C | -398 / 31 | 0.04 (1) |
| C-Q | 0 / 3621 | 0.32 (1) |
| Q-D | -1604 / 0 | 0.15 (1) |
| D-O | 0 / 1077 | 0.10 (1) |
| O-E | -883 / 0 | 0.08 (1) |
| O-G | 0 / 1070 | 0.09 (1) |
| M-G | -1606 / 0 | 0.15 (1) |
| M-H | 0 / 3625 | 0.32 (1) |
| L-H | -398 / 31 | 0.04 (1) |
| B-R | 0 / 4784 | 0.42 (1) |
| L-I | 0 / 4786 | 0.42 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.26")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 942 (0.48")

CSI: TC=0.55/1.00 (E-G:1) , BC=0.58/1.00 (M-O:1) , WB=0.42/1.00 (I-L:1) , SSI=0.26/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (R) (INPUT = 0.90 )
JSI METAL= 0.73 (P) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T40 | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington



**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 6.0 | 2.00 | 3.00 |
| C | TTWW-m | MT20 | 6.0 | 9.0 | Edge | 5.75 |
| D | TMWW-t | MT20 | 4.0 | 4.0 | | |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 8.0 | | |
| G | TMWW-t | MT20 | 4.0 | 4.0 | | |
| H | TTWW-m | MT20 | 6.0 | 9.0 | Edge | 5.75 |
| I | TMVW-p | MT20 | 5.0 | 6.0 | 2.00 | 3.00 |
| K | BMV1+p | MT20 | 3.0 | 6.0 | | |
| L | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| N | BS-t | MT20 | 5.0 | 6.0 | | |
| O | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWW-t | MT20 | 5.0 | 6.0 | | |
| R | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| S | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| L-AQ | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| AQ-AR | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| AR-K | 0 / 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 5-10-8 | -254 | -254 | --- | FRONT | VERT | TOTAL | --- | C1 |
| F | 21-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| H | 31-7-8 | -254 | -254 | --- | FRONT | VERT | TOTAL | --- | C1 |
| L | 31-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| N | 23-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| P | 13-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| R | 5-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| T | 7-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| U | 9-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| V | 11-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| W | 13-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| X | 15-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Y | 17-11-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Z | 19-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AA | 23-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AB | 25-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AC | 27-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AD | 29-6-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AE | 1-11-4 | -20 | -20 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AF | 3-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AG | 7-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AH | 9-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AI | 11-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AJ | 15-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AK | 17-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AL | 19-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AM | 21-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AN | 25-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AO | 27-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AP | 29-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AQ | 33-6-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| AR | 35-6-12 | -20 | -20 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J/G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108675

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T40Z | 1 | 2 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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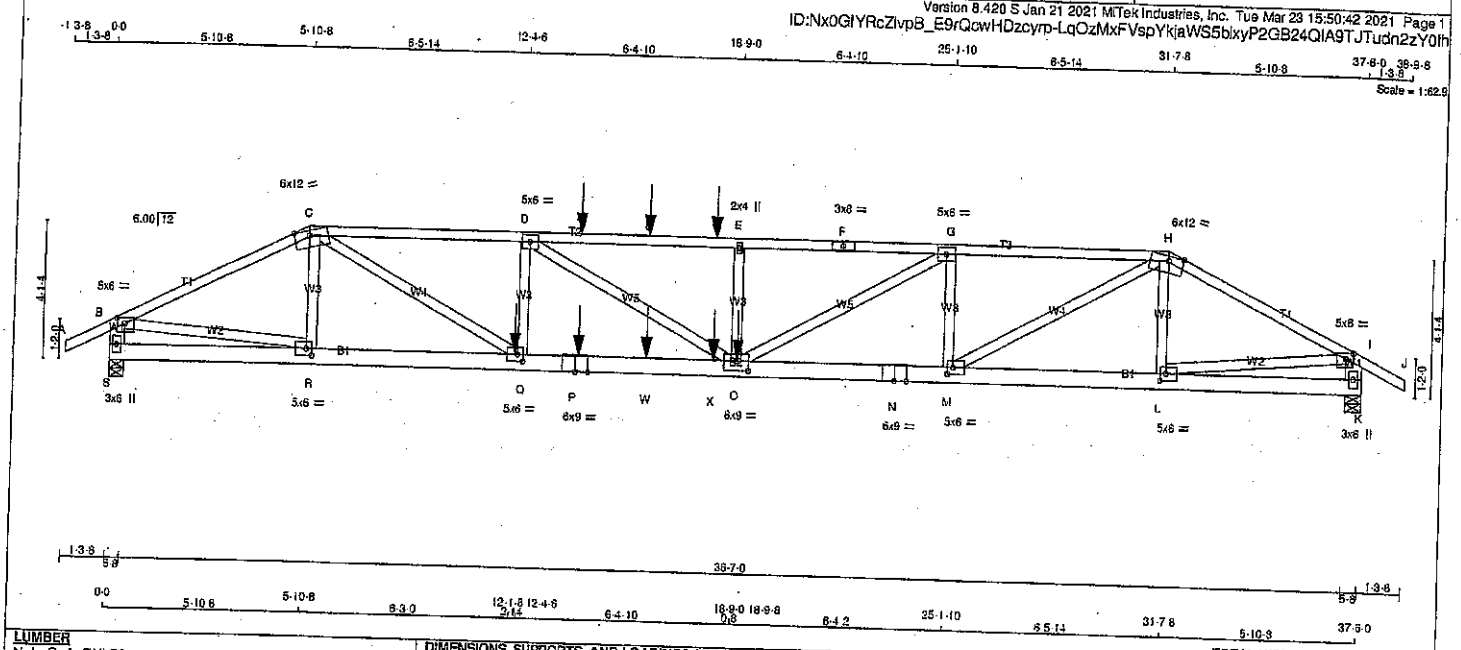


TOTAL WEIGHT = 2 X 181 = 361 lb

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | 2100F 1.8E | SPF |
| F - H | 2x4 | DRY | 2100F 1.8E | SPF |
| H - J | 2x4 | DRY | No.2 | SPF |
| S - B | 2x6 | DRY | No.2 | SPF |
| K - I | 2x6 | DRY | No.2 | SPF |
| S - P | 2x6 | DRY | No.2 | SPF |
| P - N | 2x6 | DRY | No.2 | SPF |
| N - K | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS | #ROWS | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| A- C | 1 | 12 | TOP |
| C- F | 1 | 12 | SIDE(0.0) |
| F- H | 1 | 12 | TOP |
| H- J | 1 | 12 | TOP |
| S- B | 2 | 12 | TOP |
| K- I | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| S- P | 2 | 12 | SIDE(183.1) |
| P- N | 2 | 12 | SIDE(183.1) |
| N- K | 2 | 12 | TOP |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| D- Q | 1 | 6 | SIDE(88.1) |
| E- O | 1 | 5 | SIDE(305.6) |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108676

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| S | 4060 | 0 | 4060 | 0 | 0 | 5-8 | 5-8 |
| K | 3647 | 0 | 3647 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX./MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| S | 2865 | 1915 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 949 / 0 | 0 / 0 |
| K | 2574 | 1718 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 855 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| B- C | -6414 / 0 | -91.8 | -91.8 | 0.64 (1) | 3.41 |
| C- D | -10893 / 0 | -91.8 | -91.8 | 0.58 (1) | 3.43 |
| D- T | -12555 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.16 |
| T- U | -12555 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.16 |
| U- V | -12555 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.16 |
| V- E | -12555 / 0 | -91.8 | -91.8 | 0.67 (1) | 3.16 |
| E- F | -12555 / 0 | -91.8 | -91.8 | 0.58 (1) | 3.24 |
| F- G | -12555 / 0 | -91.8 | -91.8 | 0.58 (1) | 3.24 |
| G- H | -9499 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.77 |
| H- I | -5681 / 0 | -91.8 | -91.8 | 0.57 (1) | 3.65 |
| I- J | 0 / 28 | -91.8 | -91.8 | 0.07 (1) | 10.00 |
| S- B | -4007 / 0 | 0.0 | 0.0 | 0.14 (1) | 7.10 |
| K- I | -3594 / 0 | 0.0 | 0.0 | 0.13 (1) | 7.40 |
| S- R | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |
| R- Q | 0 / 5710 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| Q- P | 0 / 10893 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| P- W | 0 / 10893 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| W- X | 0 / 10893 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| X- O | 0 / 10893 | -18.5 | -18.5 | 0.81 (1) | 10.00 |
| O- N | 0 / 9499 | -18.5 | -18.5 | 0.69 (1) | 10.00 |
| N- M | 0 / 9499 | -18.5 | -18.5 | 0.69 (1) | 10.00 |
| M- L | 0 / 5057 | -18.5 | -18.5 | 0.37 (1) | 10.00 |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| R- C | -608 / 0 | 0.06 (1) |
| C- Q | 0 / 5975 | 0.53 (1) |
| Q- D | -1780 / 0 | 0.16 (1) |
| D- O | 0 / 1924 | 0.17 (1) |
| O- E | -750 / 0 | 0.07 (1) |
| O- G | 0 / 3538 | 0.31 (1) |
| M- G | -2419 / 0 | 0.22 (1) |
| M- H | 0 / 5120 | 0.45 (1) |
| L- H | -528 / 0 | 0.05 (1) |
| B- R | 0 / 5781 | 0.51 (1) |
| L- I | 0 / 5120 | 0.45 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| O | 18-9-8 | -1320 | -1320 | --- | BACK | VERT | TOTAL | --- | C1 |
| P | 14-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| Q | 12-1-8 | -731 | -731 | --- | BACK | VERT | TOTAL | --- | C1 |
| T | 14-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| U | 16-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| V | 18-0-12 | -76 | -76 | --- | BACK | VERT | TOTAL | --- | C1 |
| W | 16-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |
| X | 18-0-12 | -21 | -21 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.35")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 693 (0.65")

CSI: TC=0.67/1.00 (D-E:1) , BC=0.81/1.00 (O-Q:1) , WB=0.53/1.00 (C-Q:1) , SSI=0.20/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90 )
JSI METAL= 0.84 (P) (INPUT = 1.00 )

CONTINUED ON PAGE 2

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T40Z | 1 | 2 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington


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**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 6.0 | 2.00 | 2.75 |
| C | TTWW-m | MT20 | 6.0 | 12.0 | 1.75 | 5.50 |
| D | TMWW-t | MT20 | 5.0 | 6.0 | | |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 8.0 | | |
| G | TMWW-t | MT20 | 5.0 | 6.0 | | |
| H | TTWW-m | MT20 | 6.0 | 12.0 | 1.75 | 5.50 |
| I | TMVW-p | MT20 | 5.0 | 6.0 | 2.00 | 2.75 |
| K | BMV1+p | MT20 | 3.0 | 8.0 | | |
| L, M, Q, R | | | | | | |
| L | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| N | BS-t | MT20 | 6.0 | 9.0 | | |
| O | BMWWW-t | MT20 | 6.0 | 9.0 | 3.50 | 4.50 |
| P | BS-t | MT20 | 6.0 | 9.0 | | |
| S | BMV1+p | MT20 | 3.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108676

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T41 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Rool Truss, Burlington

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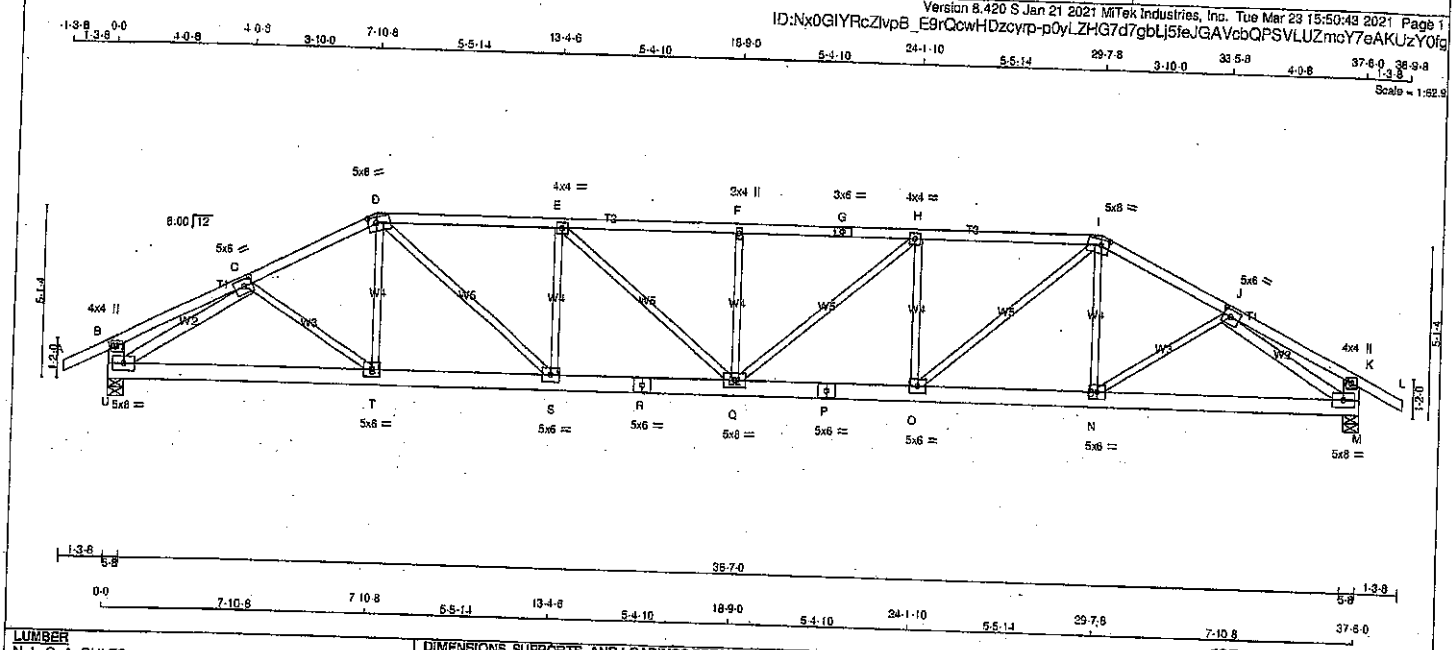
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5x6 =
4x4 =
5x6 =
4x4 =
5x6 =
5x6 =
5x6

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T42 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Tue Mar 23 15:50:44 2021 Page 1
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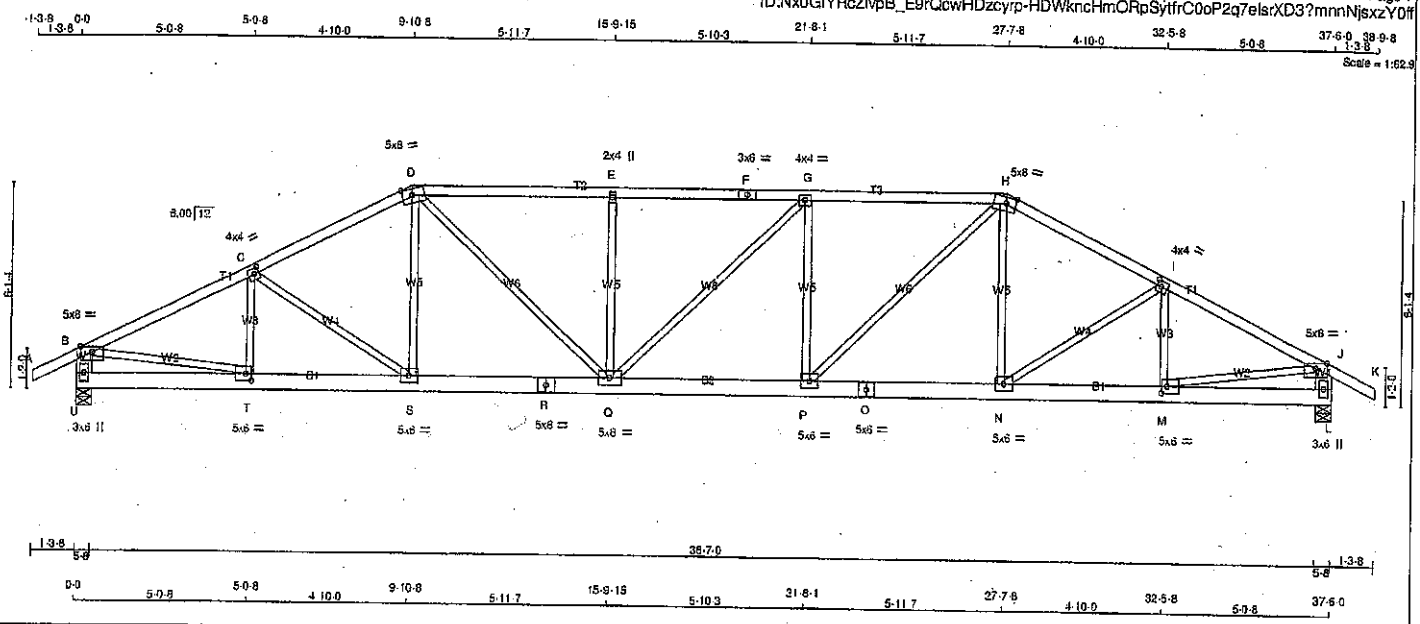


TOTAL WEIGHT = 2 X 176 = 352 lb
[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| U - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TTWW-m | MT20 | 5.0 | 8.0 | 2.25 | 3.50 |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TS-t | MT20 | 3.0 | 6.0 | | |
| G | TMWW-t | MT20 | 4.0 | 4.0 | | |
| H | TTWW-m | MT20 | 5.0 | 8.0 | 2.25 | 3.50 |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| N, P, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| U | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108678

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| U | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| L | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| U | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -3095 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.64 |
| C- D | -2975 / 0 | -91.8 | -91.8 | 0.40 (1) | 3.72 |
| D- E | -3351 / 0 | -91.8 | -91.8 | 0.57 (1) | 3.36 |
| E- F | -3351 / 0 | -91.8 | -91.8 | 0.52 (1) | 3.41 |
| F- G | -3351 / 0 | -91.8 | -91.8 | 0.52 (1) | 3.41 |
| G- H | -3357 / 0 | -91.8 | -91.8 | 0.57 (1) | 3.35 |
| H- I | -2973 / 0 | -91.8 | -91.8 | 0.40 (1) | 3.72 |
| I- J | -3096 / 0 | -91.8 | -91.8 | 0.42 (1) | 3.64 |
| J- K | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| U- B | -2129 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 |
| L- J | -2129 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 |
| U- T | 0 / 0 | -18.5 | -18.5 | 0.07 (1) | 10.00 |
| T- S | 0 / 2788 | -18.5 | -18.5 | 0.39 (1) | 10.00 |
| S- R | 0 / 2643 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| R- Q | 0 / 2643 | -18.5 | -18.5 | 0.36 (1) | 10.00 |
| Q- P | 0 / 3357 | -18.5 | -18.5 | 0.45 (1) | 10.00 |
| P- O | 0 / 2641 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| O- N | 0 / 2641 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| N- M | 0 / 2789 | -18.5 | -18.5 | 0.39 (1) | 10.00 |
| M- L | 0 / 0 | -18.5 | -18.5 | 0.07 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| T- C | -384 / 0 | 0.08 (1) |
| C- S | -180 / 0 | 0.11 (1) |
| S- D | 0 / 248 | 0.06 (1) |
| D- Q | 0 / 982 | 0.22 (1) |
| Q- E | -586 / 0 | 0.32 (1) |
| Q- G | -9 / 0 | 0.01 (1) |
| P- G | -583 / 0 | 0.32 (1) |
| P- H | 0 / 993 | 0.22 (1) |
| N- H | 0 / 239 | 0.05 (1) |
| N- I | -183 / 0 | 0.11 (1) |
| M- I | -382 / 0 | 0.06 (1) |
| B- T | 0 / 2821 | 0.63 (1) |
| M- J | 0 / 2821 | 0.63 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.36")

CSI: TC=0.57/1.00 (G-H:1) , BC=0.45/1.00 (P-Q:1) , WB=0.63/1.00 (J-M:1) , SSI=0.25/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (M) (INPUT = 0.90 )
JSI METAL= 0.63 (M) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T43 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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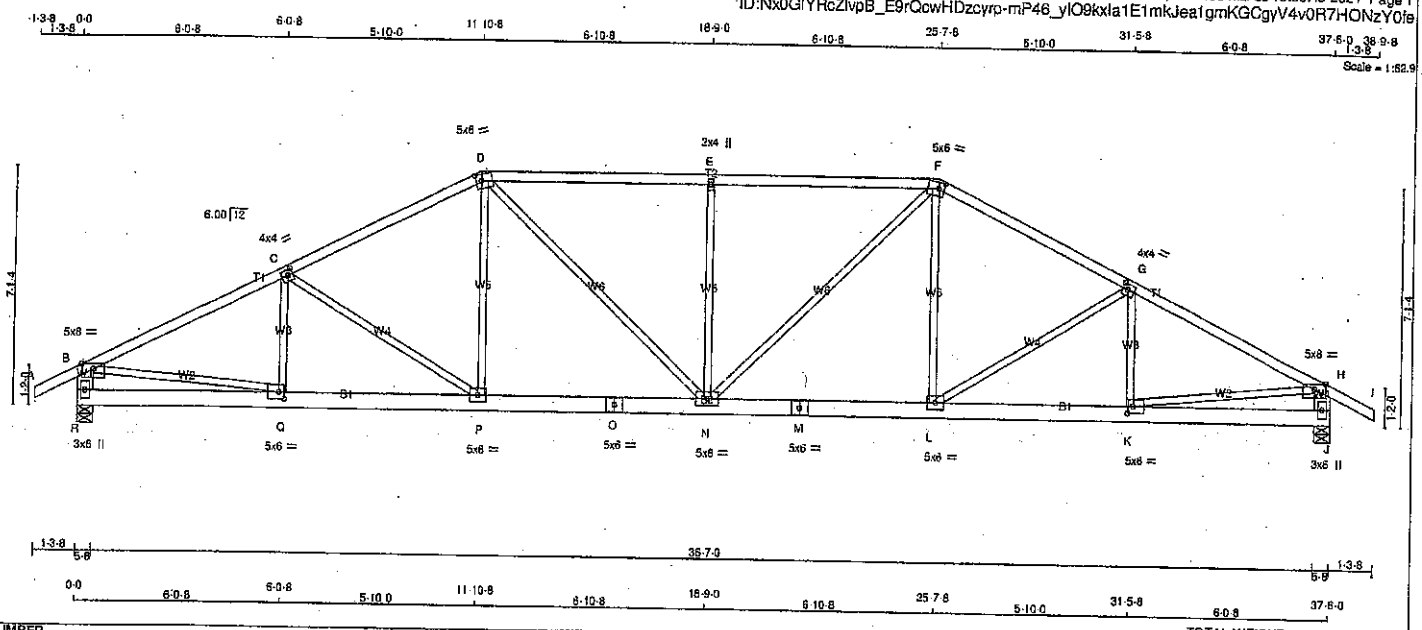



TOTAL WEIGHT = 2 X 175 = 350 lb
(M)(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| R - B | 2x6 | DRY | No.2 | SPF |
| J - H | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - M | 2x6 | DRY | No.2 | SPF |
| M - J | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

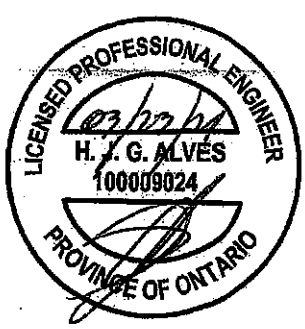
DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TTWW-m | MT20 | 5.0 | 8.0 | 2.25 | 2.00 |
| E | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| G | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| H | TMW-p | MT20 | 5.0 | 8.0 | Edge | |
| J | BMV1+p | MT20 | 3.0 | 6.0 | | |
| K | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| L | BMWW-t | MT20 | 5.0 | 6.0 | | |
| M | BS-t | MT20 | 5.0 | 6.0 | | |
| N | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWW-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| R | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.




Structural component only
DWG# T-2108679

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| R | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| J | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| R | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| J | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -3154 / 0 | -91.8 | -91.8 | 0.61 (1) | 3.41 |
| C- D | -2830 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.63 |
| D- E | -2960 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.27 |
| E- F | -2960 / 0 | -91.8 | -91.8 | 0.74 (1) | 3.27 |
| F- G | -2830 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.63 |
| G- H | -3154 / 0 | -91.8 | -91.8 | 0.61 (1) | 3.41 |
| H- I | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| R- B | -2127 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 |
| J- H | -2127 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 |
| R- Q | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| Q- P | 0 / 2846 | -18.5 | -18.5 | 0.39 (1) | 10.00 |
| P- O | 0 / 2509 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| O- N | 0 / 2509 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| N- M | 0 / 2509 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| M- L | 0 / 2509 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| L- K | 0 / 2846 | -18.5 | -18.5 | 0.39 (1) | 10.00 |
| K- J | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| Q- C | -285 / 0 | 0.07 (1) |
| C- P | -407 / 0 | 0.38 (1) |
| P- D | 0 / 369 | 0.08 (1) |
| D- N | 0 / 630 | 0.14 (1) |
| N- E | -776 / 0 | 0.64 (1) |
| N- F | 0 / 630 | 0.14 (1) |
| L- F | 0 / 369 | 0.08 (1) |
| L- G | -407 / 0 | 0.38 (1) |
| K- G | -285 / 0 | 0.07 (1) |
| B- Q | 0 / 2870 | 0.65 (1) |
| K- H | 0 / 2870 | 0.65 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 9.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31")

CSI: TC=0.74/1.00 (D-E:1) , BC=0.39/1.00 (K-L:1) , WB=0.65/1.00 (H-K:1) , SSI=0.31/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (B) (INPUT = 0.90 )
JSI METAL= 0.65 (C) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T44 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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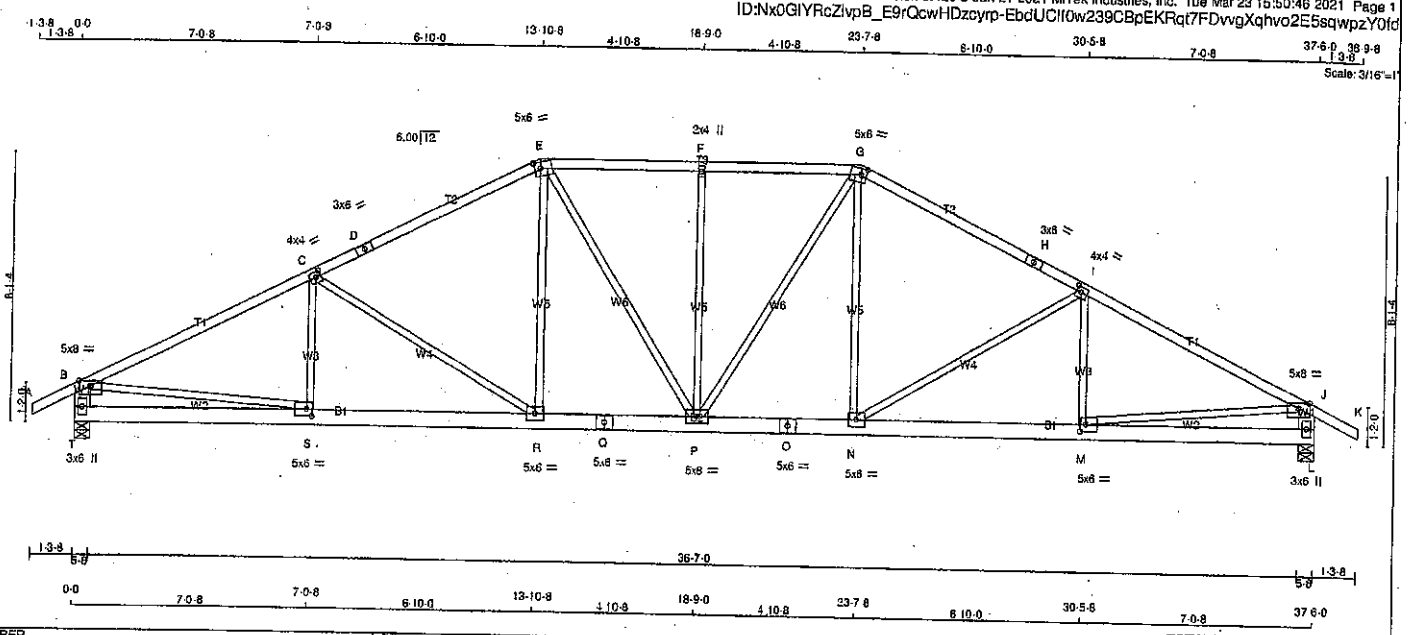


TOTAL WEIGHT = 2 X 181 = 363 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| G - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| T - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| T - Q | 2x6 | DRY | No.2 | SPF |
| Q - O | 2x6 | DRY | No.2 | SPF |
| O - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-p | MT20 | 5.0 | 8.0 | Edge | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| H | TS-t | MT20 | 3.0 | 6.0 | | |
| I | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| J | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| L | BMV1+p | MT20 | 3.0 | 6.0 | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| P | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| R | BMWW-t | MT20 | 5.0 | 6.0 | | |
| S | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| T | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108680

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| T | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| L | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| T | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A-B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B-C | -3179 / 0 | -91.8 | -91.8 | 0.88 (1) | 3.08 | |
| C-D | -2657 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.45 | |
| D-E | -2657 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.45 | |
| E-F | -2539 / 0 | -91.8 | -91.8 | 0.36 (1) | 4.01 | |
| F-G | -2539 / 0 | -91.8 | -91.8 | 0.36 (1) | 4.01 | |
| G-H | -2657 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.45 | |
| H-I | -2657 / 0 | -91.8 | -91.8 | 0.76 (1) | 3.45 | |
| I-J | -3179 / 0 | -91.8 | -91.8 | 0.88 (1) | 3.08 | |
| J-K | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| T-B | -2125 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| L-J | -2125 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| T-S | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 | |
| S-R | 0 / 2873 | -18.5 | -18.5 | 0.40 (1) | 10.00 | |
| R-Q | 0 / 2350 | -18.5 | -18.5 | 0.32 (1) | 10.00 | |
| Q-P | 0 / 2350 | -18.5 | -18.5 | 0.32 (1) | 10.00 | |
| P-O | 0 / 2350 | -18.5 | -18.5 | 0.32 (1) | 10.00 | |
| O-N | 0 / 2350 | -18.5 | -18.5 | 0.32 (1) | 10.00 | |
| N-M | 0 / 2873 | -18.5 | -18.5 | 0.40 (1) | 10.00 | |
| M-L | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| S-C | -200 / 50 | 0.06 (1) |
| C-R | -622 / 0 | 0.87 (1) |
| R-E | 0 / 464 | 0.10 (1) |
| E-P | 0 / 353 | 0.08 (1) |
| P-F | -543 / 0 | 0.65 (1) |
| P-G | 0 / 353 | 0.08 (1) |
| N-G | 0 / 464 | 0.10 (1) |
| N-I | -622 / 0 | 0.87 (1) |
| M-I | -200 / 50 | 0.06 (1) |
| B-S | 0 / 2891 | 0.65 (1) |
| M-J | 0 / 2891 | 0.65 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2018
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.29")

CSI: TC=0.88/1.00 (B-C:1) , BC=0.40/1.00 (R-S:1) , WB=0.87/1.00 (C-R:1) , SSI=0.28/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90 )
JSI METAL= 0.65 (S) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T45 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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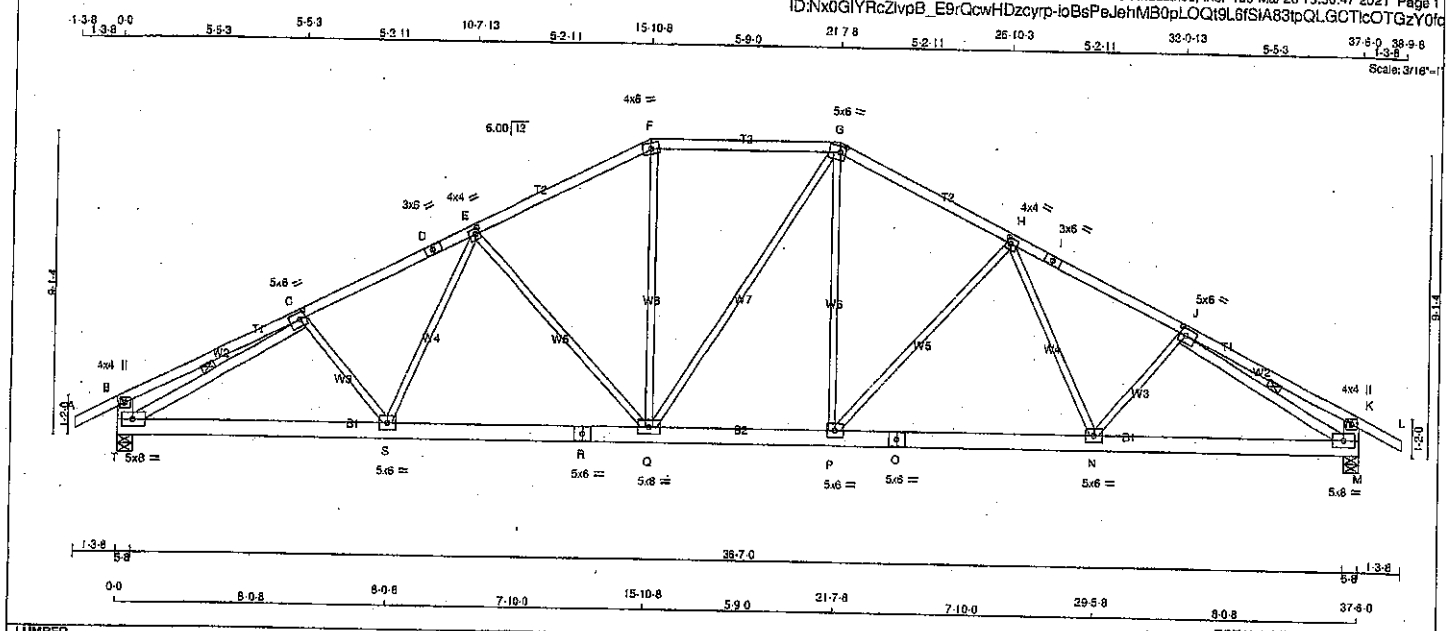


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |
| T - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| T - R | 2x6 | DRY | No.2 | SPF |
| R - O | 2x6 | DRY | No.2 | SPF |
| O - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| T - C | 2x4 | DRY | No.2 | SPF |
| J - M | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 4.0 | 4.0 | | |
| C | TMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 2.25 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| F | TTW-m | MT20 | 4.0 | 6.0 | | |
| G | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| H | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| I | TS-t | MT20 | 3.0 | 6.0 | | |
| J | TMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.25 |
| K | TMV+p | MT20 | 4.0 | 4.0 | | |
| M | BMVW1-t | MT20 | 5.0 | 8.0 | | |
| N, P, S | | | | | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | | |
| O | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 8.0 | | |
| R | BS-t | MT20 | 5.0 | 6.0 | | |
| T | BMVW1-t | MT20 | 5.0 | 8.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108681

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 184 = 369 lb
[M][F]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| T | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| M | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| T | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| M | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, M

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-T, J-M.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | 0 / 20 | -91.8 | -91.8 | 0.32 (1) | 10.00 | |
| C- D | -3036 / 0 | -91.8 | -91.8 | 0.43 (1) | 3.69 | |
| D- E | -3036 / 0 | -91.8 | -91.8 | 0.43 (1) | 3.69 | |
| E- F | -2451 / 0 | -91.8 | -91.8 | 0.39 (1) | 4.06 | |
| F- G | -2179 / 0 | -91.8 | -91.8 | 0.46 (1) | 4.14 | |
| G- H | -2449 / 0 | -91.8 | -91.8 | 0.39 (1) | 4.06 | |
| H- I | -3037 / 0 | -91.8 | -91.8 | 0.43 (1) | 3.69 | |
| I- J | -3037 / 0 | -91.8 | -91.8 | 0.43 (1) | 3.69 | |
| J- K | 0 / 20 | -91.8 | -91.8 | 0.32 (1) | 10.00 | |
| K- L | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| T- B | -324 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | |
| M- K | -324 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | |
| T- S | 0 / 2787 | -18.5 | -18.5 | 0.41 (1) | 10.00 | |
| S- R | 0 / 2613 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| R- Q | 0 / 2613 | -18.5 | -18.5 | 0.36 (1) | 10.00 | |
| Q- P | 0 / 2177 | -18.5 | -18.5 | 0.31 (1) | 10.00 | |
| P- O | 0 / 2613 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| O- N | 0 / 2613 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| N- M | 0 / 2788 | -18.5 | -18.5 | 0.41 (1) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- S | -114 / 36 | 0.04 (1) |
| S- E | 0 / 261 | 0.06 (4) |
| E- Q | -671 / 0 | 0.92 (1) |
| Q- F | 0 / 634 | 0.14 (1) |
| Q- G | 0 / 4 | 0.00 (1) |
| P- G | 0 / 629 | 0.14 (1) |
| P- H | -674 / 0 | 0.92 (1) |
| H- N | 0 / 265 | 0.06 (4) |
| N- J | -114 / 36 | 0.04 (1) |
| T- C | -3317 / 0 | 0.63 (1) |
| J- M | -3319 / 0 | 0.63 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.28")

CSI: TC=0.46/1.00 (F-G:1) , BC=0.41/1.00 (S-T:1) , WB=0.92/1.00 (H-P:1) , SSI=0.21/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90 )
JSI METAL= 0.74 (J) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T46 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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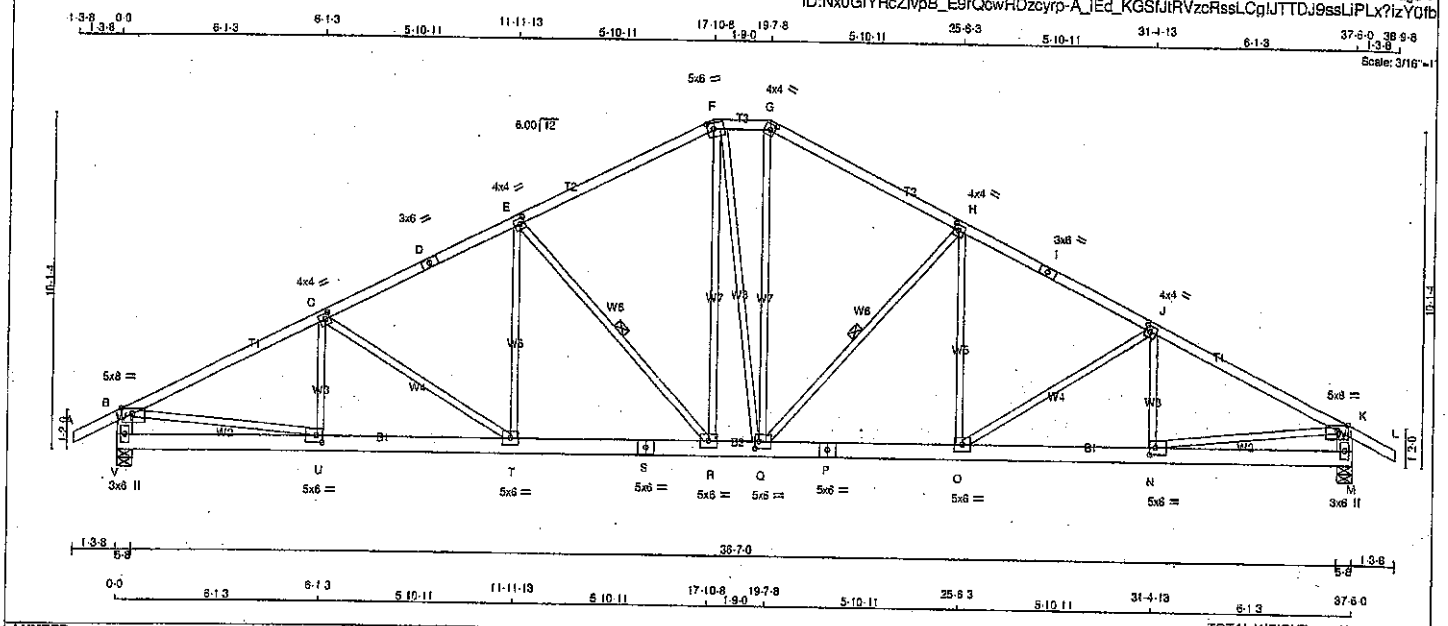


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |
| V - B | 2x6 | DRY | No.2 | SPF |
| M - K | 2x6 | DRY | No.2 | SPF |
| V - S | 2x6 | DRY | No.2 | SPF |
| S - P | 2x6 | DRY | No.2 | SPF |
| P - M | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| C, E, H, J | | | | | | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.25 |
| G | TTW-h | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| I | TS-t | MT20 | 3.0 | 6.0 | | |
| K | TMVW-p | MT20 | 5.0 | 8.0 | Edge | |
| M | BMV1+p | MT20 | 3.0 | 6.0 | | |
| N | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| O, R, T | | | | | | |
| O | BMWW-t | MT20 | 5.0 | 6.0 | | |
| P | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BMWWW-t | MT20 | 5.0 | 6.0 | 2.50 | 1.50 |
| S | SS-t | MT20 | 5.0 | 6.0 | | |
| U | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.00 |
| V | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108682

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| V | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| M | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| V | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| M | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-R, H-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LCT | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | -3143 / 0 | -91.8 | -91.8 | 0.62 (1) | 3.44 | |
| C- D | -2844 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.72 | |
| D- E | -2844 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.72 | |
| E- F | -2239 / 0 | -91.8 | -91.8 | 0.47 (1) | 4.13 | |
| F- G | -2001 / 0 | -91.8 | -91.8 | 0.08 (1) | 4.74 | |
| G- H | -2253 / 0 | -91.8 | -91.8 | 0.47 (1) | 4.11 | |
| H- I | -2838 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.73 | |
| I- J | -2838 / 0 | -91.8 | -91.8 | 0.50 (1) | 3.73 | |
| J- K | -3145 / 0 | -91.8 | -91.8 | 0.62 (1) | 3.44 | |
| K- L | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| V- B | -2129 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| M- K | -2130 / 0 | 0.0 | 0.0 | 0.14 (1) | 6.97 | |
| V- U | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 | |
| U- T | 0 / 2831 | -18.5 | -18.5 | 0.39 (1) | 10.00 | |
| T- S | 0 / 2543 | -18.5 | -18.5 | 0.35 (1) | 10.00 | |
| S- R | 0 / 2543 | -18.5 | -18.5 | 0.35 (1) | 10.00 | |
| R- Q | 0 / 1987 | -18.5 | -18.5 | 0.31 (1) | 10.00 | |
| Q- P | 0 / 2539 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| P- O | 0 / 2539 | -18.5 | -18.5 | 0.37 (1) | 10.00 | |
| O- N | 0 / 2933 | -18.5 | -18.5 | 0.40 (1) | 10.00 | |
| N- M | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| U- C | -270 / 5 | 0.07 (1) |
| C- T | -343 / 0 | 0.32 (1) |
| T- E | 0 / 321 | 0.07 (1) |
| E- R | -849 / 0 | 0.47 (1) |
| R- F | 0 / 814 | 0.14 (1) |
| F- Q | 0 / 82 | 0.02 (1) |
| Q- G | 0 / 702 | 0.16 (1) |
| Q- H | -822 / 0 | 0.46 (1) |
| O- H | 0 / 293 | 0.07 (1) |
| O- J | -352 / 0 | 0.32 (1) |
| N- J | -262 / 8 | 0.07 (1) |
| B- U | 0 / 2854 | 0.64 (1) |
| N- K | 0 / 2856 | 0.64 (1) |

TOTAL WEIGHT = 2 X 194 = 387 lb
{M}{F}

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.29")

CSI: TC=0.62/1.00 (J-K:1) , BC=0.40/1.00 (N-O:1) , WB=0.64/1.00 (K-N:1) , SSI=0.23/1.00 (J-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (K) (INPUT = 0.90 )
JSI METAL= 0.64 (N) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T47 | 7 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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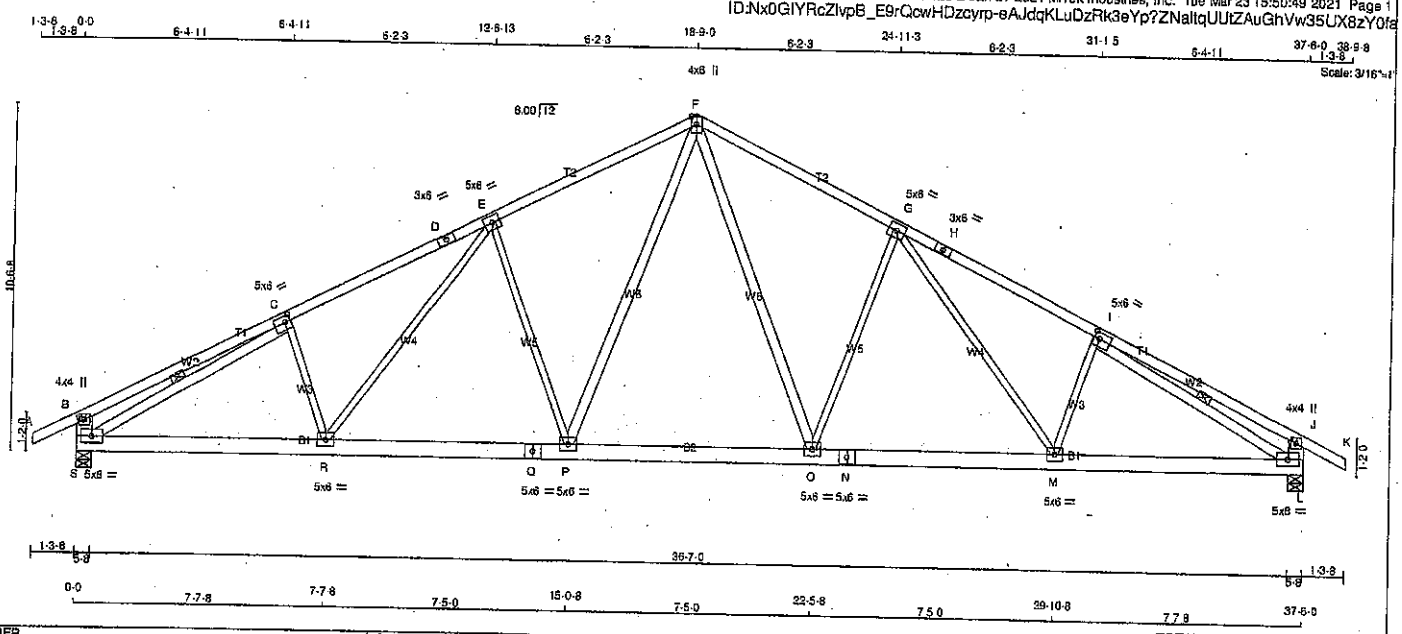


TOTAL WEIGHT = 7 X 191 = 1340 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - K | 2x4 | DRY | No.2 | SPF |
| S - B | 2x6 | DRY | No.2 | SPF |
| L - J | 2x6 | DRY | No.2 | SPF |
| S - Q | 2x6 | DRY | No.2 | SPF |
| Q - N | 2x6 | DRY | No.2 | SPF |
| N - L | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| F - O | 2x4 | DRY | No.2 | SPF |
| P - F | 2x4 | DRY | No.2 | SPF |
| S - C | 2x4 | DRY | No.2 | SPF |
| I - L | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMW+p | MT20 | 4.0 | 4.0 | | |
| C | TMWW-t | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| D | TS-t | MT20 | 3.0 | 6.0 | | |
| E | TMWW-t | MT20 | 5.0 | 6.0 | | |
| F | TTWW+p | MT20 | 4.0 | 6.0 | Edge | |
| G | TMWW-t | MT20 | 5.0 | 6.0 | | |
| H | TS-t | MT20 | 3.0 | 6.0 | | |
| I | TMWW-t | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| J | TMV+p | MT20 | 4.0 | 4.0 | | |
| L | BMWW1-t | MT20 | 5.0 | 8.0 | | |
| M, O, P, R | | | | | | |
| M | BMWW-t | MT20 | 5.0 | 6.0 | | |
| N | BS-t | MT20 | 5.0 | 6.0 | | |
| Q | BS-t | MT20 | 5.0 | 6.0 | | |
| S | BMWW1-t | MT20 | 5.0 | 8.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108683

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| S | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |
| L | 2192 | 0 | 2192 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| S | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |
| L | 1548 | 1029 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 519 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-S, I-L

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | 0 / 24 | -91.8 | -91.8 | 0.46 (1) | 10.00 |
| C- D | -3071 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.52 |
| D- E | -3071 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.52 |
| E- F | -2519 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.84 |
| F- G | -2519 / 0 | -91.8 | -91.8 | 0.55 (1) | 3.84 |
| G- H | -3071 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.52 |
| H- I | -3071 / 0 | -91.8 | -91.8 | 0.60 (1) | 3.52 |
| I- J | 0 / 24 | -91.8 | -91.8 | 0.46 (1) | 10.00 |
| J- K | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| S- B | -358 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| L- J | -358 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| S- R | 0 / 2830 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| R- Q | 0 / 2490 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| Q- P | 0 / 2490 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| P- O | 0 / 1905 | -18.5 | -18.5 | 0.28 (1) | 10.00 |
| O- N | 0 / 2490 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| N- M | 0 / 2490 | -18.5 | -18.5 | 0.35 (1) | 10.00 |
| M- L | 0 / 2830 | -18.5 | -18.5 | 0.42 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| F- O | 0 / 946 | 0.15 (1) |
| O- G | -786 / 0 | 0.86 (1) |
| G- M | 0 / 450 | 0.10 (1) |
| M- I | -251 / 3 | 0.07 (1) |
| P- F | 0 / 946 | 0.15 (1) |
| E- P | -786 / 0 | 0.86 (1) |
| R- E | 0 / 450 | 0.10 (1) |
| C- R | -251 / 3 | 0.07 (1) |
| S- C | -3335 / 0 | 0.82 (1) |
| I- L | -3335 / 0 | 0.82 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")

CSI: TC=0.80/1.00 (C-E:1) , BC=0.42/1.00 (R-S:1) , WB=0.86/1.00 (E-P:1) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90 )
JSI METAL= 0.76 (C) (INPUT = 1.00 )

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T48 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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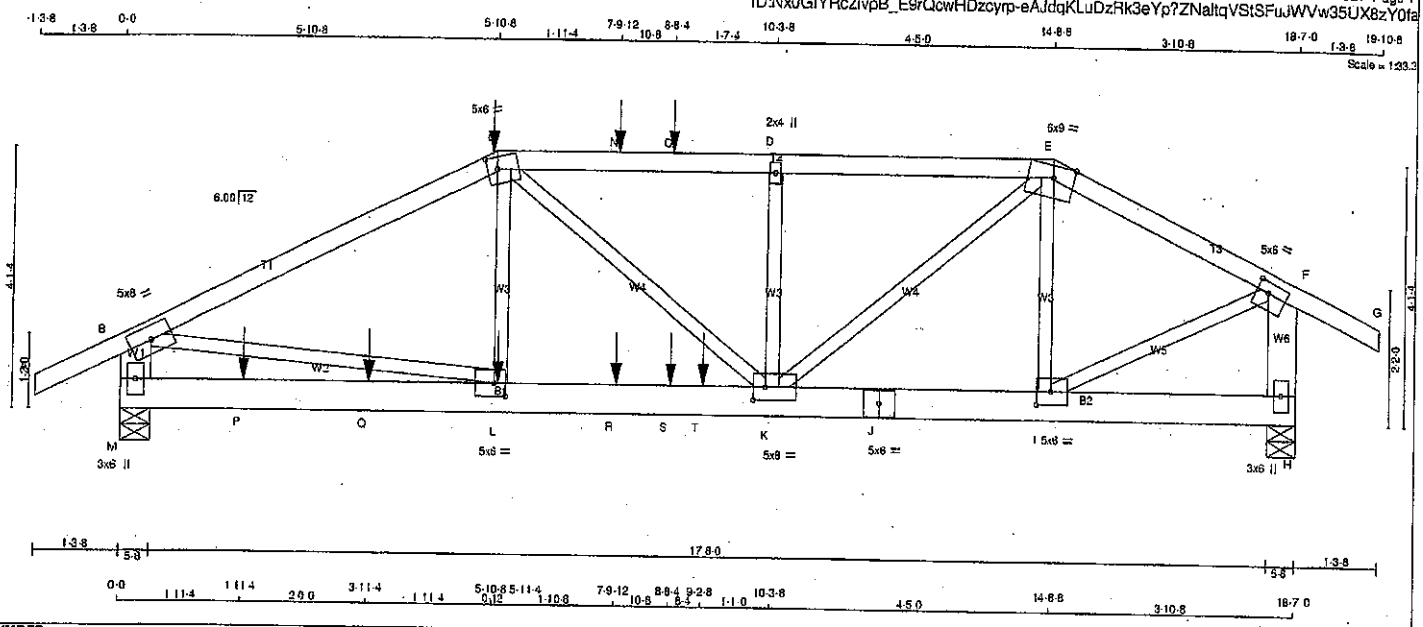


TOTAL WEIGHT = 68 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | 2100F 1.8E | SPF |
| C - E | 2x4 | DRY | 2100F 1.8E | SPF |
| E - G | 2x4 | DRY | 2100F 1.8E | SPF |
| M - B | 2x6 | DRY | No.2 | SPF |
| H - F | 2x6 | DRY | No.2 | SPF |
| M - J | 2x6 | DRY | No.2 | SPF |
| J - H | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-t | MT20 | 5.0 | 8.0 | | |
| C | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW-m | MT20 | 6.0 | 9.0 | Edge | 4.00 |
| F | TMVW-t | MT20 | 5.0 | 6.0 | 2.00 | 2.25 |
| H | BMV1+p | MT20 | 3.0 | 6.0 | | |
| I | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.75 |
| J | BS-I | MT20 | 5.0 | 6.0 | | |
| K | BMWWW-t | MT20 | 5.0 | 8.0 | 2.50 | 2.25 |
| L | BMWW-t | MT20 | 5.0 | 6.0 | 2.50 | 2.25 |
| M | BMV1+p | MT20 | 3.0 | 6.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| M | 2163 | 0 | 2163 | 0 | 0 | 5-8 | 5-8 |
| H | 1943 | 0 | 1943 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| M | 1529 | 1004 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 526 / 0 | 0 / 0 |
| H | 1371 | 914 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 458 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.09 (1) | 10.00 |
| B- C | -3049 / 0 | -91.8 | -91.8 | 0.54 (1) | 4.27 |
| C- N | -3172 / 0 | -91.8 | -91.8 | 0.37 (1) | 4.36 |
| N- O | -3172 / 0 | -91.8 | -91.8 | 0.37 (1) | 4.36 |
| O- D | -3172 / 0 | -91.8 | -91.8 | 0.37 (1) | 4.36 |
| D- E | -3172 / 0 | -91.8 | -91.8 | 0.34 (1) | 4.41 |
| E- F | -1884 / 0 | -91.8 | -91.8 | 0.20 (1) | 5.60 |
| F- G | 0 / 28 | -91.8 | -91.8 | 0.09 (1) | 10.00 |
| M- B | -2114 / 0 | 0.0 | 0.0 | 0.15 (1) | 6.95 |
| H- F | -1899 / 0 | 0.0 | 0.0 | 0.15 (1) | 7.25 |
| M- P | 0 / 0 | -18.5 | -18.5 | 0.16 (4) | 10.00 |
| P- Q | 0 / 0 | -18.5 | -18.5 | 0.16 (4) | 10.00 |
| Q- L | 0 / 0 | -18.5 | -18.5 | 0.16 (4) | 10.00 |
| L- R | 0 / 2729 | -18.5 | -18.5 | 0.86 (1) | 10.00 |
| R- S | 0 / 2729 | -18.5 | -18.5 | 0.86 (1) | 10.00 |
| S- T | 0 / 2729 | -18.5 | -18.5 | 0.86 (1) | 10.00 |
| T- K | 0 / 2729 | -18.5 | -18.5 | 0.86 (1) | 10.00 |
| K- J | 0 / 1663 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| J- I | 0 / 1663 | -18.5 | -18.5 | 0.42 (1) | 10.00 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| L- C | 0 / 194 | 0.07 (4) |
| C- K | 0 / 580 | 0.14 (1) |
| K- D | -633 / 0 | 0.16 (1) |
| K- E | 0 / 1974 | 0.49 (1) |
| I- E | -752 / 0 | 0.19 (1) |
| B- L | 0 / 2749 | 0.68 (1) |
| I- F | 0 / 1843 | 0.46 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 5-10-8 | -254 | -254 | --- | FRONT | VERT | TOTAL | --- | C1 |
| L | 5-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| N | 7-9-12 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| O | 8-8-4 | -76 | -76 | --- | FRONT | VERT | TOTAL | --- | C1 |
| P | 1-11-4 | -20 | -20 | --- | FRONT | VERT | TOTAL | --- | C1 |
| Q | 3-11-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| R | 7-9-12 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| S | 8-8-4 | -21 | -21 | --- | FRONT | VERT | TOTAL | --- | C1 |
| T | 9-2-8 | -770 | -770 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.86/1.00 (K-L:1) , WB=0.68/1.00 (B-L:1) , SSI=0.60/1.00 (K-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 786 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90 )
JSI METAL= 0.62 (L) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108684

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T49 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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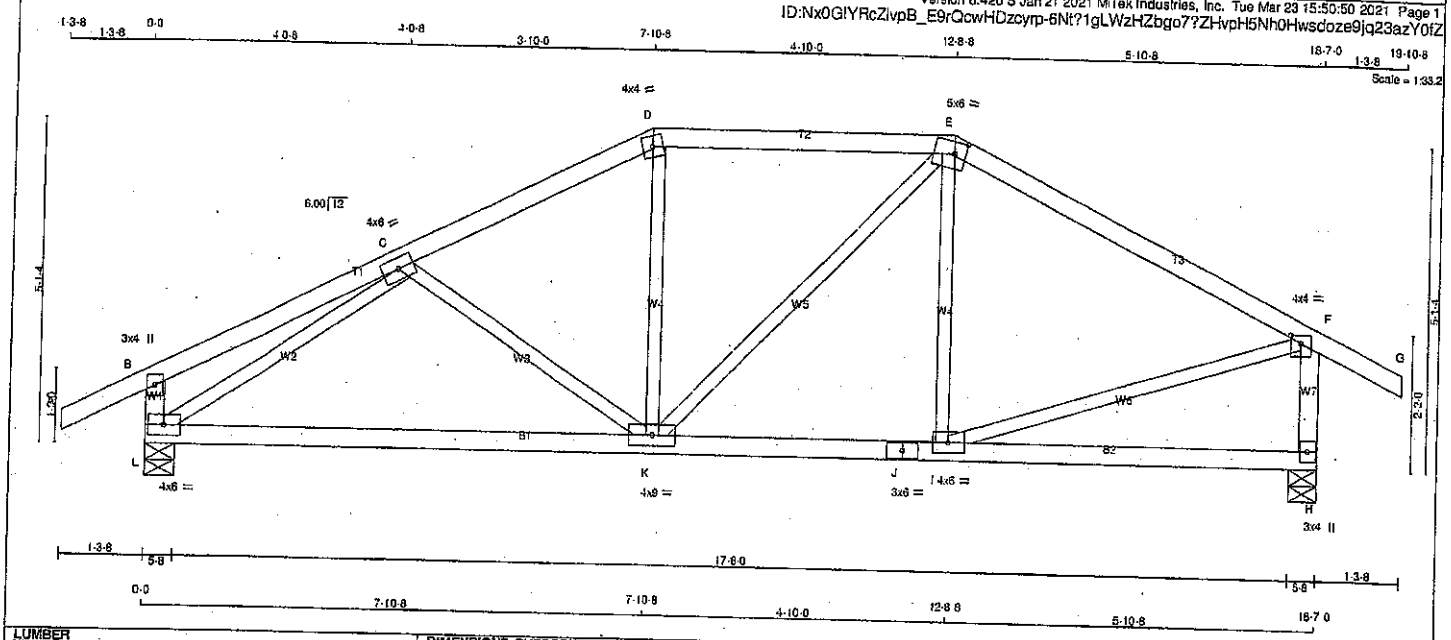


TOTAL WEIGHT = 75 lb
(M)(F)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 6.0 | | |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| F | TMVW-p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |
| I | BMWW-t | MT20 | 4.0 | 6.0 | | |
| J | BS-t | MT20 | 3.0 | 6.0 | | |
| K | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| L | BMVW1-t | MT20 | 4.0 | 6.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | 1st FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| L | 1149 | 0 | 1149 | 0 | 0 | 5-8 | 5-8 |
| H | 1149 | 0 | 1149 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 810 | 545 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |
| H | 810 | 545 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | 0 / 18 | -91.8 | -91.8 | 0.22 (1) | 10.00 |
| C- D | -1118 / 0 | -91.8 | -91.8 | 0.18 (1) | 5.80 |
| D- E | -986 / 0 | -91.8 | -91.8 | 0.29 (1) | 5.83 |
| E- F | -973 / 0 | -91.8 | -91.8 | 0.42 (1) | 5.74 |
| F- G | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| L- B | -266 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| H- F | -1100 / 0 | 0.0 | 0.0 | 0.13 (1) | 7.54 |
| L- K | 0 / 1144 | -18.5 | -18.5 | 0.33 (1) | 10.00 |
| K- J | 0 / 866 | -18.5 | -18.5 | 0.31 (4) | 10.00 |
| J- I | 0 / 866 | -18.5 | -18.5 | 0.31 (4) | 10.00 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.15 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- K | -198 / 0 | 0.08 (1) |
| K- D | 0 / 132 | 0.04 (4) |
| K- E | 0 / 170 | 0.04 (1) |
| I- E | -177 / 11 | 0.07 (1) |
| L- C | -1408 / 0 | 0.54 (1) |
| I- F | 0 / 911 | 0.20 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.42/1.00 (E-F:1) , BC=0.33/1.00 (K-L:1) , WB=0.54/1.00 (C-L:1) , SSI=0.19/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (F) (INPUT = 0.90 )
JSI METAL= 0.32 (F) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108685

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T50 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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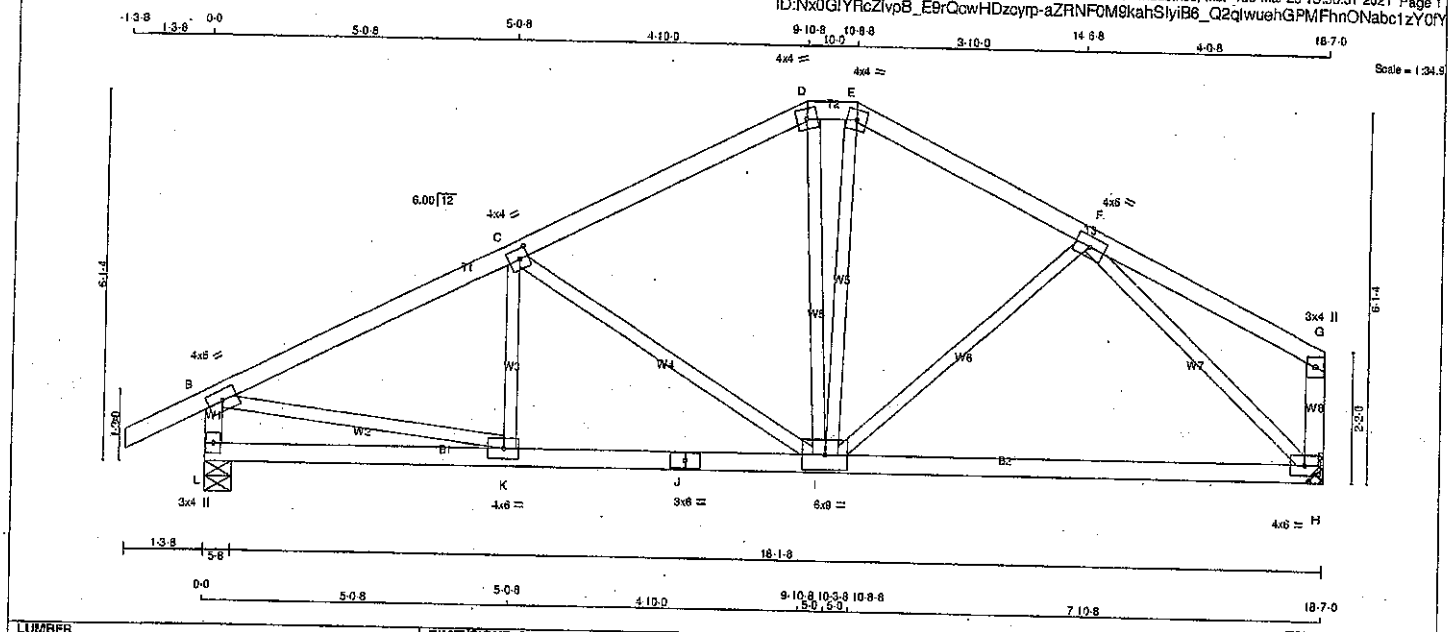


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - G | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-t | MT20 | 4.0 | 6.0 | | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TTW-m | MT20 | 4.0 | 4.0 | | |
| F | TMWW-t | MT20 | 4.0 | 6.0 | | |
| G | TMV+p | MT20 | 3.0 | 4.0 | | |
| H | BMW1-t | MT20 | 4.0 | 6.0 | | |
| I | BMWWWW*-t | MT20 | 6.0 | 9.0 | | |
| J | BS-t | MT20 | 3.0 | 6.0 | | |
| K | BMWW-t | MT20 | 4.0 | 6.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| L | 1149 | 0 | 1149 | 0 | 0 | 5-8 | 5-8 |
| H | 1024 | 0 | 1024 | 0 | 0 | MECHANICAL | IN-SX |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 810 | 545 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |
| H | 724 | 475 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 249 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 26 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -1314 / 0 | -91.8 | -91.8 | 0.30 (1) | 5.30 |
| C- D | -936 / 0 | -91.8 | -91.8 | 0.29 (1) | 6.04 |
| D- E | -829 / 0 | -91.8 | -91.8 | 0.01 (1) | 6.25 |
| E- F | -927 / 0 | -91.8 | -91.8 | 0.18 (1) | 6.21 |
| F- G | 0 / 19 | -91.8 | -91.8 | 0.23 (1) | 10.00 |
| L- B | -1105 / 0 | 0.0 | 0.0 | 0.11 (1) | 7.53 |
| H- G | -138 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.11 (4) | 10.00 |
| K- J | 0 / 1196 | -18.5 | -18.5 | 0.37 (4) | 10.00 |
| J- I | 0 / 1196 | -18.5 | -18.5 | 0.37 (4) | 10.00 |
| I- H | 0 / 845 | -18.5 | -18.5 | 0.33 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| K- C | -124 / 25 | 0.03 (1) |
| C- I | -454 / 0 | 0.30 (1) |
| I- F | -44 / 40 | 0.02 (1) |
| B- K | 0 / 1214 | 0.27 (1) |
| F- H | -1180 / 0 | 0.57 (1) |
| D- I | 0 / 204 | 0.05 (1) |
| I- E | 0 / 230 | 0.05 (1) |

TOTAL WEIGHT = 78 lb

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.30/1.00 (B-C:1) , BC=0.37/1.00 (I-K:4) , WB=0.57/1.00 (F-H:1) , SSI=0.20/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (K) (INPUT = 0.90 )
JSI METAL= 0.36 (J) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108686

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T51 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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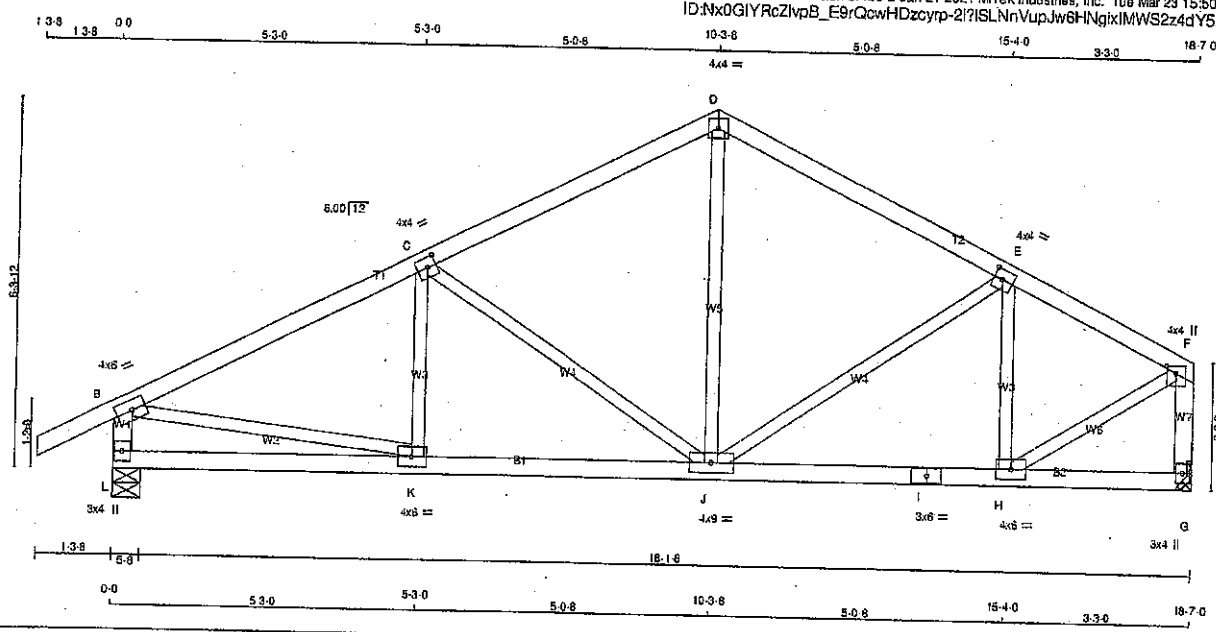


TOTAL WEIGHT = 2 X 76 = 151 lb

M[F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| G - F | 2x4 | DRY | No.2 | SPF |
| L - I | 2x4 | DRY | No.2 | SPF |
| I - G | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-t | MT20 | 4.0 | 6.0 | | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TTW-p | MT20 | 4.0 | 4.0 | | |
| E | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| F | TMVW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| G | BMV1+p | MT20 | 3.0 | 4.0 | | |
| H | BMWW-t | MT20 | 4.0 | 6.0 | | |
| I | BS-t | MT20 | 3.0 | 6.0 | | |
| J | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| K | BMWW-t | MT20 | 4.0 | 6.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| L | 1149 | 0 | 1149 | 0 | 0 | 5-8 | 5-8 |
| G | 1024 | 0 | 1024 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT G. MINIMUM BEARING LENGTH AT JOINT G = 3-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | MAX. MIN. COMPONENT REACTIONS LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 810 | 545 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 265 / 0 | 0 / 0 |
| G | 724 | 475 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 249 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | -1318 / 0 | -91.8 | -91.8 | 0.33 (1) | 5.26 | |
| C- D | -909 / 0 | -91.8 | -91.8 | 0.31 (1) | 6.07 | |
| D- E | -902 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.15 | |
| E- F | -928 / 0 | -91.8 | -91.8 | 0.23 (1) | 6.14 | |
| L- B | -1107 / 0 | 0.0 | 0.0 | 0.11 (1) | 7.52 | |
| G- F | -1001 / 0 | 0.0 | 0.0 | 0.12 (1) | 7.81 | |
| L- K | 0 / 0 | -18.5 | -18.5 | 0.11 (4) | 10.00 | |
| K- J | 0 / 1200 | -18.5 | -18.5 | 0.25 (1) | 10.00 | |
| J- I | 0 / 856 | -18.5 | -18.5 | 0.19 (1) | 10.00 | |
| I- H | 0 / 856 | -18.5 | -18.5 | 0.19 (1) | 10.00 | |
| H- G | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| K- C | -96 / 52 | 0.02 (1) |
| C- J | -498 / 0 | 0.33 (1) |
| J- D | 0 / 427 | 0.10 (1) |
| J- E | -80 / 0 | 0.05 (1) |
| H- E | -409 / 0 | 0.09 (1) |
| B- K | 0 / 1216 | 0.27 (1) |
| H- F | 0 / 986 | 0.22 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.62")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.62")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.33/1.00 (B-C:1) , BC=0.25/1.00 (J-K:1) , WB=0.33/1.00 (C-J:1) , SSI=0.21/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | .650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (F) (INPUT = 0.90 )
JSI METAL= 0.34 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108687

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T52 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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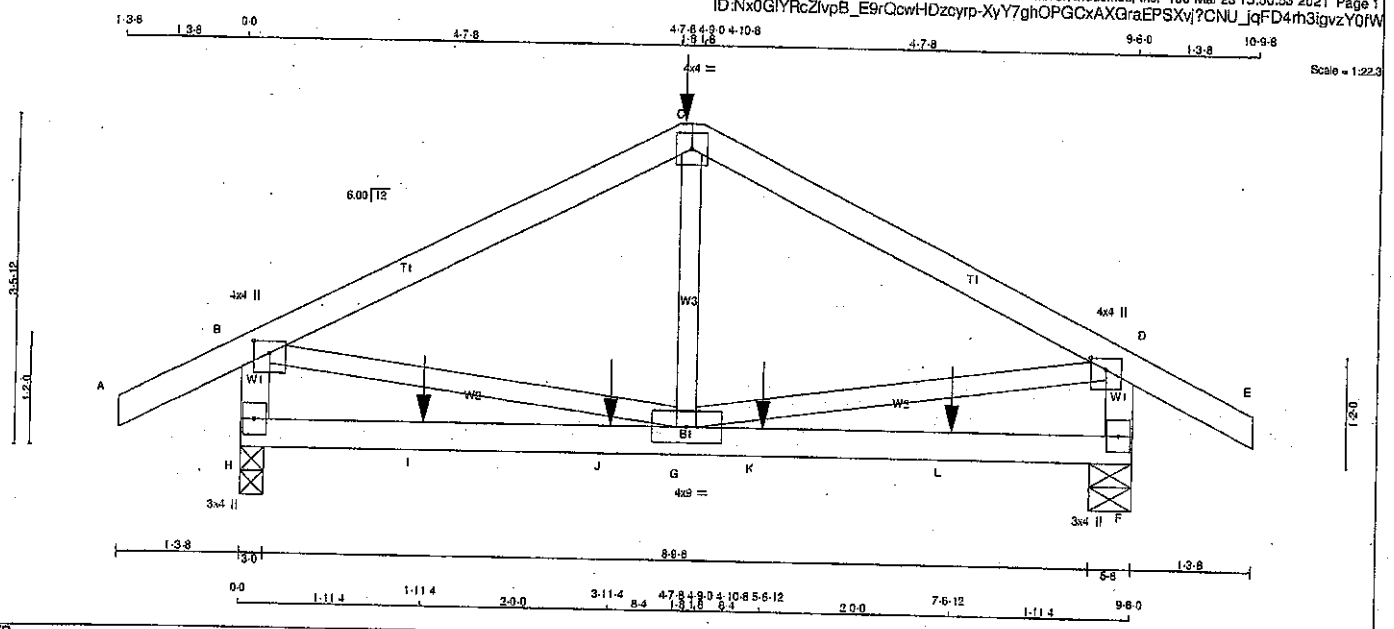


TOTAL WEIGHT = 38 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| H - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| C | TTW-p | MT20 | 4.0 | 4.0 | | |
| D | TMVW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |
| G | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| H | 890 | 0 | 890 | 0 | 0 | 3-0 | 3-0 |
| F | 890 | 0 | 890 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| H | 628 | 421 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 206 / 0 | 0 / 0 |
| F | 628 | 421 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 206 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| B- C | -829 / 0 | -91.8 | -91.8 | 0.42 (1) | 6.03 | |
| C- D | -829 / 0 | -91.8 | -91.8 | 0.42 (1) | 6.03 | |
| D- E | 0 / 28 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| F- D | -847 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 | |
| H- B | -847 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 | |
| H- I | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |
| I- J | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |
| J- G | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |
| G- K | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |
| K- L | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |
| L- F | 0 / 0 | -18.5 | -18.5 | 0.19 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| G- D | 0 / 753 | 0.19 (1) |
| B- G | 0 / 753 | 0.19 (1) |
| G- C | -114 / 87 | 0.03 (4) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 4-9-0 | -291 | -291 | --- | FRONT | VERT | TOTAL | --- | C1 |
| I | 1-11-4 | -12 | -12 | --- | FRONT | VERT | TOTAL | --- | C1 |
| J | 3-11-4 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| K | 5-6-12 | -14 | -14 | --- | FRONT | VERT | TOTAL | --- | C1 |
| L | 7-6-12 | -12 | -12 | --- | FRONT | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD.

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.42/1.00 (C-D:1) , BC=0.19/1.00 (G-H:4) , WB=0.19/1.00 (B-G:1) , SSI=0.17/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90 )
JSI METAL= 0.25 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108688

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T53 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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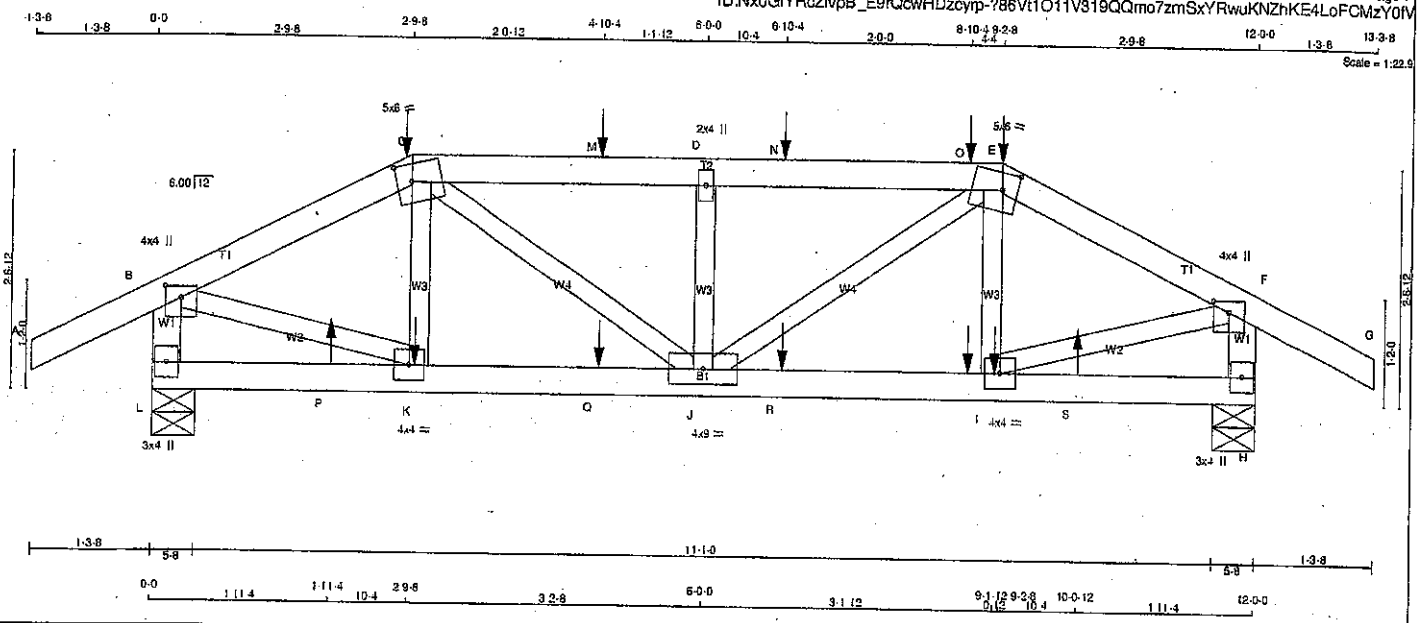


TOTAL WEIGHT = 48 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| L - B | 2x4 | DRY | No.2 | SPF |
| H - F | 2x4 | DRY | No.2 | SPF |
| L - H | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| C | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| F | TMW+p | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| H | BMV1+p | MT20 | 3.0 | 4.0 | | |
| I | BMWW-t | MT20 | 4.0 | 4.0 | | |
| J | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| K | BMWW-t | MT20 | 4.0 | 4.0 | | |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| L | 883 | 0 | 883 | 0 | 0 | 5-8 | 5-8 |
| H | 881 | 0 | 881 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| L | 609 | 407 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 202 / 0 | 0 / 0 |
| H | 621 | 416 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 205 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.93 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (7)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A-B | 0 / 28 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| B-C | -824 / 0 | -91.8 | -91.8 | 0.14 (1) | 6.25 |
| C-M | -1038 / 0 | -91.8 | -91.8 | 0.17 (1) | 5.93 |
| M-D | -1038 / 0 | -91.8 | -91.8 | 0.17 (1) | 5.93 |
| D-N | -1038 / 0 | -91.8 | -91.8 | 0.17 (1) | 5.93 |
| N-O | -1038 / 0 | -91.8 | -91.8 | 0.17 (1) | 5.93 |
| O-E | -1038 / 0 | -91.8 | -91.8 | 0.17 (1) | 5.93 |
| E-F | -849 / 0 | -91.8 | -91.8 | 0.16 (1) | 6.25 |
| F-G | 0 / 28 | -91.8 | -91.8 | 0.13 (1) | 10.00 |
| L-B | -841 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 |
| H-F | -859 / 0 | 0.0 | 0.0 | 0.10 (1) | 7.81 |
| L-P | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |
| P-K | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |
| K-Q | 0 / 730 | -18.5 | -18.5 | 0.16 (1) | 10.00 |
| Q-J | 0 / 730 | -18.5 | -18.5 | 0.16 (1) | 10.00 |
| J-R | 0 / 751 | -18.5 | -18.5 | 0.16 (1) | 10.00 |
| R-I | 0 / 751 | -18.5 | -18.5 | 0.16 (1) | 10.00 |
| I-S | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |
| S-H | 0 / 0 | -18.5 | -18.5 | 0.04 (4) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| K-C | -151 / 2 | 0.03 (1) |
| C-J | 0 / 377 | 0.09 (1) |
| J-D | -384 / 0 | 0.06 (1) |
| J-E | 0 / 351 | 0.09 (1) |
| I-E | -155 / 4 | 0.03 (1) |
| B-K | 0 / 768 | 0.19 (1) |
| I-F | 0 / 791 | 0.20 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| C | 2-9-8 | -40 | -40 | 86 | BACK | VERT | TOTAL | -- | C1 |
| E | 9-2-8 | -40 | -40 | 86 | BACK | VERT | TOTAL | -- | C1 |
| I | 8-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| I | 9-1-12 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| K | 2-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| M | 4-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| N | 6-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| O | 8-10-4 | -24 | -24 | -- | BACK | VERT | TOTAL | -- | C1 |
| P | 1-11-4 | 1 | 1 | 1 | BACK | VERT | TOTAL | -- | C1 |
| Q | 4-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| R | 6-10-4 | -3 | -3 | -- | BACK | VERT | TOTAL | -- | C1 |
| S | 10-0-12 | 1 | 1 | 1 | BACK | VERT | TOTAL | -- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.17/1.00 (D-E:1) , BC=0.16/1.00 (I-J:1) , WB=0.20/1.00 (F-I:1) , SSI=0.16/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 850 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90 )
JSI METAL= 0.26 (I) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108689

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T54 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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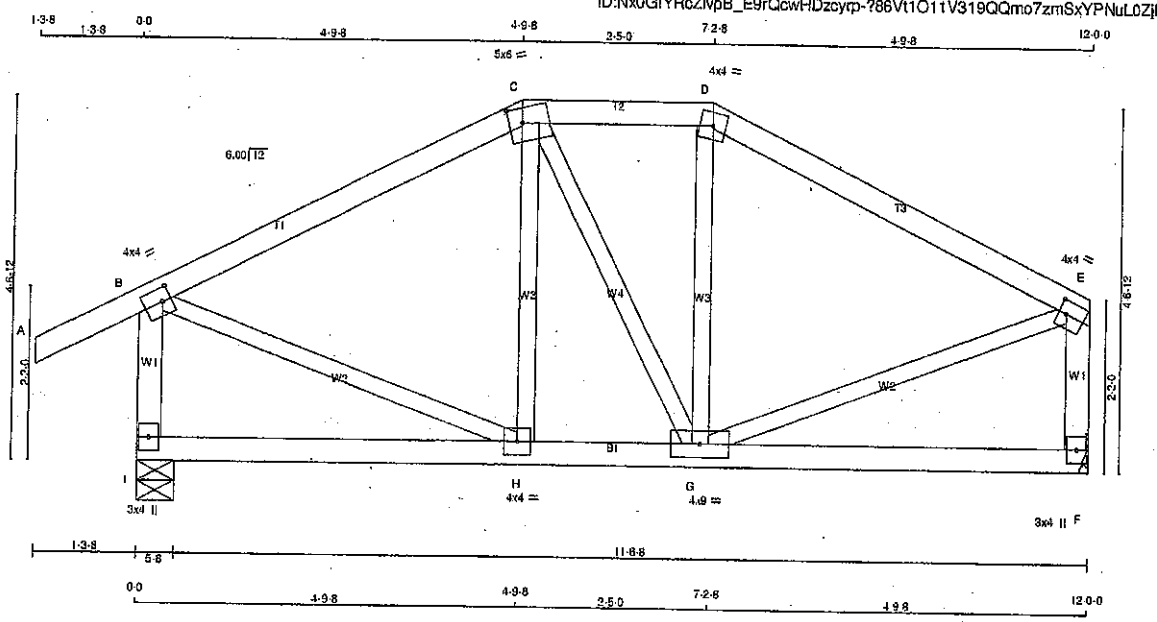


TOTAL WEIGHT = 52 lb

[M][F]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| I - B | 2x4 | DRY | No.2 | SPF |
| F - E | 2x4 | DRY | No.2 | SPF |
| I - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| C | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |
| G | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| H | BMWW-t | MT20 | 4.0 | 4.0 | | |
| I | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| I | 786 | 0 | 786 | 0 | 0 | 5-8 | 5-8 |
| F | 662 | 0 | 662 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

**UNFACTORED REACTIONS**

| JT | 1ST LOASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| I | 554 | 376 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 177 / 0 | 0 / 0 |
| F | 468 | 307 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 161 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -511 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| C- D | -454 / 0 | -91.8 | -91.8 | 0.07 (1) | 6.25 |
| D- E | -511 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| I- B | -747 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 |
| F- E | -622 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| H- G | 0 / 455 | -18.5 | -18.5 | 0.12 (4) | 10.00 |
| G- F | 0 / 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| H- C | -101 / 20 | 0.03 (1) |
| C- G | 0 / 0 | 0.00 (1) |
| G- D | -102 / 20 | 0.03 (1) |
| B- H | 0 / 489 | 0.11 (1) |
| G- E | 0 / 489 | 0.11 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.27/1.00 (B-C:1) , BC=0.12/1.00 (G-H:4) , WB=0.11/1.00 (B-H:1) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (B) (INPUT = 0.90 )
JSI METAL= 0.23 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108690

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | T55 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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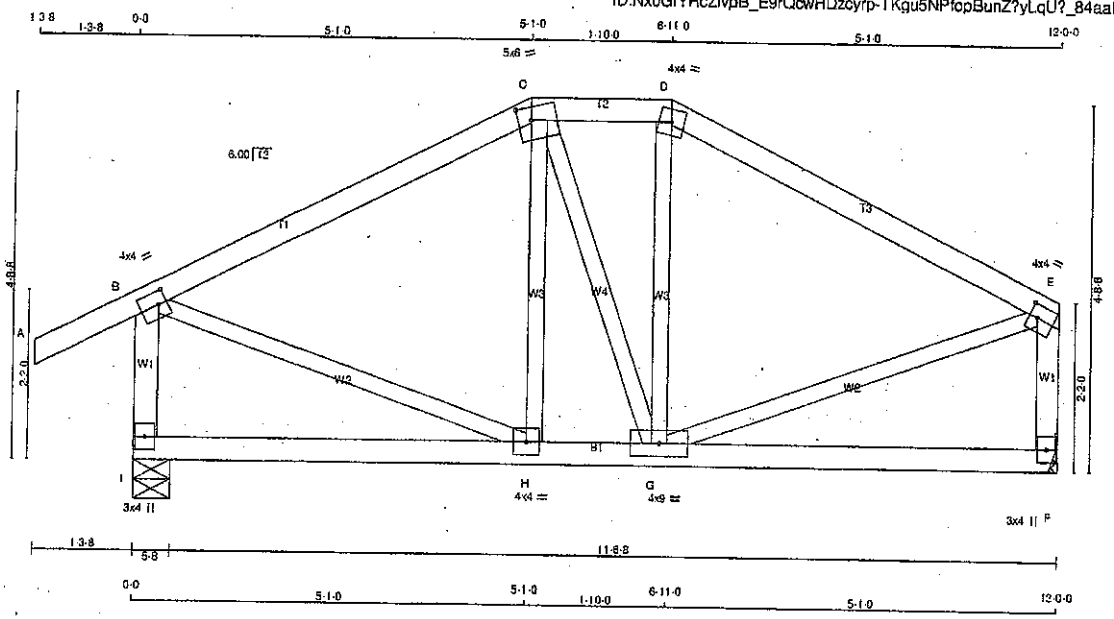


TOTAL WEIGHT = 53 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - D | 2x4 | DRY | No.2 | SPF |
| D - E | 2x4 | DRY | No.2 | SPF |
| I - B | 2x4 | DRY | No.2 | SPF |
| F - E | 2x4 | DRY | No.2 | SPF |
| I - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| C | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TMVW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.25 |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |
| G | BMWWW-t | MT20 | 4.0 | 9.0 | | |
| H | BMWW-t | MT20 | 4.0 | 4.0 | | |
| I | BMV1+p | MT20 | 3.0 | 4.0 | | |

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| I | 786 | 0 | 786 | 0 | 0 | IN-SX | IN-SX |
| F | 662 | 0 | 662 | 0 | 0 | 5-8 | 5-8 |
| | | | | | | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| I | 554 | 378 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 177 / 0 | 0 / 0 |
| F | 468 | 307 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 161 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -505 / 0 | -91.8 | -91.8 | 0.31 (1) | 6.25 |
| C- D | -448 / 0 | -91.8 | -91.8 | 0.04 (1) | 6.25 |
| D- E | -504 / 0 | -91.8 | -91.8 | 0.31 (1) | 6.25 |
| I- B | -746 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 |
| F- E | -621 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 |
| I- H | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| H- G | 0 / 449 | -18.5 | -18.5 | 0.14 (4) | 10.00 |
| G- F | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| H- C | -90 / 22 | 0.03 (1) |
| C- G | -1 / 0 | 0.00 (1) |
| G- D | -91 / 22 | 0.03 (1) |
| B- H | 0 / 479 | 0.11 (1) |
| G- E | 0 / 479 | 0.11 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.31/1.00 (B-C:1) , BC=0.14/1.00 (G-H:4) , WB=0.11/1.00 (B-H:1) , SSI=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (B) (INPUT = 0.90 )
JSI METAL= 0.23 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108691

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | PB1 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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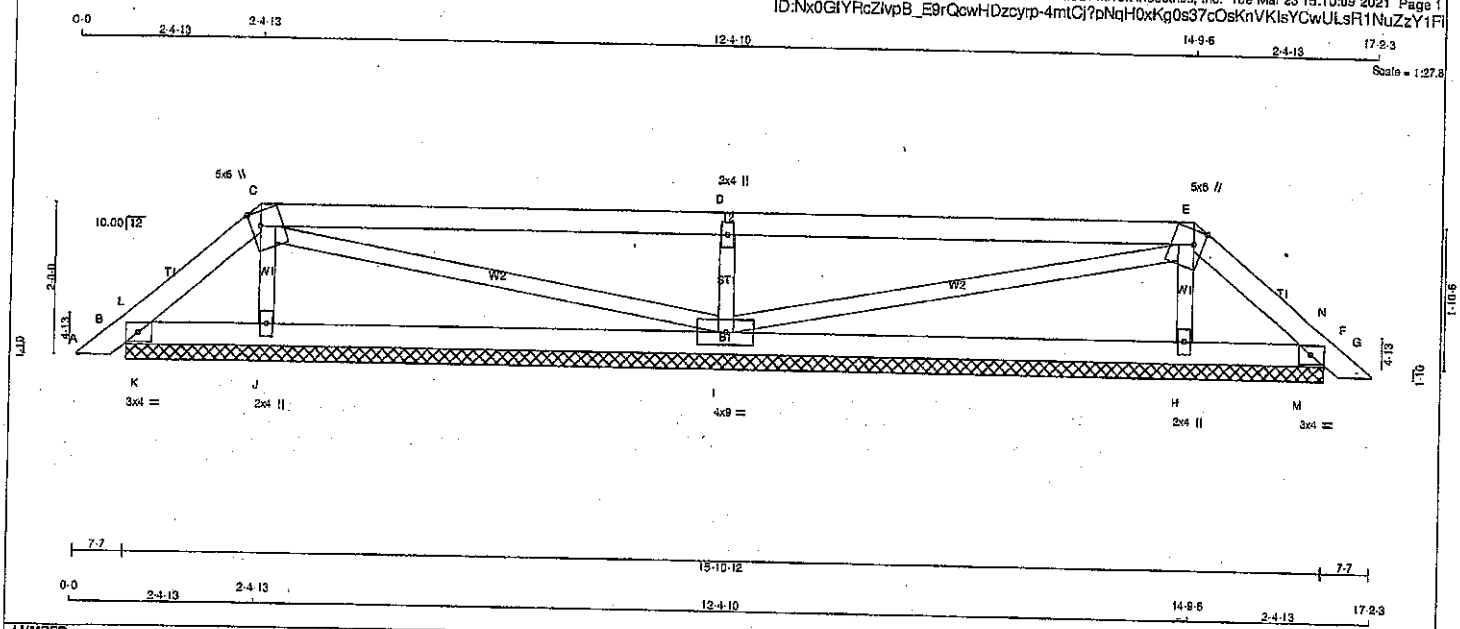


TOTAL WEIGHT = 2 X 52 = 105 lb

[M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| B - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMB1-I | MT20 | 3.0 | 4.0 | | |
| C | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| F | TMB1-I | MT20 | 3.0 | 4.0 | | |
| H | BMW1+w | MT20 | 2.0 | 4.0 | | |
| I | BMWWW1-I | MT20 | 4.0 | 9.0 | | |
| J | BMW1+w | MT20 | 2.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| B | 161 | 0 | 161 | 0 | 0 | 15-10-12 | 15-10-12 |
| F | 161 | 0 | 161 | 0 | 0 | 15-10-12 | 15-10-12 |
| I | 836 | 0 | 836 | 0 | 0 | 15-10-12 | 15-10-12 |
| J | 347 | 0 | 347 | 0 | 0 | 15-10-12 | 15-10-12 |
| H | 347 | 0 | 347 | 0 | 0 | 15-10-12 | 15-10-12 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| B | 110 | 94 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 15 / 0 | 0 / 0 |
| F | 110 | 94 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 15 / 0 | 0 / 0 |
| I | 589 | 400 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 189 / 0 | 0 / 0 |
| J | 249 | 140 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |
| H | 249 | 140 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, J, H

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 14 | -91.8 | -91.8 | 0.02 (1) | 10.00 |
| B- L | -21 / 19 | -91.8 | -91.8 | 0.02 (4) | 6.25 |
| L- C | -63 / 0 | -91.8 | -91.8 | 0.03 (1) | 6.25 |
| C- D | -9 / 0 | -91.8 | -91.8 | 0.60 (1) | 10.00 |
| D- E | -9 / 0 | -91.8 | -91.8 | 0.60 (1) | 10.00 |
| E- N | -63 / 0 | -91.8 | -91.8 | 0.03 (1) | 6.25 |
| N- F | -21 / 19 | -91.8 | -91.8 | 0.02 (4) | 6.25 |
| F- G | 0 / 14 | -91.8 | -91.8 | 0.02 (1) | 10.00 |
| B- K | 0 / 43 | -18.5 | -18.5 | 0.04 (1) | 10.00 |
| K- J | 0 / 43 | -18.5 | -18.5 | 0.11 (4) | 10.00 |
| J- I | 0 / 28 | -18.5 | -18.5 | 0.15 (4) | 10.00 |
| I- H | 0 / 28 | -18.5 | -18.5 | 0.15 (4) | 10.00 |
| H- M | 0 / 43 | -18.5 | -18.5 | 0.11 (4) | 10.00 |
| M- F | 0 / 43 | -18.5 | -18.5 | 0.04 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| I- D | -710 / 0 | 0.10 (1) |
| J- C | -232 / 0 | 0.03 (1) |
| H- E | -232 / 0 | 0.03 (1) |
| C- I | -19 / 0 | 0.01 (1) |
| I- E | -19 / 0 | 0.01 (1) |
| K- L | -138 / 0 | 0.00 (1) |
| M- N | -138 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.60/1.00 (D-E:1) , BC=0.15/1.00 (I-J:4) , WB=0.10/1.00 (D-I:1) , SSI=0.28/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (D) (INPUT = 0.90 )
JSI METAL= 0.15 (D) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108619

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | PB2 | 3 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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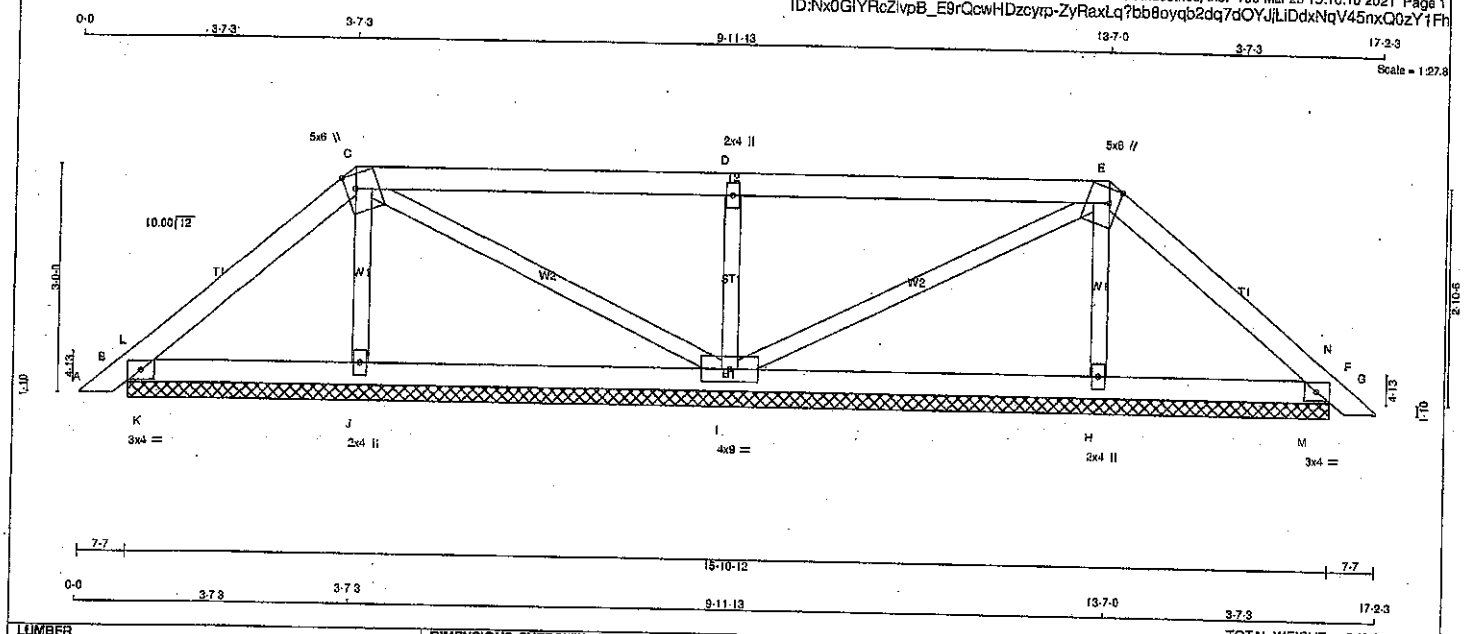


TOTAL WEIGHT = 3 X 54 = 163 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| B - F | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMB1-I | MT20 | 3.0 | 4.0 | | |
| C | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| D | TMW+w | MT20 | 2.0 | 4.0 | | |
| E | TTWW+m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| F | TMB1-I | MT20 | 3.0 | 4.0 | | |
| H | BMW1+w | MT20 | 2.0 | 4.0 | | |
| I | BMWWW1-t | MT20 | 4.0 | 9.0 | | |
| J | BMW1+w | MT20 | 2.0 | 4.0. | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| B | 261 | 0 | 261 | 0 | 0 | 15-10-12 | 15-10-12 |
| F | 261 | 0 | 261 | 0 | 0 | 15-10-12 | 15-10-12 |
| I | 704 | 0 | 704 | 0 | 0 | 15-10-12 | 15-10-12 |
| J | 312 | 0 | 312 | 0 | 0 | 15-10-12 | 15-10-12 |
| H | 312 | 0 | 312 | 0 | 0 | 15-10-12 | 15-10-12 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| B | 182 | 134 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 48 / 0 | 0 / 0 |
| F | 182 | 134 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 48 / 0 | 0 / 0 |
| I | 495 | 339 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 156 / 0 | 0 / 0 |
| J | 224 | 130 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 94 / 0 | 0 / 0 |
| H | 224 | 130 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 94 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, J, H

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A-B | 0 / 14 | -91.8 | -91.8 | 0.02 (1) | 10.00 |
| B-L | -14 / 0 | -91.8 | -91.8 | 0.04 (1) | 6.25 |
| L-C | -101 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| C-D | -18 / 0 | -91.8 | -91.8 | 0.39 (1) | 6.25 |
| D-E | -18 / 0 | -91.8 | -91.8 | 0.39 (1) | 6.25 |
| E-N | -101 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| N-F | -14 / 0 | -91.8 | -91.8 | 0.04 (1) | 6.25 |
| F-G | 0 / 14 | -91.8 | -91.8 | 0.02 (1) | 10.00 |
| B-K | 0 / 72 | -18.5 | -18.5 | 0.09 (1) | 10.00 |
| K-J | 0 / 72 | -18.5 | -18.5 | 0.09 (1) | 10.00 |
| J-I | 0 / 63 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| I-H | 0 / 63 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| H-M | 0 / 72 | -18.5 | -18.5 | 0.09 (1) | 10.00 |
| M-F | 0 / 72 | -18.5 | -18.5 | 0.09 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| I-D | -572 / 0 | 0.10 (1) |
| J-C | -202 / 0 | 0.03 (1) |
| H-E | -202 / 0 | 0.03 (1) |
| C-I | -51 / 0 | 0.03 (1) |
| I-E | -51 / 0 | 0.03 (1) |
| K-L | -257 / 0 | 0.00 (1) |
| M-N | -257 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.39/1.00 (C-D:1) , BC=0.10/1.00 (I-J:4) , WB=0.10/1.00 (D-I:1) , SSI=0.22/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (D) (INPUT = 0.90 )
JSI METAL= 0.12 (D) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108620

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | PB20 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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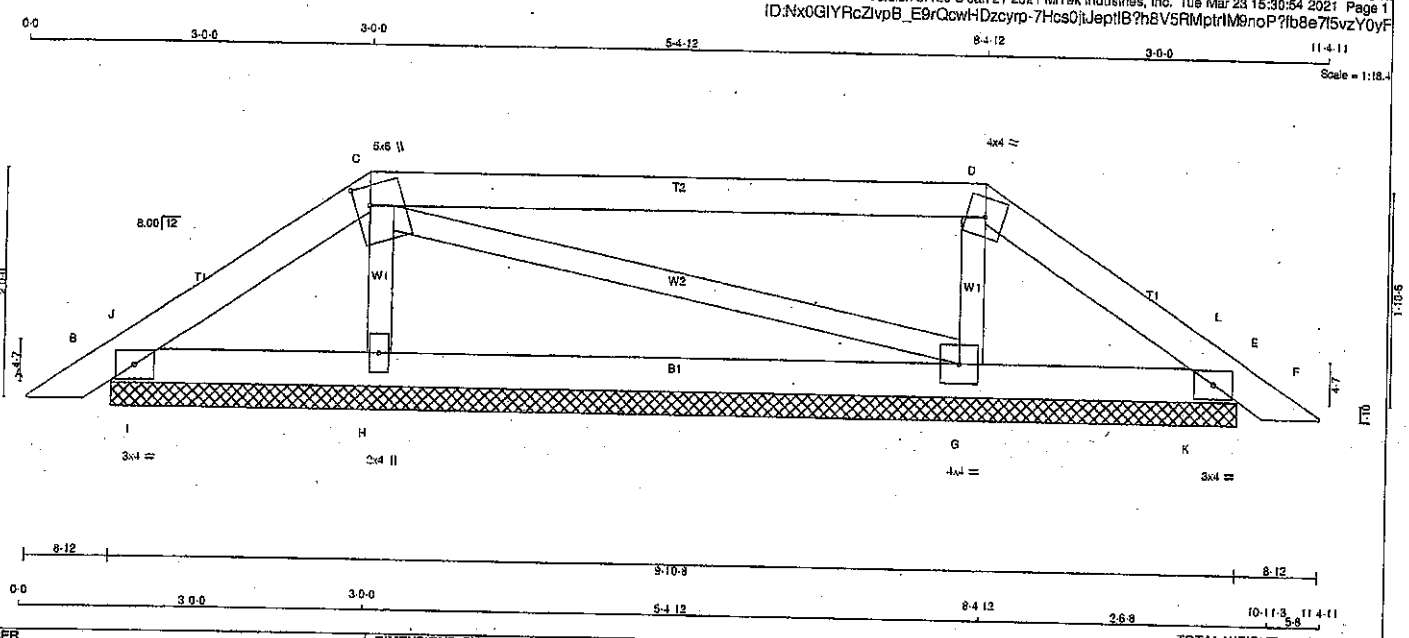


TOTAL WEIGHT = 2 X 32 = 64 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| B - E | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMB1-I | MT20 | 3.0 | 4.0 | | |
| C | TTWW+m | MT20 | 5.0 | 6.0 | 2.00 | 1.50 |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TMB1-I | MT20 | 3.0 | 4.0 | | |
| G | BMWW1-I | MT20 | 4.0 | 4.0 | | |
| H | BMW1+w | MT20 | 2.0 | 4.0 | | |

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| B | 212 | 0 | 212 | 0 | 0 | 9-10-8 | 9-10-8 |
| E | 204 | 0 | 204 | 0 | 0 | 9-10-8 | 9-10-8 |
| H | 388 | 0 | 388 | 0 | 0 | 9-10-8 | 9-10-8 |
| G | 404 | 0 | 404 | 0 | 0 | 9-10-8 | 9-10-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| B | 147 | 115 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 32 / 0 | 0 / 0 |
| E | 141 | 111 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 31 / 0 | 0 / 0 |
| H | 277 | 169 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 108 / 0 | 0 / 0 |
| G | 268 | 178 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A-B | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B-J | -55 / 0 | -91.8 | -91.8 | 0.02 (1) | 6.25 |
| J-C | -80 / 0 | -91.8 | -91.8 | 0.05 (1) | 6.25 |
| C-D | -31 / 0 | -91.8 | -91.8 | 0.45 (1) | 6.25 |
| D-L | -65 / 0 | -91.8 | -91.8 | 0.05 (1) | 6.25 |
| L-E | -40 / 0 | -91.8 | -91.8 | 0.02 (1) | 6.25 |
| E-F | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B-I | 0 / 63 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| I-H | 0 / 63 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| H-G | 0 / 44 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| G-K | 0 / 51 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| K-E | 0 / 51 | -18.5 | -18.5 | 0.06 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| H-C | -284 / 0 | 0.04 (1) |
| G-D | -298 / 0 | 0.04 (1) |
| C-G | -13 / 0 | 0.01 (1) |
| I-J | -142 / 0 | 0.00 (1) |
| K-L | -143 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.45/1.00 (C-D:1) , BC=0.09/1.00 (H-I:4) , WB=0.04/1.00 (D-G:1) , SSI=0.19/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (D) (INPUT = 0.90 )
JSI METAL= 0.06 (H) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108647

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | PB21 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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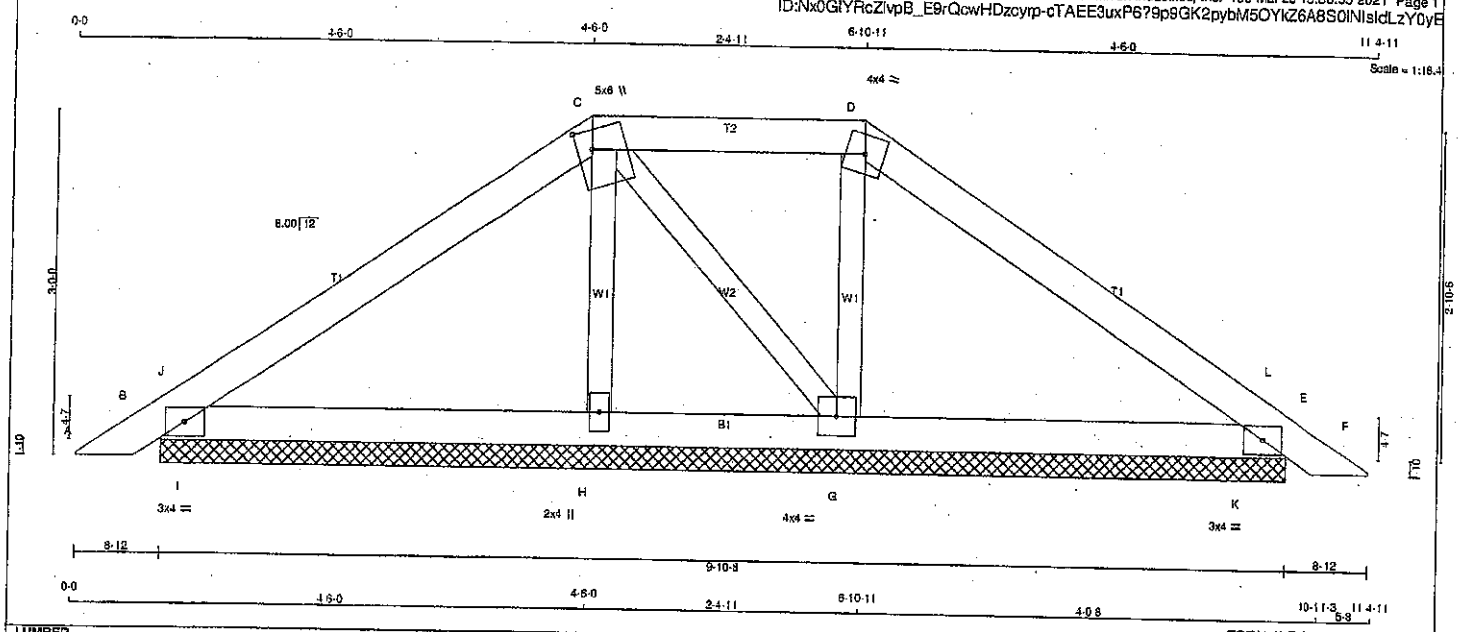


TOTAL WEIGHT = 2 X 32 = 65 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| B - E | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMB1-I | MT20 | 3.0 | 4.0 | | |
| C | TTWW+m | MT20 | 5.0 | 6.0 | 2.00 | 1.50 |
| D | TTW-m | MT20 | 4.0 | 4.0 | | |
| E | TMB1-I | MT20 | 3.0 | 4.0 | | |
| G | BMWW1-t | MT20 | 4.0 | 4.0 | | |
| H | BMW1+w | MT20 | 2.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| B | 332 | 0 | 332 | 0 | 0 | 9-10-8 | 9-10-8 |
| E | 312 | 0 | 312 | 0 | 0 | 9-10-8 | 9-10-8 |
| H | 237 | 0 | 237 | 0 | 0 | 9-10-8 | 9-10-8 |
| G | 328 | 0 | 328 | 0 | 0 | 9-10-8 | 9-10-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| B | 233 | 165 / 0 | 0 / 0 | 0 / 0 | 0 0 | 68 / 0 | 0 / 0 |
| E | 219 | 154 0 | 0 / 0 | 0 0 | 0 0 | 65 0 | 0 / 0 |
| H | 169 | 101 0 | 0 0 | 0 0 | 0 / 0 | 68 0 | 0 0 |
| G | 232 | 153 / 0 | 0 / 0 | 0 / 0 | 0 0 | 79 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

**CHORDS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B- J | -58 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| J- C | -141 / 0 | -91.8 | -91.8 | 0.16 (1) | 6.25 |
| C- D | -74 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| D- L | -105 / 0 | -91.8 | -91.8 | 0.16 (1) | 6.25 |
| L- E | -38 / 0 | -91.8 | -91.8 | 0.06 (1) | 6.25 |
| E- F | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B- I | 0 / 111 | -18.5 | -18.5 | 0.14 (1) | 10.00 |
| I- H | 0 / 111 | -18.5 | -18.5 | 0.14 (1) | 10.00 |
| H- G | 0 / 105 | -18.5 | -18.5 | 0.08 (1) | 10.00 |
| G- K | 0 / 82 | -18.5 | -18.5 | 0.14 (1) | 10.00 |
| K- E | 0 82 | -18.5 | -18.5 | 0.14 (1) | 10.00 |

**WEBS**

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| H- C | -146 / 0 | 0.02 (1) |
| G- D | -201 / 0 | 0.03 (1) |
| C- G | -47 / 0 | 0.01 (1) |
| I- J | -301 / 0 | 0.00 (1) |
| K- L | -304 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00:12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2016 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.16/1.00 (C-J:1) , BC=0.14/1.00 (B-I:1) , WB=0.03/1.00 (D-G:1) , SSI=0.24/1.00 (E-K:1)

DOL LUMBER=1.00 NAILS=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90 )
JSI METAL= 0.07 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108648

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | PB22 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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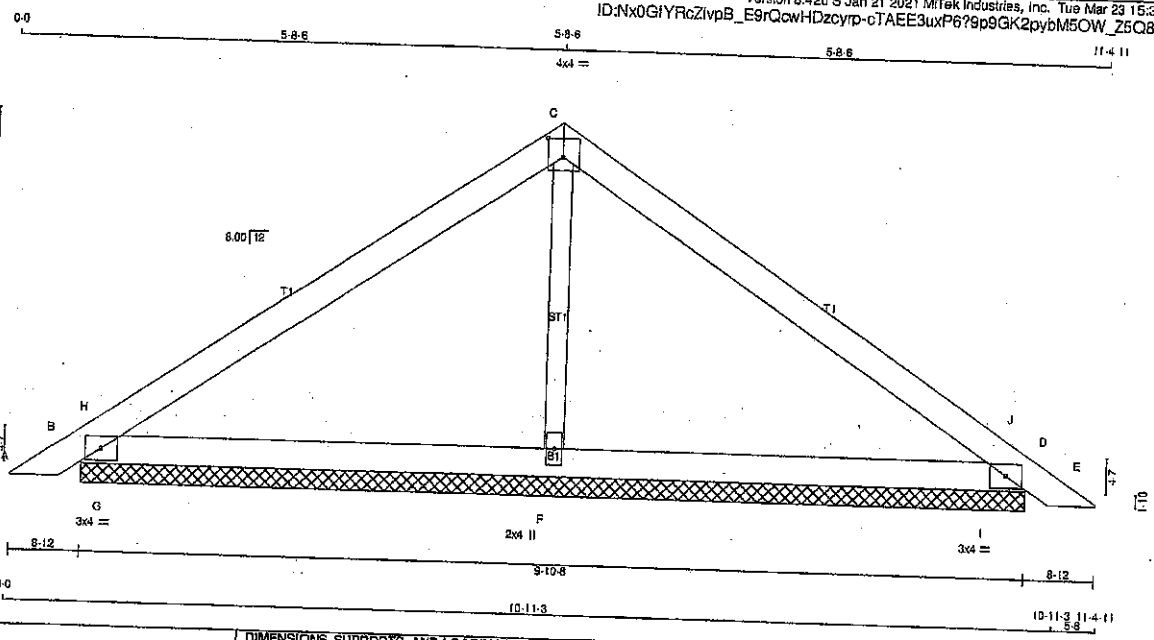


TOTAL WEIGHT = 2 X 29 = 59 lb

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| B - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMB1-I | MT20 | 3.0 | 4.0 | | |
| C | TTW-p | MT20 | 4.0 | 4.0 | 2.25 | 2.00 |
| D | TMB1-I | MT20 | 3.0 | 4.0 | | |
| F | BMW1+w | MT20 | 2.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| B | 412 | 0 | 412 | 0 | 0 | 9-10-8 | 9-10-8 |
| D | 412 | 0 | 412 | 0 | 0 | 9-10-8 | 9-10-8 |
| F | 386 | 0 | 386 | 0 | 0 | 9-10-8 | 9-10-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| B | 288 | 205 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 83 / 0 | 0 / 0 |
| D | 288 | 205 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 83 / 0 | 0 / 0 |
| F | 276 | 163 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 114 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| A- B | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B- H | -42 / 15 | -91.8 | -91.8 | 0.15 (1) | 6.25 |
| H- C | -205 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| C- J | -205 / 0 | -91.8 | -91.8 | 0.27 (1) | 6.25 |
| J- D | -42 / 15 | -91.8 | -91.8 | 0.15 (1) | 6.25 |
| D- E | 0 / 15 | -91.8 | -91.8 | 0.03 (1) | 10.00 |
| B- G | 0 / 160 | -18.5 | -18.5 | 0.25 (1) | 10.00 |
| G- F | 0 / 160 | -18.5 | -18.5 | 0.25 (1) | 10.00 |
| F- I | 0 / 160 | -18.5 | -18.5 | 0.25 (1) | 10.00 |
| I- D | 0 / 160 | -18.5 | -18.5 | 0.25 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| F- C | -166 / 0 | 0.04 (1) |
| G- H | -572 / 0 | 0.00 (1) |
| I- J | -572 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.27/1.00 (C-J:1) , BC=0.25/1.00 (F-I:1) , WB=0.04/1.00 (C-F:1) , SSI=0.43/1.00 (D-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 550 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (D) (INPUT = 0.90 )
JSI METAL= 0.09 (D) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108649

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | J1 | 20 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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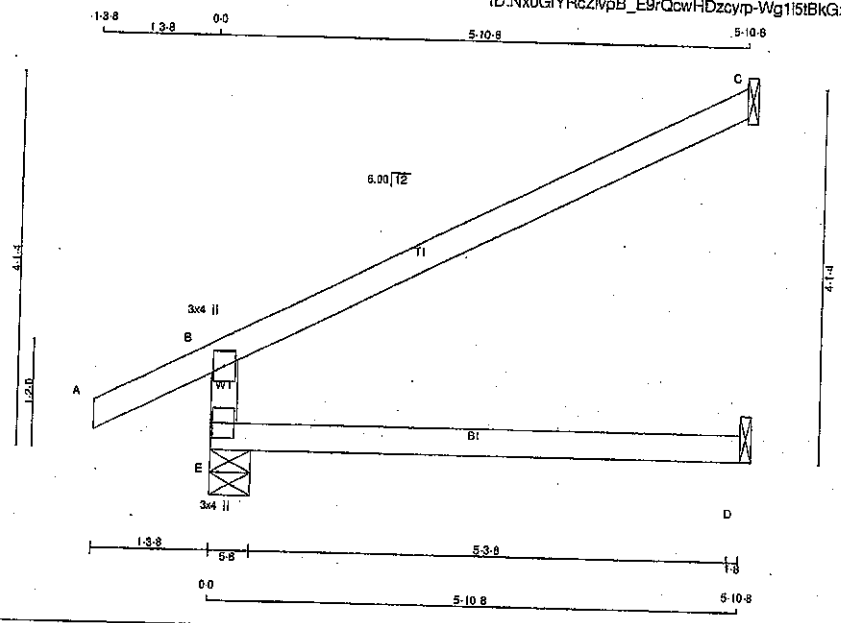


TOTAL WEIGHT = 20 X 17 = 336 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 525 | 0 | 525 | 0 | 0 | 5-8 | 5-8 |
| C | 202 | 0 | 202 | 0 | 0 | 1-8 | 1-8 |
| D | 45 | 0 | 50 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

MAX./MIN. COMPONENT REACTIONS

| JT | 1ST LCASE COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 369 | 257 / 0 | 0 / 0 | 0 0 | 0 0 | 111 0 | 0 0 |
| C | 139 | 113 0 | 0 0 | 0 0 | 0 0 | 26 0 | 0 0 |
| D | 36 | 0 0 | 0 0 | 0 0 | 0 0 | 36 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 CSI (LC) | MAX | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| E- B | -461 / 0 | 0.0 | 0.0 | 0.13 (4) | | 7.81 |
| A- B | 0 28 | -91.8 | -91.8 | 0.12 (1) | | 10.00 |
| B- C | -30 / 0 | -91.8 | -91.8 | 0.54 (1) | | 6.25 |
| E- D | 0 0 | -18.5 | -18.5 | 0.13 (4) | | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10.

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.60 )
JSI METAL= 0.13 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108671

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | J1 | 21 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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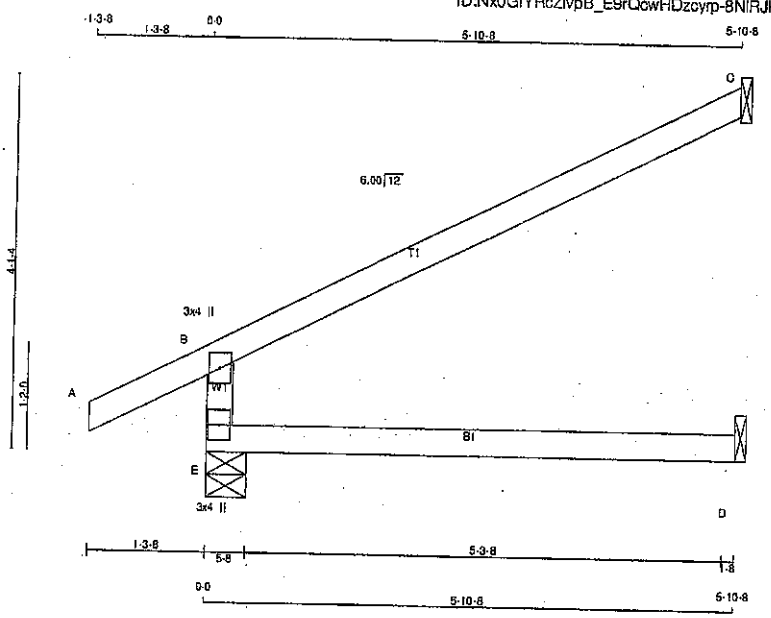


TOTAL WEIGHT = 21 X 17 = 353 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 525 | 0 | 525 | 0 | 0 | 5-8 | 5-8 |
| C | 202 | 0 | 202 | 0 | 0 | 1-8 | 1-8 |
| D | 45 | 0 | 50 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 369 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 111 / 0 | 0 / 0 |
| C | 139 | 113 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 26 / 0 | 0 / 0 |
| D | 36 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -481 / 0 | 0.0 | 0.0 | 0.13 (4) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -30 / 0 | -91.8 | -91.8 | 0.54 (1) | 6.25 |
| E- D ** | 0 / 0 | -18.5 | -18.5 | 0.13 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.90 )
JSI METAL= 0.13 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100089024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108617

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | J1 | 23 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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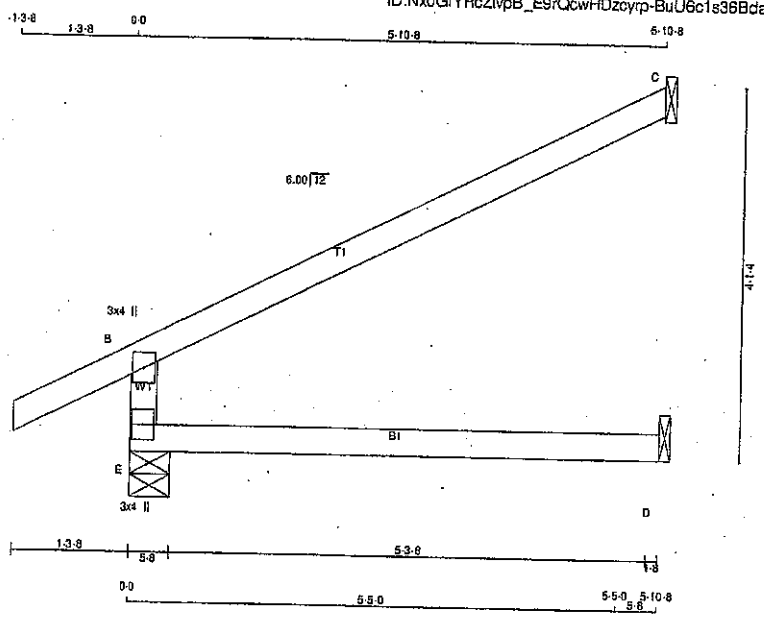


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 23 X 17 = 386 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 525 | 0 | 525 | 0 | 0 | 5-8 | 5-8 |
| C | 202 | 0 | 202 | 0 | 0 | 1-8 | 1-8 |
| D | 45 | 0 | 50 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 369 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 111 / 0 | 0 / 0 |
| C | 139 | 113 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 26 / 0 | 0 / 0 |
| D | 36 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -461 / 0 | 0.0 | 0.0 | 0.13 (4) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -30 / 0 | -91.8 | -91.8 | 0.54 (1) | 6.25 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.13 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 374 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.90 )
JSI METAL= 0.13 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108644

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | J2 | 3 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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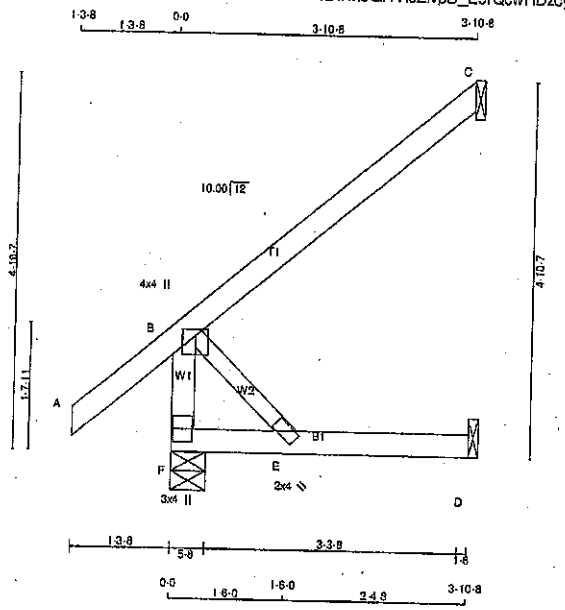


TOTAL WEIGHT = 3 X 15 = 46 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 341 | 0 | 341 | 0 | 0 | 5-8 | 5-8 |
| C | 178 | 0 | 178 | 0 | 0 | 1-8 | 1-8 |
| D | 36 | 0 | 40 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 239 | 170 0 | 0 0 | 0 0 | 0 0 | 69 0 | 0 0 |
| C | 122 | 99 0 | 0 0 | 0 0 | 0 0 | 23 0 | 0 0 |
| D | 29 | 0 0 | 0 0 | 0 0 | 0 0 | 29 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- B | -305 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| A- B | 0 41 | -91.8 | -91.8 | 0.14 (5) | 10.00 |
| B- C | 0 0 | -91.8 | -91.8 | 0.23 (1) | 10.00 |
| F- E | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| E- D | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 0 | 0.00 (1) |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.23/1.00 (B-C:1) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.90 )
JSI METAL= 0.08 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108618

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | J20 | 4 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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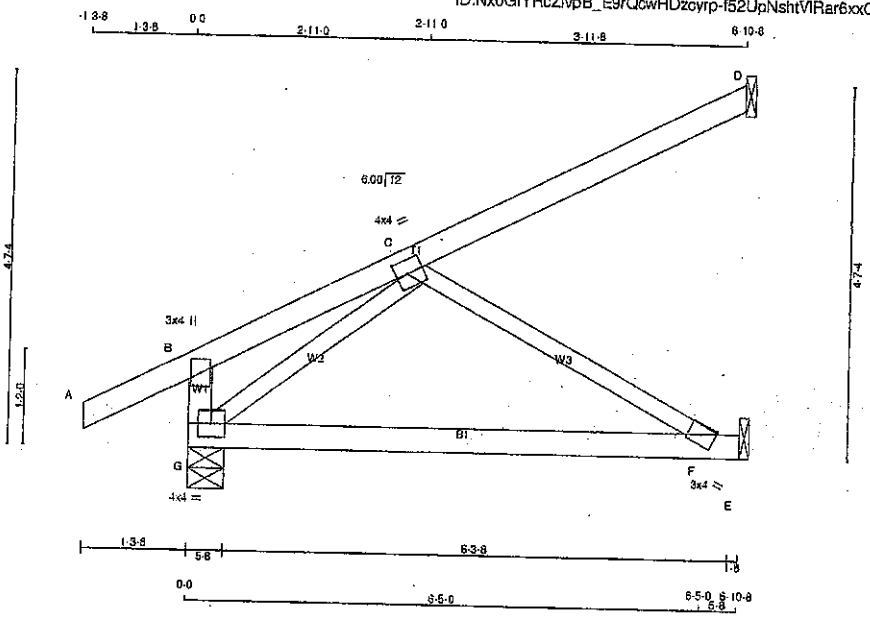


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| G - B | 2x4 | DRY | No.2 | SPF |
| A - D | 2x4 | DRY | No.2 | SPF |
| G - E | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| C | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| F | BMW+w | MT20 | 3.0 | 4.0 | | |
| G | BMVW1-t | MT20 | 4.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM. FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| G | 503 | 0 | 503 | 0 | 0 | 5-8 | 5-8 |
| D | 160 | 0 | 160 | 0 | 0 | 1-8 | 1-8 |
| E | 219 | 0 | 219 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) D , E

**UNFACTORED REACTIONS**

| JT | 1ST LOASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| G | 354 | 245 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 108 / 0 | 0 / 0 |
| D | 111 | 88 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 23 / 0 | 0 / 0 |
| E | 157 | 88 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 69 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G .

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| G- B | -202 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | 0 / 21 | -91.8 | -91.8 | 0.18 (1) | 10.00 |
| C- D | -14 / 0 | -91.8 | -91.8 | 0.18 (1) | 6.25 |
| G- F | 0 / 278 | -18.5 | -18.5 | 0.28 (4) | 10.00 |
| F- E | 0 / 0 | -18.5 | -18.5 | 0.13 (1) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| C- F | -324 / 0 | 0.12 (1) |
| G- C | -359 / 0 | 0.08 (1) |

TOTAL WEIGHT = 4 X 25 = 101 lb
(M)(F)

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 561 (0.15")

CSI: TC=0.18/1.00 (C-D:1) , BC=0.28/1.00 (F-G:4) , WB=0.12/1.00 (C-F:1) , SSI=0.17/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (G) (INPUT = 0.90 )
JSI METAL= 0.12 (F) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108645

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | J21 | 3 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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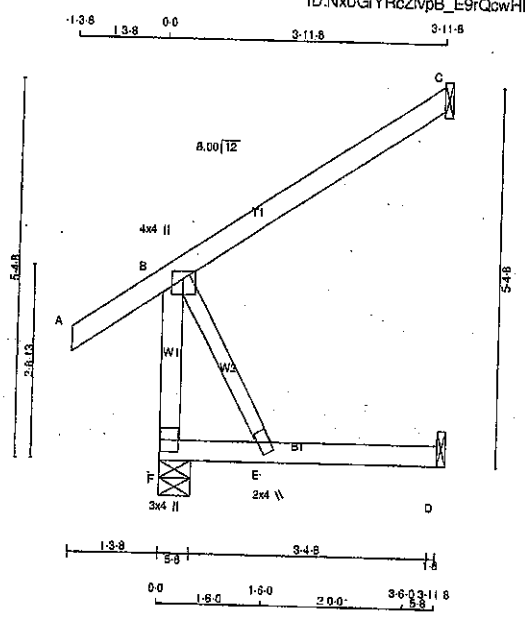


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 3 X 17 = 50 lb
[M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 344 | 0 | 344 | 0 | 0 | 5-8 | 5-8 |
| C | 182 | 0 | 182 | 0 | 0 | 1-8 | 1-8 |
| D | 37 | 0 | 41 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX.MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 241 | 172 0 | 0 0 | 0 0 | 0 0 | 70 0 | 0 0 |
| C | 125 | 101 0 | 0 0 | 0 0 | 0 0 | 24 0 | 0 0 |
| D | 29 | 0 0 | 0 0 | 0 0 | 0 0 | 29 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- B | -308 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 |
| A- B | 0 35 | -91.8 | -91.8 | 0.14 (5) | 10.00 |
| B- C | 0 0 | -91.8 | -91.8 | 0.24 (1) | 10.00 |
| F- E | 0 0 | -18.5 | -18.5 | 0.06 (4) | 10.00 |
| E- D | 0 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 0 | 0.00 (1) |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90 )
JSI METAL= 0.06 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108646

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | J40 | 5 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Rool Truss, Burlington

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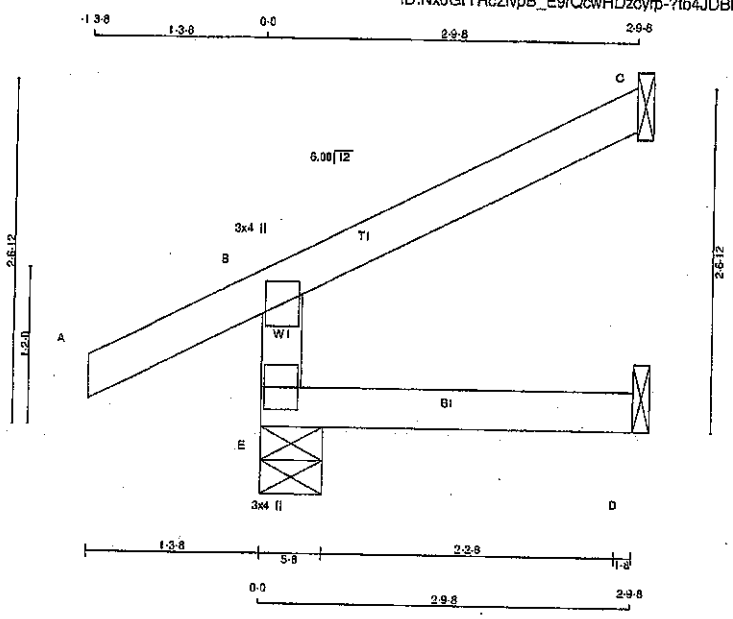


TOTAL WEIGHT = 5 X 9 = 47 lb
[M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 314 | 0 | 314 | 0 | 0 | 5-8 | 5-8 |
| C | 96 | 0 | 98 | 0 | 0 | 1-8 | 1-8 |
| D | 22 | 0 | 25 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 219 | 159 0 | 0 0 | 0 0 | 0 0 | 61 0 | 0 0 |
| C | 66 | 54 0 | 0 0 | 0 0 | 0 0 | 13 0 | 0 0 |
| D | 18 | 0 0 | 0 0 | 0 0 | 0 0 | 18 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -284 0 | 0.0 | 0.0 | 0.02 (4) | 7.81 |
| A- B | 0 28 | -91.8 | -91.8 | 0.13 (5) | 10.00 |
| B- C | -14 0 | -91.8 | -91.8 | 0.12 (1) | 6.25 |
| E- D | 0 0 | -18.5 | -18.5 | 0.03 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:5) , BC=0.03/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.11 (E) (INPUT = 0.90 )
JSI METAL= 0.08 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108672

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | C1 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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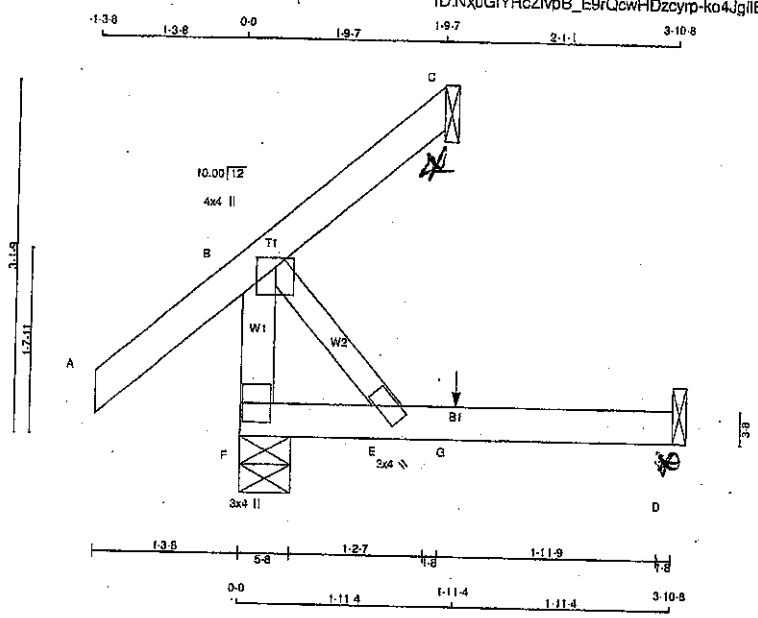


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

TOTAL WEIGHT = 12 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 294 | 0 | 294 | 0 | 0 | 5-8 | 5-8 |
| C | 33 | 0 | 33 | 0 | -40 | 1-8 | 1-8 |
| D | 35 | 0 | 40 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 207 | 144 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 62 / 0 | 0 / 0 |
| C | 23 | 18 / -27 | 0 / 0 | 0 / 0 | 0 / 0 | 4 / 0 | 0 / 0 |
| D | 29 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 29 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- B | -258 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 |
| A- B | 0 / 41 | -91.8 | -91.8 | 0.14 (5) | 10.00 |
| B- C | -32 / 0 | -91.8 | -91.8 | 0.14 (5) | 6.25 |
| F- E | 0 / 0 | -18.5 | -18.5 | 0.07 (4) | 10.00 |
| E- G | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| G- D | 0 / 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 / 0 | 0.00 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| G | 1-11-4 | 1 | 1 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 8.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.14/1.00 (A-B:5) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , BSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90 )
JSI METAL= 0.05 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108613

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417535 | C2 | 1 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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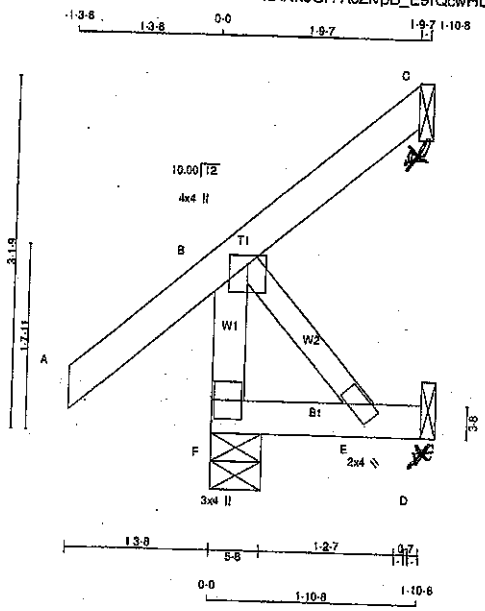


TOTAL WEIGHT = 10 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

**NOTES-** (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 276 | 0 | 276 | 0 | 0 | 5-8 | 5-6 |
| C | 33 | 0 | 33 | 0 | -40 | 1-8 | 1-8 |
| D | 17 | 0 | 19 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 192 | 144 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 48 / 0 | 0 / 0 |
| C | 23 | 18 / -27 | 0 / 0 | 0 / 0 | 0 / 0 | -4 / 0 | 0 / 0 |
| D | 14 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 14 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- B | -258 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 | |
| A- B | 0 / 41 | -91.8 | -91.8 | 0.13 (1) | 10.00 | |
| B- C | -32 / 0 | -91.8 | -91.8 | 0.12 (1) | 6.25 | |
| F- E | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 | |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 / 0 | 0.00 (1) |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING =** 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.08/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90 )
JSI METAL= 0.05 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108614

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | C20 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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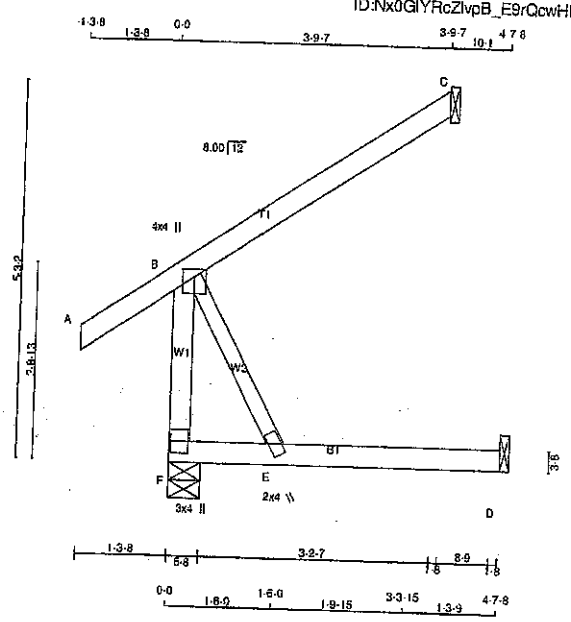


TOTAL WEIGHT = 2 X 17 = 34 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD. BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 342 | 0 | 342 | 0 | 0 | 5-8 | 5-8 |
| C | 174 | 0 | 174 | 0 | 0 | 1-8 | 1-8 |
| D | 43 | 0 | 48 | 0 | 0 | 1-8 | 1-8 |

SEE MiTEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

MAX.:MIN. COMPONENT REACTIONS

| JT | 1ST LCASE COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 241 | 187 0 | 0 0 | 0 0 | 0 0 | 73 0 | 0 0 |
| C | 120 | 97 0 | 0 0 | 0 0 | 0 0 | 23 0 | 0 0 |
| D | 34 | 0 0 | 0 0 | 0 0 | 0 0 | 34 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- B | -300 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 |
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | 0 / 0 | -91.8 | -91.8 | 0.22 (1) | 10.00 |
| F- E | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 / 0 | 0.00 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.12/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90 )
JSI METAL= 0.06 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108639

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | C21 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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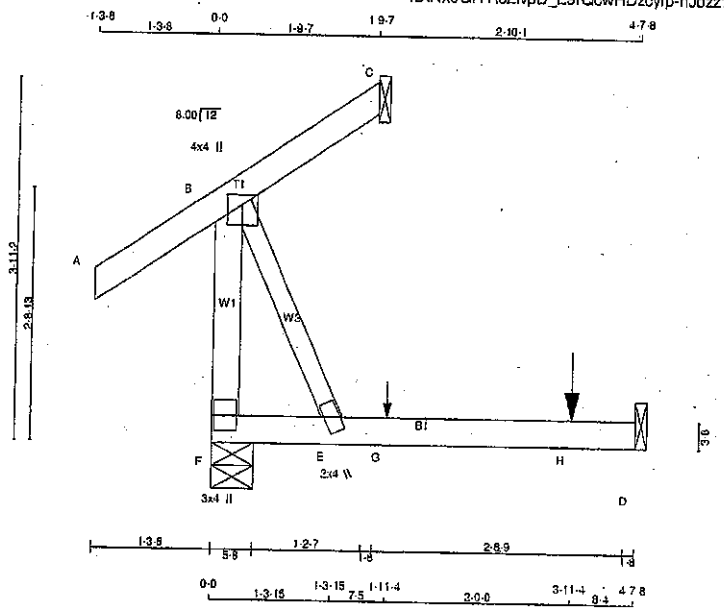


TOTAL WEIGHT = 2 X 14 = 29 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 299 | 0 | 299 | 0 | 0 | 5-8 | 5-8 |
| C | 34 | 0 | 34 | 0 | 0 | 1-8 | 1-8 |
| D | 44 | 0 | 50 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 211 | 143 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 68 / 0 | 0 / 0 |
| C | 23 | 19 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 4 / 0 | 0 / 0 |
| D | 35 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 35 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- B | -256 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | |
| A- B | 0 / 35 | -91.8 | -91.8 | 0.12 (1) | 10.00 | |
| B- C | -27 / 0 | -91.8 | -91.8 | 0.12 (1) | 6.25 | |
| F- E | 0 / 0 | -18.5 | -18.5 | 0.10 (4) | 10.00 | |
| E- G | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 | |
| G- H | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 | |
| H- D | 0 / 0 | -18.5 | -18.5 | 0.12 (4) | 10.00 | |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 / 0 | 0.00 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| G | 1-11-4 | 1 | 1 | --- | BACK | VERT | TOTAL | --- | C1 |
| H | 3-11-4 | -1 | -1 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.12/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90 )
JSI METAL= 0.05 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108640

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | C22 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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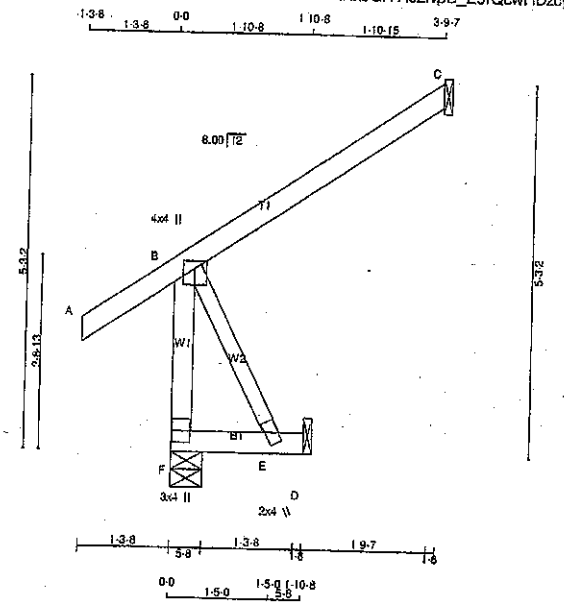


TOTAL WEIGHT = 2 X 14 = 28 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 317 | 0 | 317 | 0 | 0 | 5-8 | 5-8 |
| C | 174 | 0 | 174 | 0 | 0 | 1-8 | 1-8 |
| D | 17 | 0 | 19 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 220 | 167 0 | 0 0 | 0 0 | 0 0 | 53 0 | 0 0 |
| C | 120 | 97 0 | 0 0 | 0 0 | 0 0 | 23 0 | 0 0 |
| D | 14 | 0 0 | 0 0 | 0 0 | 0 0 | 14 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| F- B | -300 0 | 0.0 | 0.0 | | 0.04 (1) | 7.81 |
| A- B | 0 35 | -91.8 | -91.8 | | 0.13 (5) | 10.00 |
| B- C | 0 0 | -91.8 | -91.8 | | 0.22 (1) | 10.00 |
| F- E | 0 0 | -18.5 | -18.5 | | 0.02 (4) | 10.00 |
| E- D | 0 0 | -18.5 | -18.5 | | 0.01 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 0 | 0.00 (1) |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI-GRIP= 0.20 (B) (INPUT = 0.90 )
JSI METAL= 0.06 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108641

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | C23 | 3 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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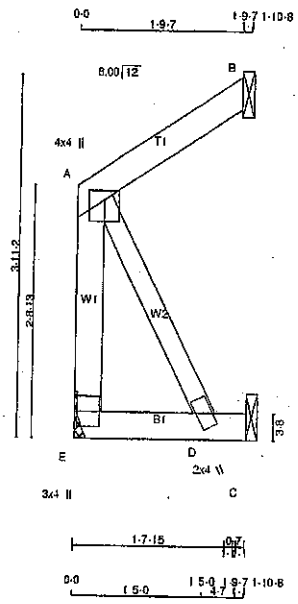


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - A | 2x4 | DRY | No.2 | SPF |
| A - B | 2x4 | DRY | No.2 | SPF |
| E - C | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| A | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| D | BMW+w | MT20 | 2.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 99 | 0 | 99 | 0 | 0 | MECHANICAL | |
| B | 82 | 0 | 82 | 0 | 0 | 1-8 | 1-8 |
| C | 17 | 0 | 19 | 0 | 0 | 1-8 | 1-8 |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) B , C

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 70 | 46 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 25 / 0 | 0 / 0 |
| B | 56 | 46 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 11 / 0 | 0 / 0 |
| C | 14 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 14 / 0 | 0 / 0 |

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- A | -82 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 |
| A- B | 0 / 0 | -91.8 | -91.8 | 0.05 (1) | 10.00 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 |
| D- C | 0 / 0 | -18.5 | -18.5 | 0.01 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| A- D | 0 / 0 | 0.00 (1) |

TOTAL WEIGHT = 3 X 10 = 29 lb
[M][F]

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.05/1.00 (A-B:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (A-D:1) , SSI=0.05/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.05 (A) (INPUT = 0.90 )
JSI METAL= 0.02 (A) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108642

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417536 | C24 | 1 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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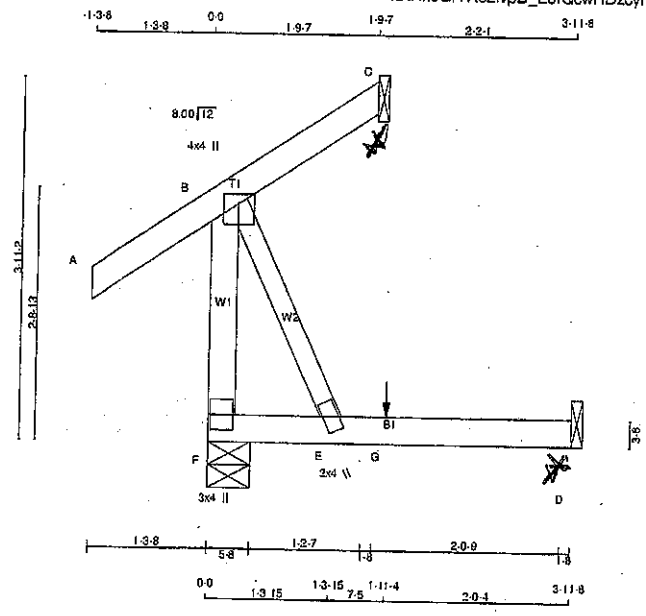


**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| F - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| E | BMW+w | MT20 | 2.0 | 4.0 | | |
| F | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 14 lb [M]

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| F | 293 | 0 | 293 | 0 | 0 | 5-8 | 5-8 |
| C | 34 | 0 | 34 | 0 | -39 | 1-8 | 1-8 |
| D | 37 | 0 | 41 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX.-MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| F | 206 | 143 0 | 0 0 | 0 0 | 0 0 | 63 0 | 0 0 |
| C | 23 | 19 -27 | 0 0 | 0 0 | 0 0 | 4 0 | 0 0 |
| D | 29 | 0 0 | 0 0 | 0 0 | 0 0 | 29 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 CSI (LC) | MAX UNBRAC LENGTH |
|---|---|---|---|---|---|
| F- B | -256 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 |
| A- B | 0 35 | -91.8 | -91.8 | 0.14 (5) | 10.00 |
| B- C | -27 0 | -91.8 | -91.8 | 0.13 (5) | 6.25 |
| F- E | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| E- G | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |
| G- D | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| B- E | 0 0 | 0.00 (1) |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| G | 1-11-4 | 1 | 1 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.14/1.00 (A-B:5) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90 )
JSI METAL= 0.05 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108643

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C40 | 3 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Tue Mar 23 15:50:31 2021 Page 1
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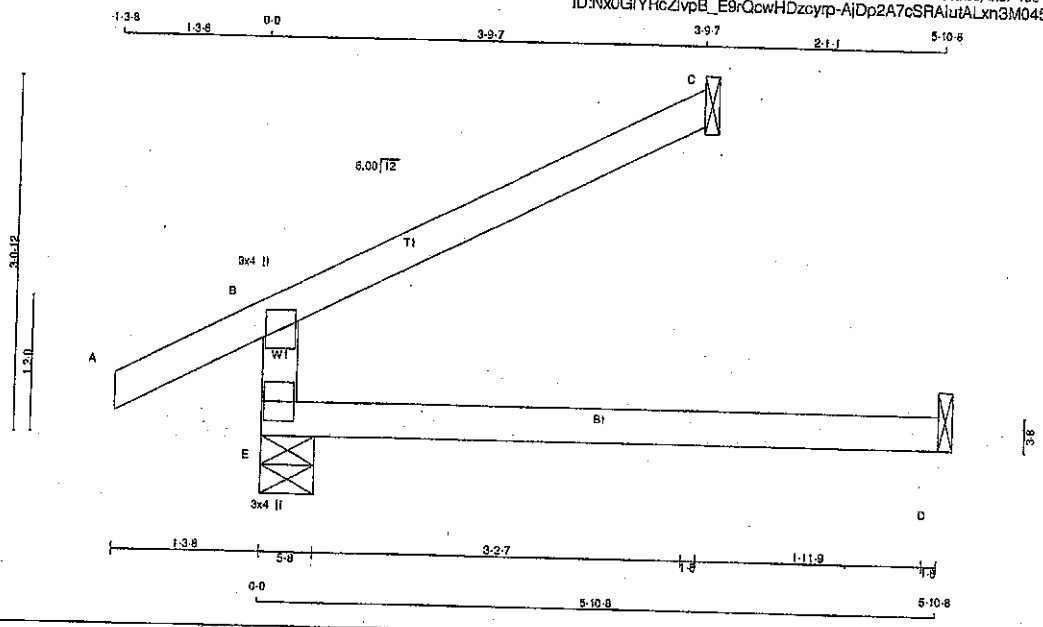


TOTAL WEIGHT = 3 X 14 = 42 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 405 | 0 | 405 | 0 | 0 | 5-8 | 5-8 |
| C | 130 | 0 | 130 | 0 | 0 | 1-8 | 1-8 |
| D | 45 | 0 | 50 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX. MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 288 | 190 0 | 0 0 | 0 0 | 0 0 | 96 0 | 0 0 |
| C | 90 | 73 0 | 0 0 | 0 0 | 0 0 | 17 0 | 0 0 |
| D | 36 | 0 0 | 0 0 | 0 0 | 0 0 | 36 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| E- B | -342 / 0 | 0.0 | 0.0 | 0.13 (4) | | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | | 10.00 |
| B- C | -19 / 0 | -91.8 | -91.8 | 0.22 (1) | | 6.25 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.13 (4) | | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90 )
JSI METAL= 0.09 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108664

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C41 | 3 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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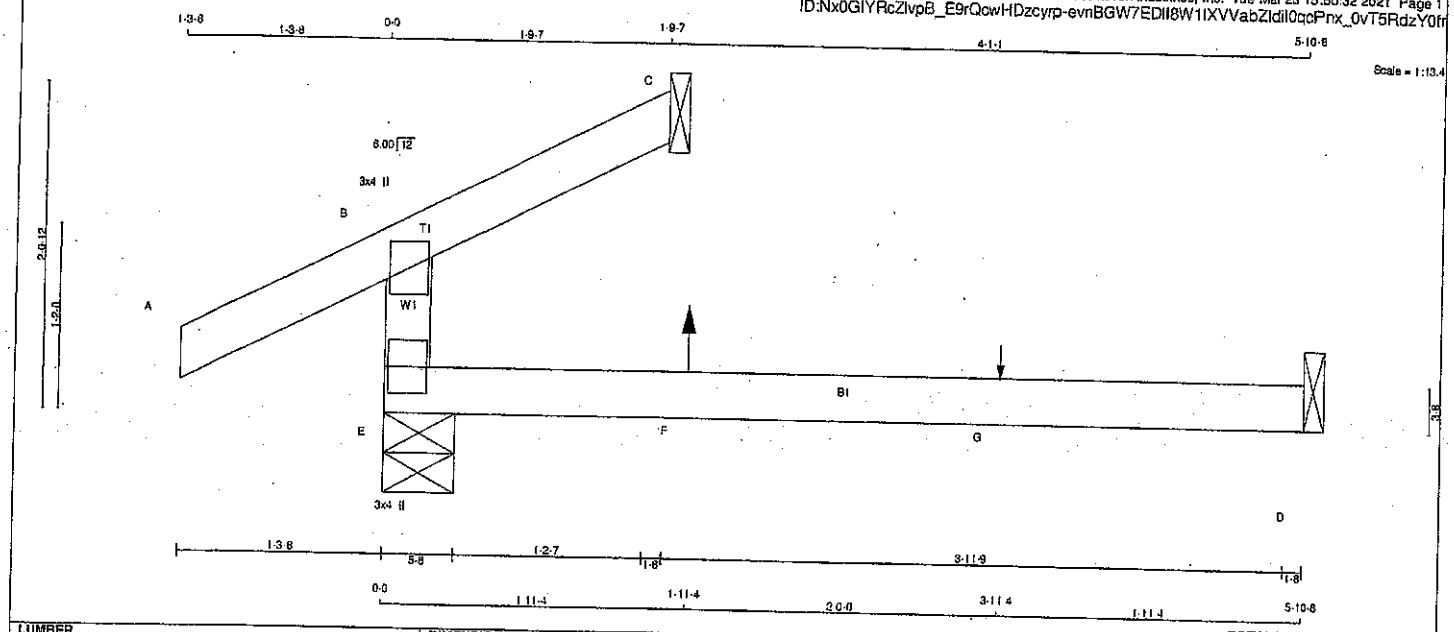


TOTAL WEIGHT = 8 X 12 = 35 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 284 | 0 | 284 | 0 | 0 | 5-8 | 5-8 |
| C | 63 | 0 | 63 | 0 | 0 | 1-8 | 1-8 |
| D | 44 | 0 | 52 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 200 | 137 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 62 / 0 | 0 / 0 |
| C | 46 | 21 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 25 / 0 | 0 / 0 |
| D | 35 | 0 / -3 | 0 / 0 | 0 / 0 | 0 / 0 | 37 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (7)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -227 / 0 | 0.0 | 0.0 | 0.11 (4) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -9 / 9 | -91.8 | -91.8 | 0.08 (4) | 10.00 |
| E- F | 0 / 0 | -18.5 | -18.5 | 0.14 (4) | 10.00 |
| F- G | 0 / 0 | -18.5 | -18.5 | 0.14 (4) | 10.00 |
| G- D | 0 / 0 | -18.5 | -18.5 | 0.14 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| F | 1-11-4 | 5 | 1 | 8 | BACK | VERT | TOTAL | — | C1 |
| G | 3-11-4 | 1 | 1 | — | BACK | VERT | TOTAL | — | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.14/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=0.99 NAIL=0.99 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.09 (E) (INPUT = 0.90 )
JSI METAL= 0.06 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108665

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C42 | 5 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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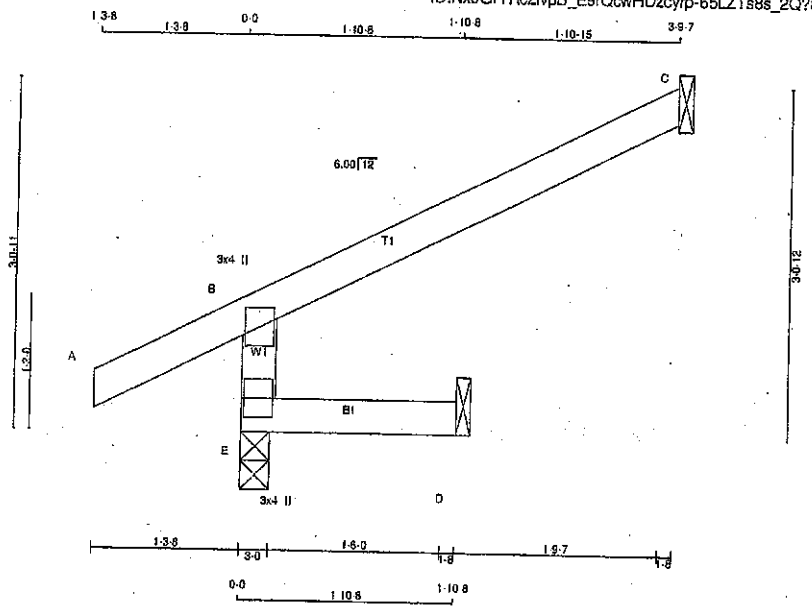


TOTAL WEIGHT = 5 X 10 = 48 lb.

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 361 | 0 | 361 | 0 | 0 | 3-0 | 3-0 |
| C | 130 | 0 | 130 | 0 | 0 | 1-8 | 1-8 |
| D | 16 | 0 | 17 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 250 | 190 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 60 / 0 | 0 / 0 |
| C | 90 | 73 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 17 / 0 | 0 / 0 |
| D | 12 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 12 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -342 / 0 | 0.0 | 0.0 | 0.01 (4) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.13 (5) | 10.00 |
| B- C | -19 / 0 | -91.8 | -91.8 | 0.22 (1) | 6.25 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.02 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA** [M]

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 5.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 786 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90 )
JSI METAL= 0.09 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108666

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C43 | 7 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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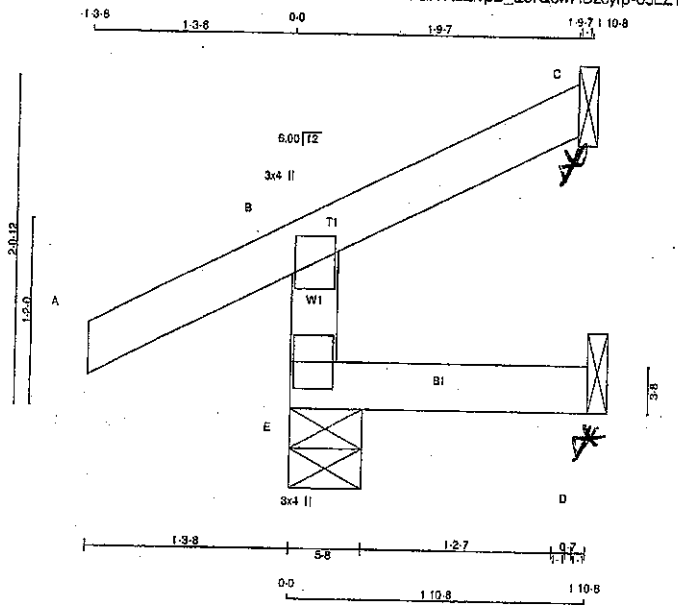


TOTAL WEIGHT = 7 X 7 = 49 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 271 | 0 | 271 | 0 | 0 | 5-8 | 5-8 |
| C | 45 | 0 | 45 | 0 | -23 | 1-8 | 1-8 |
| D | 8 | 0 | 17 | 0 | -2 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 188 | 141 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 47 / 0 | 0 / 0 |
| C | 31 | 24 / -18 | 0 / 0 | 0 / 0 | 0 / 0 | 7 / 0 | 0 / 0 |
| D | 7 | 6 / -8 | 0 / 0 | 0 / 0 | 0 / 0 | 12 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (5)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -244 / 0 | 0.0 | 0.0 | 0.04 (5) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -17 / 0 | -91.8 | -91.8 | 0.09 (1) | 6.25 |
| E- D | 0 / 0 | -18.5 | -18.5 | 0.04 (5) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (D-E:5) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90 )
JSI METAL= 0.07 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108667

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C44 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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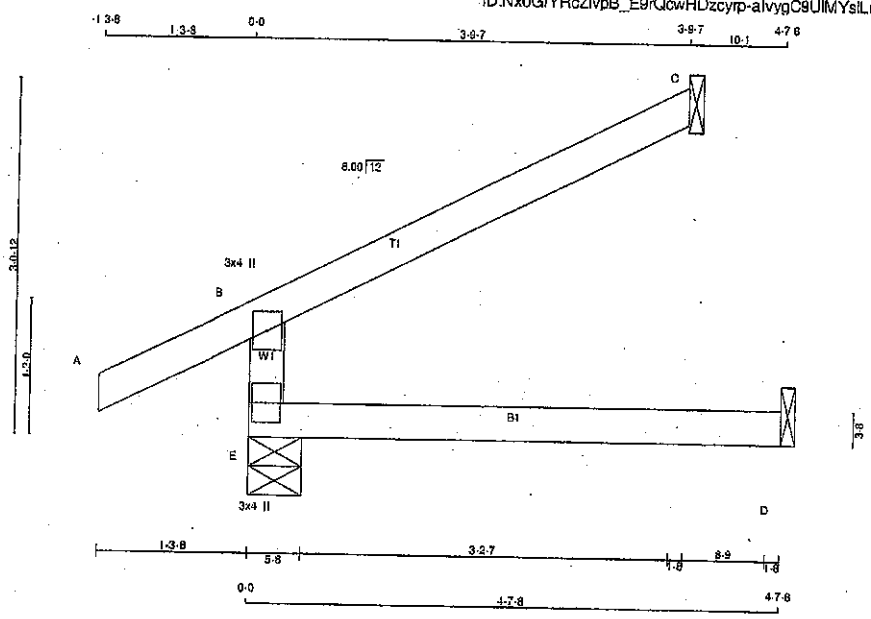


TOTAL WEIGHT = 2 X 13 = 25 lb

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 391 | 0 | 391 | 0 | 0 | 5-8 | 5-8 |
| C | 130 | 0 | 130 | 0 | 0 | 1-8 | 1-8 |
| D | 36 | 0 | 40 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 275 | 190 0 | 0 0 | 0 0 | 0 0 | 84 0 | 0 0 |
| C | 90 | 73 0 | 0 0 | 0 0 | 0 0 | 17 0 | 0 0 |
| D | 29 | 0 0 | 0 0 | 0 0 | 0 0 | 29 0 | 0 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (4)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -342 0 | 0.0 | 0.0 | 0.07 (4) | 7.81 |
| A- B | 0 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -19 0 | -91.8 | -91.8 | 0.22 (1) | 6.25 |
| E- D | 0 0 | -18.5 | -18.5 | 0.08 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. O/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 850 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90 )
JSI METAL= 0.09 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108668

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C45 | 2 | 1 | GREENPARK HOMES<br>TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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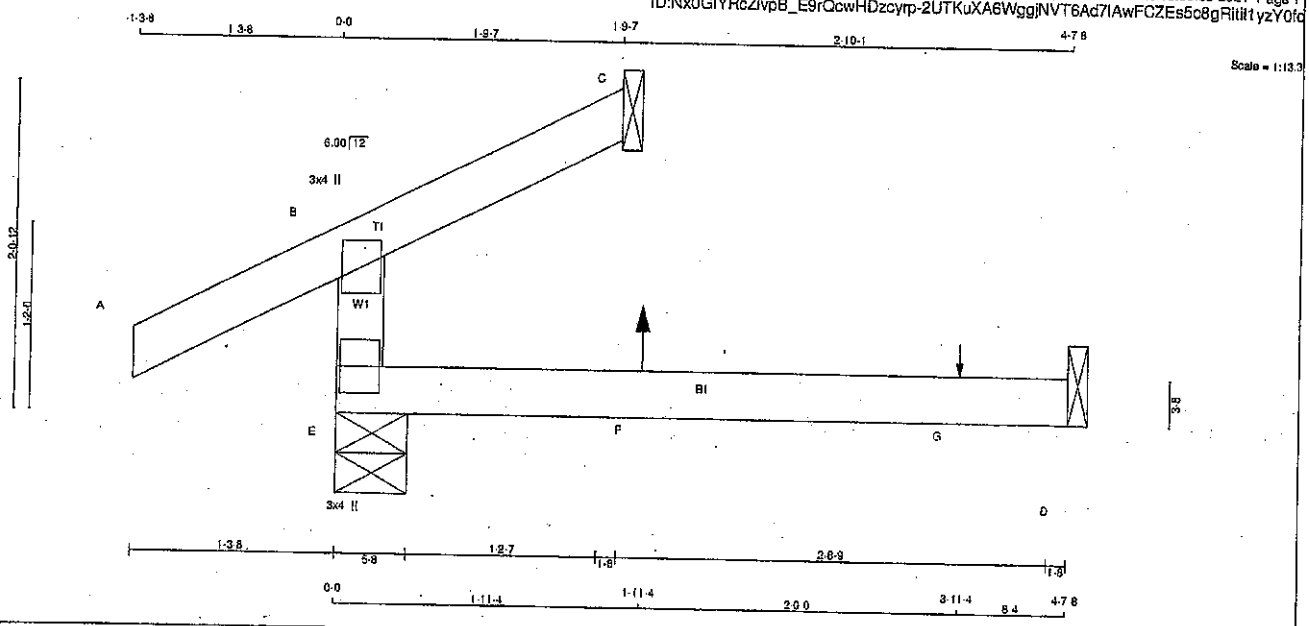


TOTAL WEIGHT = 2 X 10 = 20 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 281 | 0 | 281 | 0 | 0 | 5-8 | 5-8 |
| C | 53 | 0 | 53 | 0 | 0 | 1-8 | 1-8 |
| D | 33 | 0 | 41 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 198 | 138 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 60 / 0 | 0 / 0 |
| C | 38 | 22 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 16 / 0 | 0 / 0 |
| D | 27 | 0 / -4 | 0 / 0 | 0 / 0 | 0 / 0 | 30 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (7)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| E- B | -237 / 0 | 0.0 | 0.0 | 0.06 (4) | 7.81 |
| A- B | 0 / 28 | -91.8 | -91.8 | 0.12 (1) | 10.00 |
| B- C | -14 / 4 | -91.8 | -91.8 | 0.07 (5) | 6.25 |
| E- F | 0 / 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| F- G | 0 / 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |
| G- D | 0 / 0 | -18.5 | -18.5 | 0.09 (4) | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| F | 1-11-4 | 5 | 1 | 8 | BACK | VERT | TOTAL | --- | C1 |
| G | 3-11-4 | 1 | 1 | --- | BACK | VERT | TOTAL | --- | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL = | 25.6 | PSF |
| | DL = | 6.0 | PSF |
| BOT CH. | LL = | 0.0 | PSF |
| | DL = | 7.4 | PSF |
| TOTAL LOAD | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.09/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.09 (E) (INPUT = 0.90 )
JSI METAL= 0.07 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108669

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. GREENPARK HOMES | DRWG NO. |
|---|---|---|---|---|---|
| 417537 | C46 | 2 | 1 | TRUSS DESC. | |

Tamarack Roof Truss, Burlington

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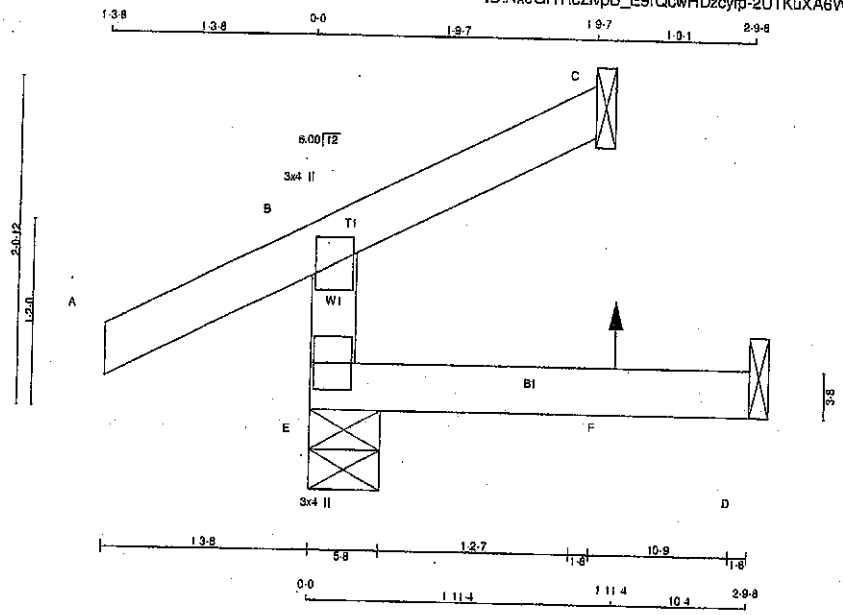



TOTAL WEIGHT = 2 X 8 = 16 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| E - B | 2x4 | DRY | No.2 | SPF |
| A - C | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| B | TMV+p | MT20 | 3.0 | 4.0 | | |
| E | BMV1+p | MT20 | 3.0 | 4.0 | | |

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| E | 274 | 0 | 274 | 0 | 0 | 5-8 | 5-8 |
| C | 45 | 0 | 45 | 0 | -23 | 1-8 | 1-8 |
| D | 14 | 0 | 25 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL 897791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| E | 191 | 139 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 52 / 0 | 0 / 0 |
| C | 32 | 23 / -19 | 0 / 0 | 0 / 0 | 0 / 0 | 9 / 0 | 0 / 0 |
| D | 12 | 0 / -8 | 0 / 0 | 0 / 0 | 0 / 0 | 18 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**
TOTAL LOAD CASES: (9)

CHORDS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| E-B | -243 / 0 | 0.0 | 0.0 | 0.04 (5) | | 7.81 |
| A-B | 0 / 28 | -91.8 | -91.8 | 0.13 (5) | | 10.00 |
| B-C | -17 / 0 | -91.8 | -91.8 | 0.09 (6) | | 6.25 |
| E-F | 0 / 0 | -18.5 | -18.5 | 0.04 (5) | | 10.00 |
| F-D | 0 / 0 | -18.5 | -18.5 | 0.04 (5) | | 10.00 |

WEBS

| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|---|---|---|---|---|---|---|---|---|---|
| F | 1-11-4 | 5 | 1 | 8 | FRONT | VERT | TOTAL | — | C1 |

**CONNECTION REQUIREMENTS**

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

| | | | | |
|---|---|---|---|---|
| TOP CH. | LL | = | 25.6 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.4 | PSF |
| TOTAL LOAD | | = | 39.0 | PSF |

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:5) , BC=0.04/1.00 (D-E:5) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) (PSI) MAX | MIN | SHEAR (PLI) MAX | MIN | SECTION (PLI) MAX | MIN |
|---|---|---|---|---|---|---|
| MT20 | 650 | 371 | 1747 | 788 | 1987 | 1879 |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90 )
JSI METAL= 0.07 (B) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
03/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2108670

Alves Engineering Services Inc.
5208 Easton road
Burlington, Ontario L7L 6N6
(289) 259 5455

LICENSED PROFESSIONAL ENGINEER
06/11/18
H.J.G. ALVES
PROVINCE OF ONTARIO

RESPONSABILITIES

1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components

2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.

3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.

4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.

5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

SPECIFICATIONS

1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.

2- Lumber is to be the sizes and grade specified on the truss drawing.

3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.

4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings

5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.

6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)

7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.

8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1900218 Feb 09, 2018

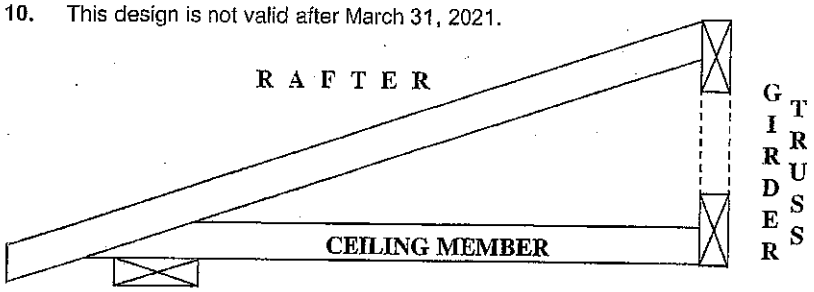
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

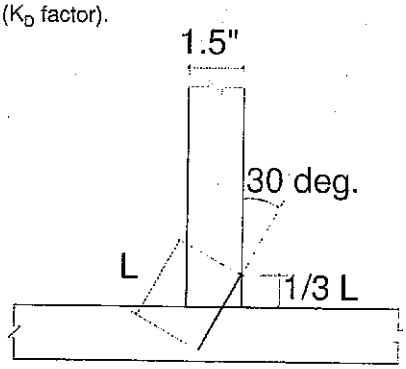
B97791H1

| NAIL TYPE | LENGTH (IN) | DIAMETER (IN) | NAIL LATERAL CAPACITY (LB) | |
|---|---|---|---|---|
| | | | S-P-F | D. FIR |
| COMMON WIRE | 3.00 | 0.144 | 132 | 147 |
| | 3.25 | 0.144 | 132 | 147 |
| | 3.50 | 0.160 | 159 | 177 |
| COMMON SPIRAL | 3.00 | 0.122 | 97 | 108 |
| | 3.25 | 0.122 | 97 | 108 |
| | 3.50 | 0.152 | 145 | 162 |

**NOTES:**

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor $J_A$ in CSA O86-14, section 12.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 ($K_D$ factor).
8. Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
9. Nail values in this table comply with CSA O86-14, section 12.9.4
10. This design is not valid after March 31, 2021.




**TOE-NAIL INSTALLATION**

| Nail type | Common wire | Common spiral | Common wire | Common spiral |
|---|---|---|---|---|
| Nail dia. (in) | 0.160 | 0.152 | 0.144 | 0.122 |
| | ( 3.5" nail ) | | ( 3" and 3.25" nail ) | |
| **LUMBER SIZE** | **MAXIMUM NUMBER OF TOE-NAILS** | | | |
| **2X4 SPF** | 2 | 2 | 3 | 3 |
| **2X4 D. Fir** | 2 | 2 | 2 | 2 |
| **2X6 SPF** | 4 | 4 | 4 | 5 |
| **2X6 D. Fir** | 3 | 3 | 3 | 4 |


MiTek®

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100 Industrial Rd.
Bradford, Ontario L3Z 3G7


PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

December 2, 2019

# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

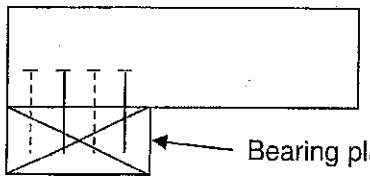
| NAIL TYPE | LENGTH (IN) | DIAMETER (IN) | NAIL WITHDRAWAL CAPACITY (LB) | |
|---|---|---|---|---|
| | | | S-P-F | D. FIR |
| COMMON WIRE | 3.00 | 0.144 | 30 | 42 |
| | 3.25 | 0.144 | 32 | 45 |
| | 3.50 | 0.160 | 38 | 52 |
| COMMON SPIRAL | 3.00 | 0.122 | 26 | 36 |
| | 3.25 | 0.122 | 28 | 40 |
| | 3.50 | 0.152 | 36 | 50 |

**Note:** If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

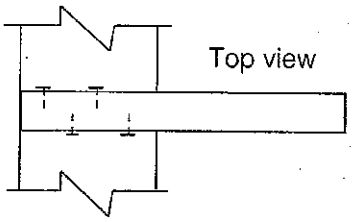
**NOTES:**

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor $J_A$ in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: G = 0.42(SPF), G = 0.49(D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

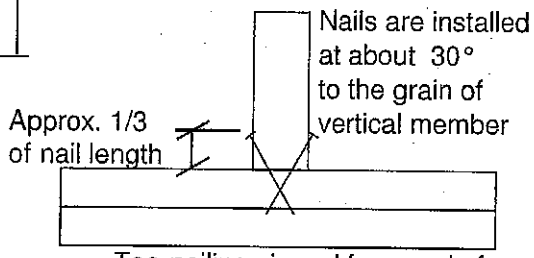
Toe-nailing on 2x6 Bearing Plate




Elevation view

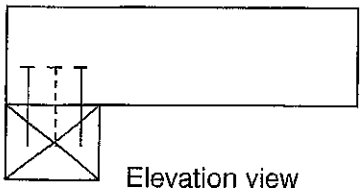


Top view

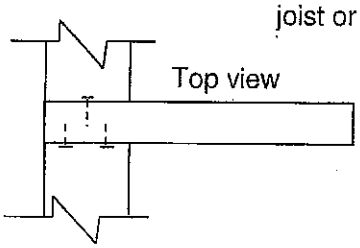



Toe-nailing viewed from end of joist or truss

Toe-nailing on 2x4 Bearing Plate



Elevation view



Top view

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
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PROVINCE OF ONTARIO


MiTek®

MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7


December 2, 2019

TECHNICAL BULLETIN

# HUS/LJS – Double Shear Joist Hangers

SIMPSON Strong-Tie

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**Material:** See table

**Finish:** G90 galvanized

**Design:**

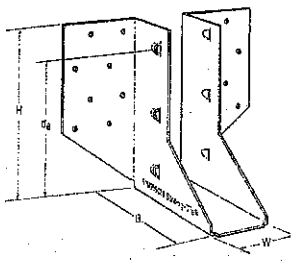
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

**Installation:**

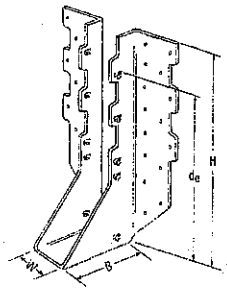
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

**Options:**

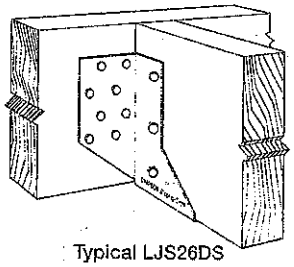
- See current catalogue for options



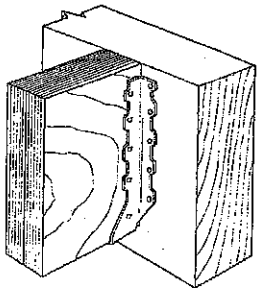
LJS26DS



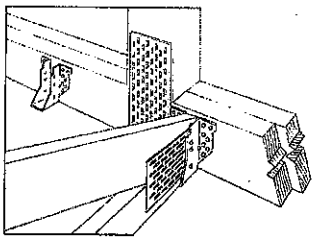
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



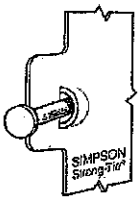
Typical HUS Installation



Typical HUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

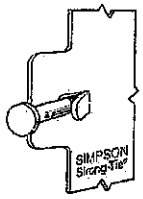
| Model No. | Ga. | Dimensions (in.) | | | | Fasteners | | Factored Resistance (lb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | D.Fir-L | | S-P-F | |
| | | W | H | B | $d_e$[1] | Face | Joist | Uplift ($K_D$=1.15) lb. | Normal ($K_D$=1.00) lb. | Uplift ($K_D$=1.15) lb. | Normal ($K_D$=1.00) lb. |
| LJS26DS | 18 | 1 9/16 | 5 | 3½ | 4⅝ | (16) 16d | (6) 16d | 2055 | 4265 | 1460 | 4115 |
| HUS26 | 16 | 1⅝ | 5⅜ | 3 | 3 15/16 | (14) 16d | (6) 16d | 2705 | 4940 | 2065 | 3875 |
| HUS28 | 16 | 1⅝ | 7 3/32 | 3 | 6 3/32 | (22) 16d | (8) 16d | 3605 | 5365 | 2675 | 4345 |
| HUS210 | 16 | 1⅝ | 9 3/32 | 3 | 7 31/32 | (30) 16d | (10) 16d | 4505 | 5795 | 4010 | 4740 |
| HUS1.81/10 | 16 | 1 13/16 | 9 | 3 | 8 | (30) 16d | (10) 16d | 4505 | 6450 | 4010 | 5200 |

1. $d_e$ is the distance from the seat of the hanger to the highest joist nail.

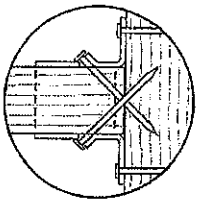


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

# LUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

**Material:** 18 gauge

**Finish:** G90 galvanized

**Design:**

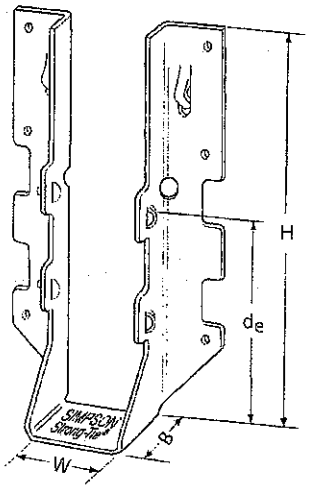
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

**Installation:**

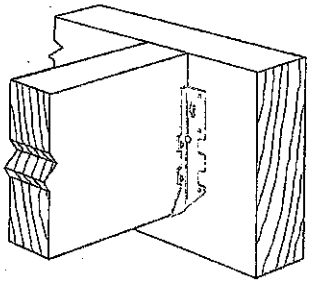
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

**Options:**

- These hangers cannot be modified



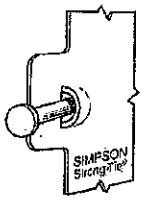

LUS28



Typical LUS Installation

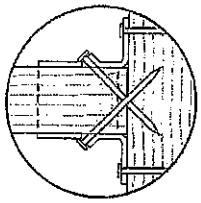
| Model No. | Ga. | Dimensions (in.) | | | | Fasteners | | Factored Resistance (lb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | D.Fir-L | | S-P-F | |
| | | W | H | B | $d_e$[1] | Face | Joist | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) |
| LUS24 | 18 | 1 9/16 | 3 1/8 | 1 3/4 | 1 15/16 | (4) 10d | (2) 10d | 710 | 1630 | 645 | 1155 |
| LUS24-2 | 18 | 3 1/8 | 3 1/8 | 2 | 1 13/16 | (4) 16d | (2) 16d | 835 | 2020 | 590 | 1435 |
| LUS26 | 18 | 1 9/16 | 4 3/4 | 1 3/4 | 3 5/8 | (4) 10d | (4) 10d | 1420 | 2170 | 1290 | 1630 |
| LUS26-2 | 18 | 3 1/8 | 4 7/8 | 2 | 4 | (4) 16d | (4) 16d | 1720 | 2595 | 1545 | 1920 |
| LUS26-3 | 18 | 4 5/8 | 4 3/16 | 2 | 3 1/4 | (4) 16d | (4) 16d | 1720 | 2595 | 1545 | 2340 |
| LUS28 | 18 | 1 9/16 | 6 5/8 | 1 3/4 | 3 3/4 | (6) 10d | (6) 10d | 1420 | 2520 | 1290 | 1790 |
| LUS28-2 | 18 | 3 1/8 | 7 | 2 | 4 | (6) 16d | (4) 16d | 1720 | 3325 | 1545 | 2575 |
| LUS28-3 | 18 | 4 5/8 | 6 1/4 | 2 | 3 1/4 | (6) 16d | (4) 16d | 1720 | 3325 | 1545 | 2375 |
| LUS210 | 18 | 1 9/16 | 7 13/16 | 1 3/4 | 3 7/8 | (8) 10d | (4) 10d | 1420 | 2785 | 1290 | 2210 |
| LUS210-2 | 18 | 3 1/8 | 9 | 2 | 6 | (8) 16d | (6) 16d | 2580 | 4500 | 2320 | 3195 |
| LUS210-3 | 18 | 4 5/8 | 8 3/16 | 2 | 5 1/4 | (8) 16d | (6) 16d | 2580 | 3345 | 2320 | 2375 |

1. $d_e$ is the distance from the seat of the hanger to the highest joist nail.




Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECLUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

# HGUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**Material:** 12 gauge

**Finish:** G90 galvanized

**Design:**

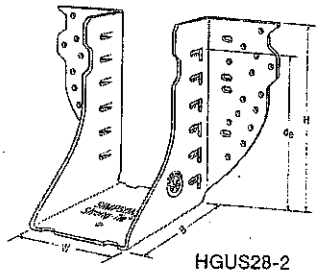
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

**Installation:**

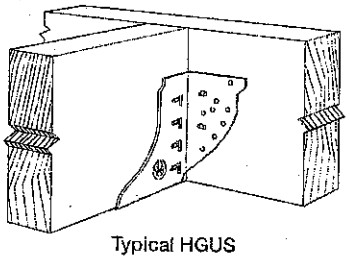
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

**Options:**

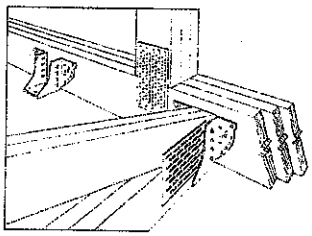
- See current catalogue for options



HGUS28-2



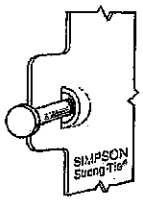
Typical HGUS Installation



Typical HGUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

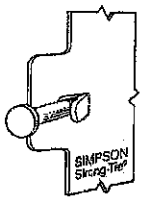
| Model No. | Ga. | Dimensions (in.) | | | | Fasteners | | Factored Resistance (lb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | D.Fir-L | | S-P-F | |
| | | W | H | B | $d_a$[1] | Face | Joist | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) |
| HGUS26 | 12 | 1⅝ | 5⅜ | 5 | 4 5/32 | (20) 16d | (8) 16d | 2685 | 6625 | 2685 | 5700 |
| HGUS26-2 | 12 | 3 9/16 | 5 7/16 | 4 | 4⅛ | (20) 16d | (8) 16d | 4385 | 8950 | 3100 | 6355 |
| HGUS26-3 | 12 | 4 15/16 | 5½ | 4 | 4⅛ | (20) 16d | (8) 16d | 4385 | 8950 | 3100 | 6355 |
| HGUS26-4 | 12 | 6 9/16 | 5 7/16 | 4 | 4⅛ | (20) 16d | (8) 16d | 4385 | 8950 | 3100 | 6355 |
| HGUS28 | 12 | 1⅝ | 7⅛ | 5 | 6⅛ | (36) 16d | (12) 16d | 3310 | 7675 | 3100 | 6900 |
| HGUS28-2 | 12 | 3 5/16 | 7 3/16 | 4 | 6⅛ | (36) 16d | (12) 16d | 6070 | 12980 | 4310 | 9215 |
| HGUS28-3 | 12 | 4 15/16 | 7¼ | 4 | 6⅜ | (36) 16d | (12) 16d | 6070 | 12980 | 4310 | 9215 |
| HGUS28-4 | 12 | 6 9/16 | 7 3/16 | 4 | 6⅛ | (36) 16d | (12) 16d | 6070 | 12980 | 4310 | 9215 |
| HGUS210 | 12 | 1⅝ | 9⅛ | 5 | 7⅞ | (46) 16d | (16) 16d | 3535 | 11070 | 2510 | 8090 |
| HGUS210-2 | 12 | 3 5/16 | 9 3/16 | 4 | 8⅛ | (46) 16d | (16) 16d | 6840 | 14015 | 4855 | 10270 |
| HGUS210-3 | 12 | 4 15/16 | 9¼ | 4 | 8⅜ | (46) 16d | (16) 16d | 6840 | 14645 | 4855 | 10400 |
| HGUS210-4 | 12 | 6 9/16 | 9 3/16 | 4 | 8⅛ | (46) 16d | (16) 16d | 6840 | 14645 | 4855 | 10400 |
| HGUS212-4 | 12 | 6 9/16 | 10 5/8 | 4 | 10⅛ | (56) 16d | (20) 16d | 7640 | 14995 | 5425 | 10645 |
| HGUS214-4 | 12 | 6 9/16 | 12 5/8 | 4 | 11⅛ | (66) 16d | (22) 16d | 10130 | 16400 | 7195 | 11645 |

1. $d_a$ is the distance from the seat of the hanger to the highest joist nail.

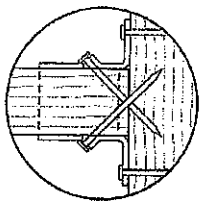


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

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04/01/2020
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LIMIT STATES DESIGN

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TECHNICAL BULLETIN

# H – Seismic and Hurricane Ties

SIMPSON Strong-Tie®

The H connector series provides wind and seismic ties for trusses and rafters.

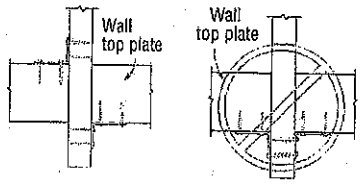
**Material:** 18 gauge **Finish:** G90 galvanized

**Design:** • Factored resistances are in accordance with CSA O86-14
- Factored resistances have been increased 15%. No further increase is permitted.

**Installation:** • Use all specified fasteners
- Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½ long, 10d x 1½" = 0.146" x 1½" long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

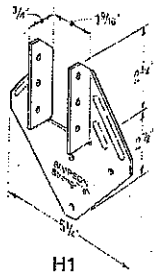
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

Hurricane Tie Installations to Achieve Twice the Load (Top View)

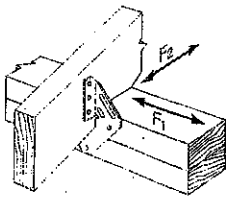



Install diagonally across from each other for minimum 2x truss.

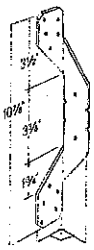
Nailing into both sides of a single ply 2x truss may cause the wood to split.



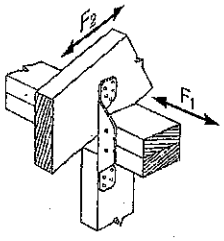
H1




H1 Installation

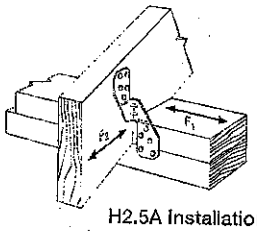


H2A

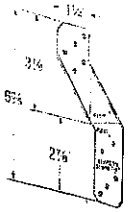



H2A Installation

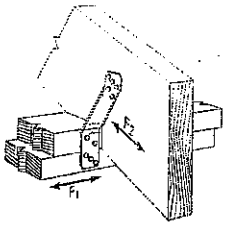
H2.5A



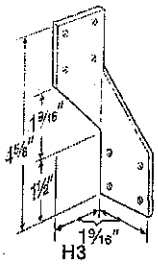

H2.5A Installation



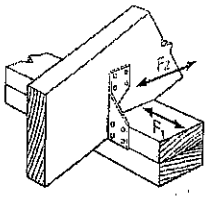
H2.5T



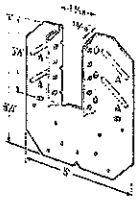

H2.5T Installation (Nails into both top plates)



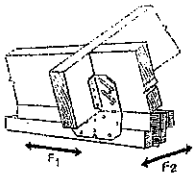

H3




H3 Installation



H10A




H10A Installation

| Model No. | Ga. | Fasteners | | | Factored Resistance (lb.) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | D.Fir-L | | | S-P-F | | |
| | | To Rafter | To Plates | To Studs | Uplift | Normal $F_1$ | Normal $F_2$ | Uplift | Normal $F_1$ | Normal $F_2$ |
| | | | | | ($K_D$=1.15) | | | ($K_D$=1.15) | | |
| H1 | 18 | (6) 8d x 1½" | (4) 8d | — | 740 | 685 | 300 | 680 | 485 | 215 |
| H2A | 18 | (5) 8d x 1½" | (2) 8d x 1½" | (5) 8d x 1½" | 830 | 220 | 75 | 590 | 155 | 55 |
| H2.5A | 18 | (5) 8d | (5) 8d | — | 805 | 160 | 160 | 755 | 160 | 160 |
| H2.5T | 18 | (5) 8d | (5) 8d | — | 835 | 175 | 240 | 740 | 160 | 210 |
| H3 | 18 | (4) 8d | (4) 8d | — | 740 | 180 | 265 | 615 | 125 | 190 |
| H10A | 18 | (9) 10d x 1½" | (9) 10d x 1½" | — | 1735 | 795 | 410 | 1505 | 565 | 290 |

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.
3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.

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TECHNICAL BULLETIN

# TC – Truss Connectors

SIMPSON Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

**Material:** 16 gauge

**Finish:** G90 galvanized

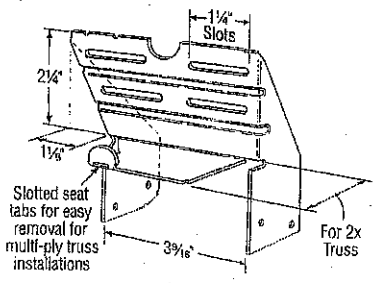
**Design:** Factored resistances are in accordance with CSA 086-14

**Installation:**

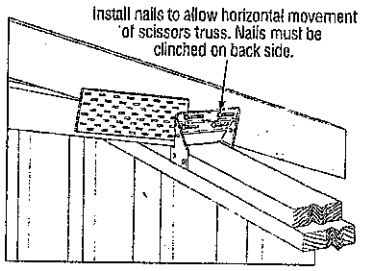
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½ = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss–allow room under the nail head for movement of the truss with respect to the wall.

**Optional TC Installation:**

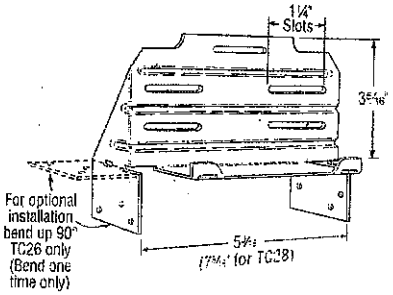
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen™ screws into the top and face of masonry wall. See optional load tables and installation details.



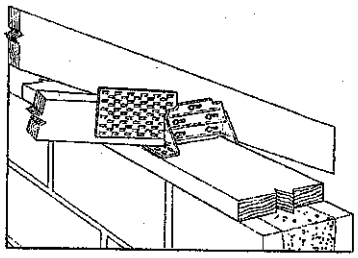

TC24
U.S. Patent 4,932,173



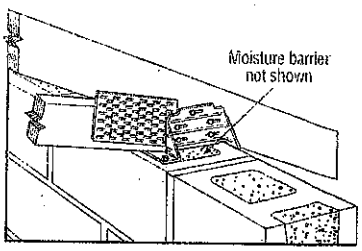

Typical TC24 Installation




TC26
(TC28 Similar)



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer
(8", 10", 12" Wall Installation Similar)



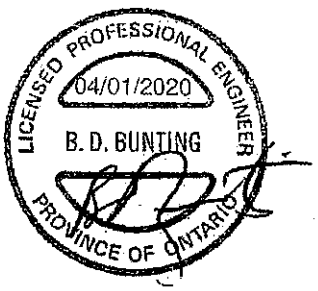

Optional TC26 Installation for Grouted Concrete Block using Titen Screws

| Model No. | Fasteners | | Factored Resistance | |
|---|---|---|---|---|
| | Truss | Wall Plates | D.Fir-L | S-P-F |
| | | | Uplift ($K_D$=1.15) | Uplift ($K_D$=1.15) |
| | | | lb. | lb. |
| TC24 | (4) 10d | (4) 10d | 605 | 430 |
| TC26 | (5) 10d | (6) 10d | 1015 | 720 |
| TC28 | (5) 10d | (6) 10d | 1015 | 720 |

**Optional TC Installation Table**

| Model No. | Fasteners | | Factored Resistance | |
|---|---|---|---|---|
| | Truss | Wall Plates | D.Fir-L | S-P-F |
| | | | Uplift ($K_D$=1.15) | Uplift ($K_D$=1.15) |
| | | | lb. | lb. |
| TC26 | (5) 10d | (6) 10d x 1½" | 810 | 660 |
| | (5) 10d | (6) 10d | 930 | 660 |

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ³⁄₁₆" x 2¼" Titen screws has a factored uplift resistance of 275 lb.




LIMIT STATES DESIGN

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T-SPECTC20 3/20 exp. 6/22

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TECHNICAL BULLETIN

# HHUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

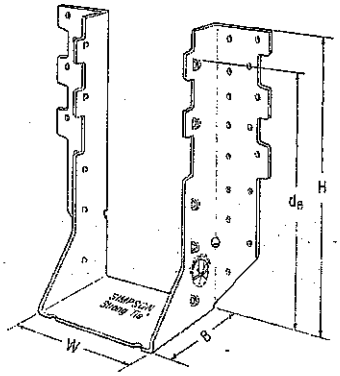
All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**Material:** 14 gauge

**Finish:** G90 galvanized

**Design:**

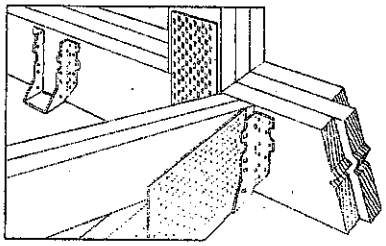
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.




HHUS410

**Installation:**

- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications



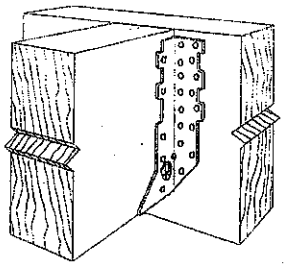
Typical HHUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

**Options:**

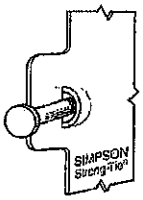
- See current catalogue for options

| Model No. | Ga. | Dimensions (in.) | | | | Fasteners | | Factored Resistance (lb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | D.Fir-L | | S-P-F | |
| | | W | H | B | $d_e$[1] | Face | Joist | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) | Uplift ($K_D$=1.15) | Normal ($K_D$=1.00) |
| HHUS26-2 | 14 | 3 5/16 | 5 13/16 | 3 | 3 15/16 | (14) 16d | (6) 16d | 2850 | 7335 | 2065 | 5205 |
| HHUS28-2 | 14 | 3 5/16 | 7 7/32 | 3 | 6 5/32 | (22) 16d | (8) 16d | 3765 | 8940 | 2675 | 6345 |
| HHUS210-2 | 14 | 3 5/16 | 9 3/32 | 3 | 8 | (30) 16d | (10) 16d | 4670 | 9660 | 4235 | 7000 |
| HHUS210-3 | 14 | 4 11/16 | 9 | 3 | 7 13/16 | (30) 16d | (10) 16d | 4670 | 9670 | 4235 | 6865 |
| HHUS210-4 | 14 | 6 1/8 | 8 29/32 | 3 | 7 27/32 | (30) 16d | (10) 16d | 4670 | 10155 | 4235 | 7210 |
| HHUS46 | 14 | 3 5/8 | 5 13/32 | 3 | 3 13/16 | (14) 16d | (6) 16d | 2540 | 7335 | 2065 | 5205 |
| HHUS48 | 14 | 3 5/8 | 7 1/8 | 3 | 6 1/8 | (22) 16d | (8) 16d | 3765 | 8940 | 2675 | 6345 |
| HHUS410 | 14 | 3 5/8 | 9 | 3 | 8 | (30) 16d | (10) 16d | 4670 | 9855 | 4235 | 7000 |
| HHUS5.50/10 | 14 | 5 1/2 | 9 | 3 | 8 | (30) 16d | (10) 16d | 4670 | 10155 | 4235 | 7210 |
| HHUS7.25/10 | 14 | 7 1/4 | 9 | 3 5/16 | 7 29/32 | (30) 16d | (10) 16d | 4670 | 10155 | 3370 | 7210 |

1. $d_e$ is the distance from the seat of the hanger to the highest joist nail.

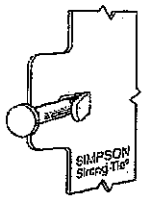


Typical HHUS Installation

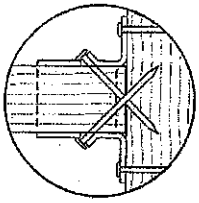



Dome Double Shear Nailing prevents tabs breaking off (available on some models).

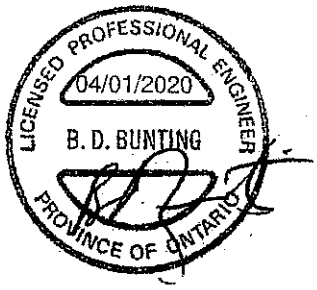
U.S. Patent 5,603,580




Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.




LIMIT STATES DESIGN

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ONTARIO WOOD TRUSS
FABRICATORS ASSOCIATION

# TECH-NOTES

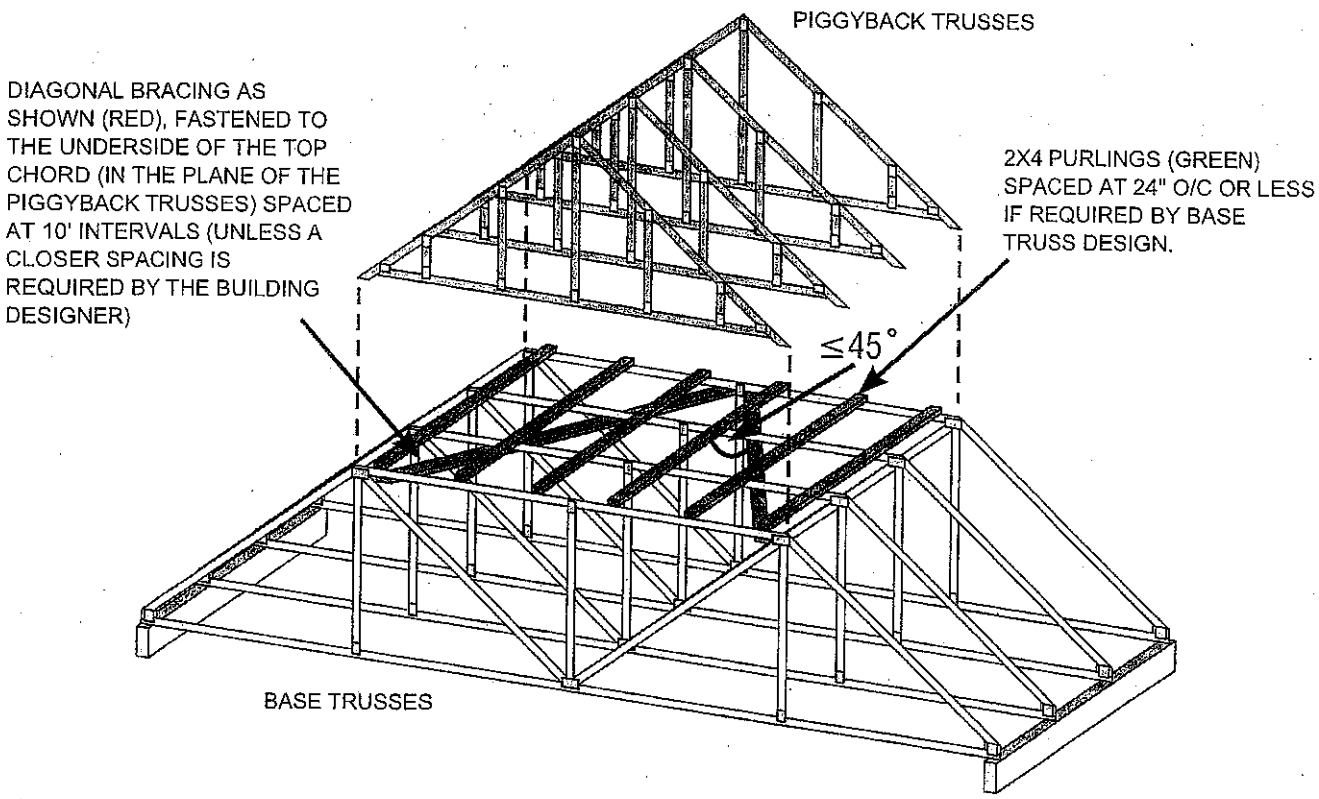
## TN 15-001
## Piggyback Bracing

Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:




NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

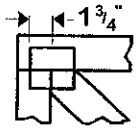
*SKETCH FROM BCSI-CANADA 2013*

Disclaimer:

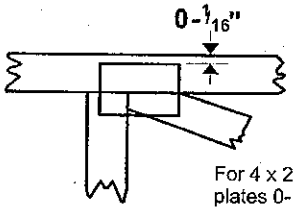
OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

# Symbols

## PLATE LOCATION AND ORIENTATION




Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.




For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

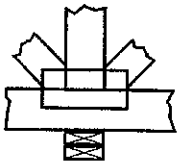
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

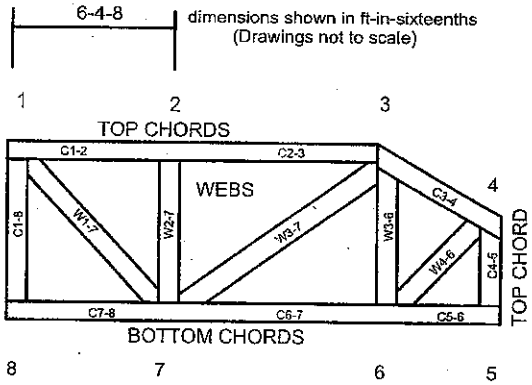


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

**PRODUCT CODE APPROVALS**

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.