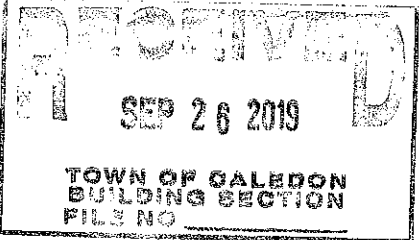


10/12 ROOF PITCH  
UNLESS OTHERWISE  
SPECIFIED



12 " FINISH O.H  
R.T.M.C  
2X6 EXTERIOR WALLS  
ASPHALT SHINGLES  
2X6 FASCIA BOARD

DESIGN LOADS:  
GS LOAD 1.8 KPA  
TC DEAD 6 PSF  
BC LIVE 10.5 PSF  
BC DEAD 7 PSF

ALL CONVENTIONAL ROOF  
FRAMING TO CONFORM TO  
PART 9 OF THE OBC. LATEST  
EDITION ROOF RAFTERS  
THAT MEET OR CROSS  
OVER TRUSSES ARE TO BE  
2"X4" SPF @24"o.c. WITH A  
2"X4"SPF VERTICAL POST  
TO THE TRUSS UNDER AT  
EACH CROSS POINT. POSTS  
LONGER THAN 6' TO BE  
LATERALLY BRACED SO  
THAT THE DISTANCE  
BETWEEN END POINTS AND  
BETWEEN ROWS OF  
BRACING DOES NOT  
EXCEED 6'.

TRUSSES DESIGNED  
CONFORM TO THE  
RELEVANT SECTION OF THE  
LATEST EDITION OF THE  
ONTARIO BUILDING CODE  
(RESIDENTIAL PART 9)

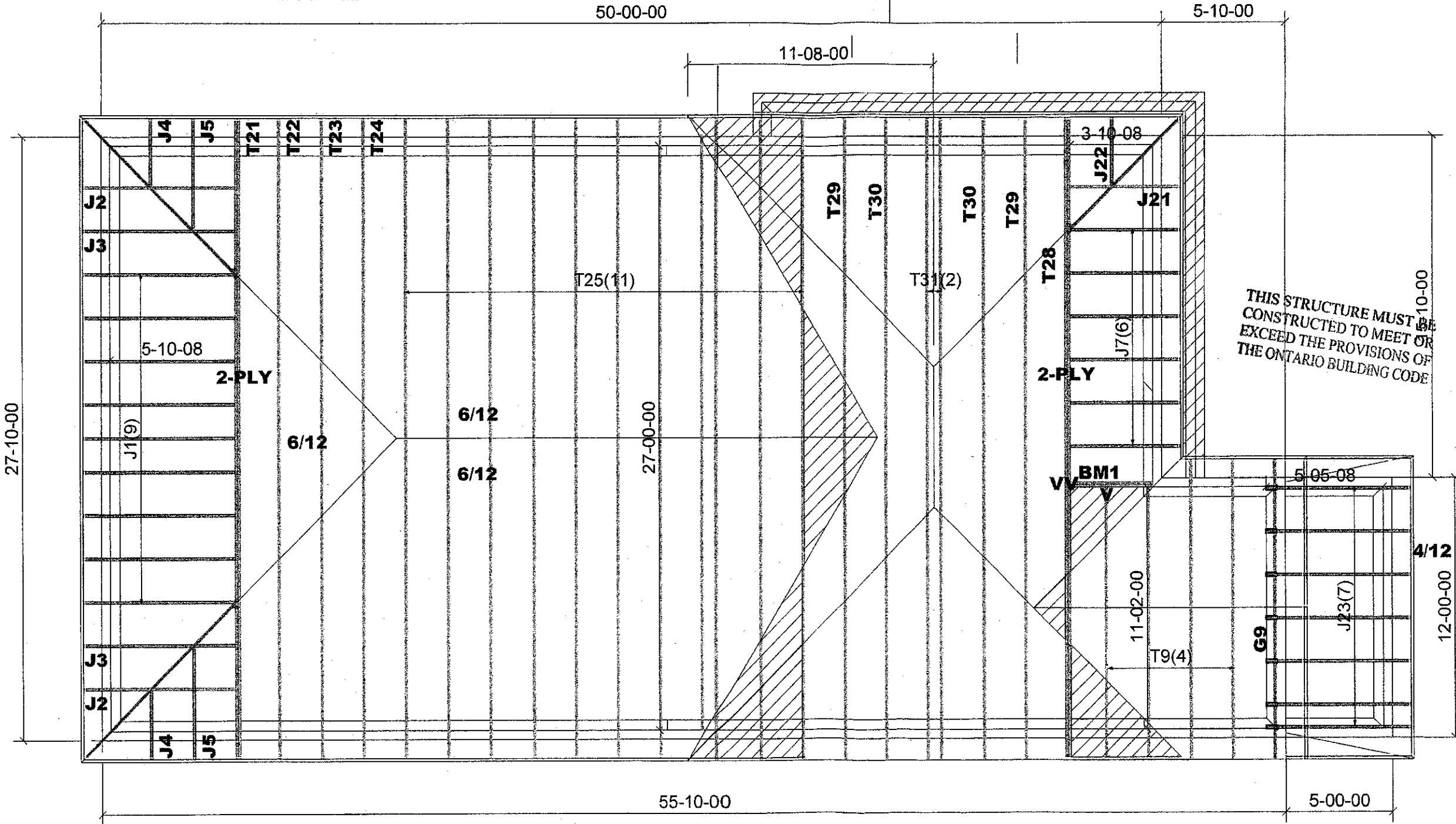
HARDWARE  
HGUS26-2(XX)  
LUS26-2(VV)  
LJS26DS(V)

BM1:2-2X10

DENOTES  
CONVENTIONAL  
FRAMING



T- .....



M12236



Job Track: 50033  
Plan Log: 201018  
Layout ID: 402974

Builder / Location:  
**GREEN PARK HOMES / CALEDON**  
Project: **LAMBERT LANE PH.2**  
Date: 5/6/2019 Sales: Mario DiCano Designer: JG

Model / Elevation:  
**BARTON 3/2 Lot 27**

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 UTILIZED FOR ANY OTHER PURPOSE.

Mike ver 8.2.3.229



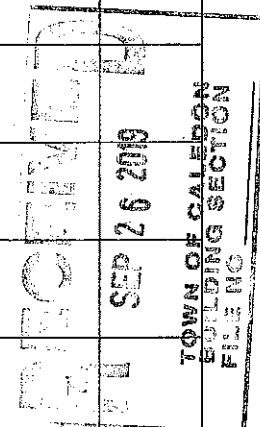
# DELIVERY SHIPLIST

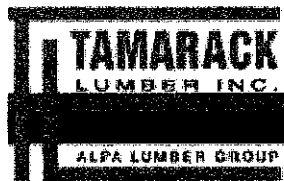
Lumber Yard: TAMARACK LUMBER  
 Builder: GREEN PARK HOMES  
 Project: LAMBERT LANE PH.2  
 Location: CALEDON  
 Model: BARTON 3  
 Lot #: 27  
 Elevation: 2

Job Track: 50033  
 PlanLog: 201018  
 Layout ID: 402974  
 Ref #  
 Page: 1 of 2  
 Date: 05/06/2019  
 Designer:  
 Sales Rep: Mario DiCano

## 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 |
|---------|------------|---------------------------|---------|----------|---------|----------------|---------------------------|------------------------------|-------------------|---------------------|--------------------|
|         | 4          | T9<br>Common              | 10 / 12 | 11-02-00 | 6-03-08 | 2 x 4          | 1-03-08<br>1-03-08        | 1-07-11<br>1-07-11           | 198.87<br>132.00  |                     |                    |
|         | 1          | G9<br>GABLE               | 10 / 12 | 11-02-00 | 6-03-08 | 2 x 4          | 1-05-00<br>1-03-08        | 1-07-11<br>1-07-11           | 54.45<br>37.00    |                     |                    |
|         | 1<br>2-ply | T21<br>Hip Girder         | 6 / 12  | 27-00-00 | 4-01-04 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 252.71<br>158.00  |                     |                    |
|         | 1          | T22<br>Hip                | 6 / 12  | 27-00-00 | 5-01-04 | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 109.31<br>68.83   |                     |                    |
|         | 1          | T23<br>Hip                | 6 / 12  | 27-00-00 | 6-01-04 | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 110.98<br>70.67   |                     |                    |
|         | 1          | T24<br>Hip                | 6 / 12  | 27-00-00 | 7-01-04 | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 112.6<br>70.67    |                     |                    |
|         | 11         | T25<br>Common             | 6 / 12  | 27-00-00 | 7-11-00 | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 1199.12<br>740.67 |                     |                    |
|         | 1<br>2-ply | T28<br>Hip Girder         | 10 / 12 | 27-00-00 | 4-10-07 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-07-11<br>1-07-11           | 266.28<br>170.33  |                     |                    |
|         | 2          | T29<br>Hip                | 10 / 12 | 27-00-00 | 6-06-07 | 2 x 4          | 1-03-08<br>1-05-00        | 1-07-11<br>1-07-11           | 250.96<br>158.67  |                     |                    |
|         | 2          | T30<br>Hip                | 10 / 12 | 27-00-00 | 8-02-07 | 2 x 4          | 1-03-08<br>1-05-00        | 1-07-11<br>1-07-11           | 260.71<br>165.33  |                     |                    |
|         | 2          | T31<br>Hip                | 10 / 12 | 27-00-00 | 9-10-07 | 2 x 4          | 1-03-08<br>1-05-00        | 1-07-11<br>1-07-11           | 269.72<br>171.33  |                     |                    |
|         | 9          | 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           | 151.16<br>96.00   |                     |                    |
|         | 2          | J2<br>Jack-Open<br>Girder | 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           | 23.16<br>14.67    |                     |                    |
|         | 2          | J3<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           | 28.26<br>17.33    |                     |                    |





## DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: GREEN PARK HOMES  
 Project: LAMBERT LANE PH.2  
 Location: CALEDON  
 Model: BARTON 3  
 Lot #: 27  
 Elevation: 2

Job Track: 50033  
 PlanLog: 201018  
 Layout ID: 402974  
 Ref #  
 Page: 2 of 2  
 Date: 05/06/2019  
 Designer:  
 Sales Rep: Mario DiCano

### 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          | J4<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           | 14.04<br>9.33   |                     |                    |
|         | 2          | J5<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           | 19.14<br>12.00  |                     |                    |
|         | 6          | J7<br>Jack-Open            | 10 /12 | 3-10-08 | 4-10-07 | 2 x 4  | 1-03-08                   | 1-07-11<br>4-10-07           | 91.36<br>58.00  |                     |                    |
|         | 1          | J21<br>Jack-Open<br>Girder | 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          | J22<br>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    |                     |                    |
|         | 7          | J23<br>Jack-Open           | 4 /12  | 5-05-08 | 2-06-11 | 2 x 4  | 1-03-08                   | 3-15<br>2-01-12              | 101.14<br>65.33 |                     |                    |

TOTAL # TRUSS= 61

TOTAL BFT OF ALL TRUSSES= 2231.49

BFT.

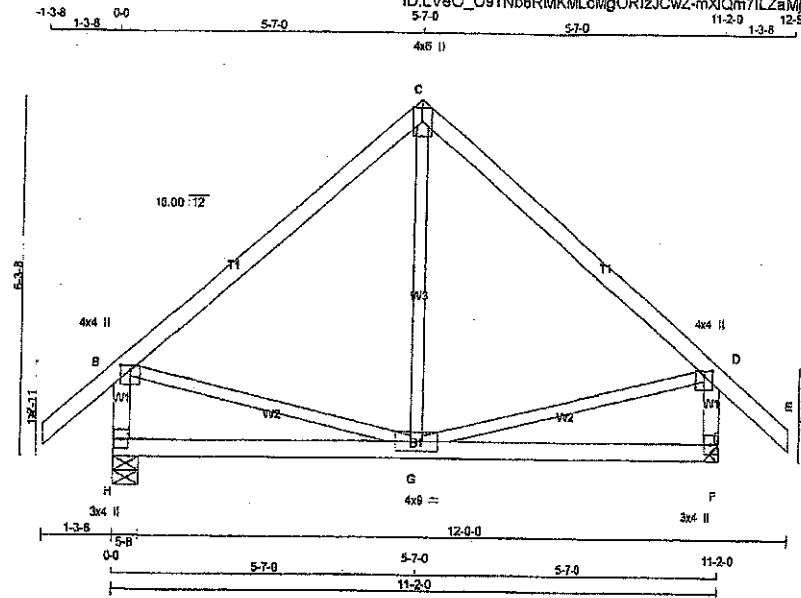
TOTAL WEIGHT OF ALL TRSSES 3535.73 LBS

### HARDWARE

| QTY | TYPE     | MODEL   | LENGTH |
|-----|----------|---------|--------|
| 1   | Hardware | LJS26DS |        |
| 1   | Hardware | LUS26-2 |        |

TOTAL NUMBER OF ITEMS= 2

|                                                                            |                         |                      |                 |                                                                                   |          |
|----------------------------------------------------------------------------|-------------------------|----------------------|-----------------|-----------------------------------------------------------------------------------|----------|
| JOB NAME<br><b>402973</b>                                                  | TRUSS NAME<br><b>T9</b> | QUANTITY<br><b>2</b> | PLY<br><b>1</b> | JOB DESC.<br><b>GREEN PARK HOMES</b>                                              | DRWG NO. |
| Tamarack Roof Truss, Burlington                                            |                         |                      |                 | Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 08:38:48 2019 Page 1 |          |
| ID:LVeQ_O9TNb8RMKMLcMgORlZJCwZ-mXlQm7ILZaMISWBAm20SrnYpf7679Lw_NxAFKwzldab |                         |                      |                 | 11-2-0 12-5-8                                                                     |          |



Scale = 1:37.5

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

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 |
| C                           | TTW+p   | MT20 | 4.0 | 6.0 | Edge      |
| D                           | TMVW+p  | MT20 | 4.0 | 4.0 | 1.00 2.00 |
| F                           | BMV1+p  | MT20 | 3.0 | 4.0 |           |
| G                           | BMVWW+t | MT20 | 4.0 | 9.0 |           |
| H                           | BMV1+p  | MT20 | 3.0 | 4.0 |           |

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

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

| BEARINGS |                | FACTORED       | MAXIMUM FACTORED | INPUT | REQD       |
|----------|----------------|----------------|------------------|-------|------------|
| JT       | GROSS REACTION | GROSS REACTION | DOWN             | UP    | BRG        |
| H        | 927 0          | 927 0          | 0 0              | 0 0   | 5-8 5-8    |
| F        | 927 0          | 927 0          | 0 0              | 0 0   | MECHANICAL |

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

#### UNFACTORED REACTIONS

| 1ST LCASE | SNOW     | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|-----------|----------|---------|-----------|-------|---------|-------|
| JT        | COMBINED |         |           |       |         |       |
| H         | 684      | 405 / 0 | 117 / 0   | 0 / 0 | 182 / 0 | 0 / 0 |
| F         | 684      | 405 / 0 | 117 / 0   | 0 / 0 | 182 / 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 |                           |                           |                   | WEBS  |                           |               |                     |
|--------|---------------------------|---------------------------|-------------------|-------|---------------------------|---------------|---------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX. CSI (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) | UNBRAC LENGTH FR-TO |
| FR-TO  |                           |                           |                   | FR-TO |                           |               |                     |
| A-B    | 0 / 45                    | -102.1                    | -102.1 0.14 (1)   | G-C   | 0 / 248                   | 0.05 (3)      | 10.00               |
| B-C    | -510 / 0                  | -102.1                    | -102.1 0.41 (1)   | B-G   | 0 / 403                   | 0.09 (1)      | 6.25                |
| C-D    | -510 / 0                  | -102.1                    | -102.1 0.41 (1)   | G-D   | 0 / 403                   | 0.09 (1)      | 6.25                |
| D-E    | 0 / 45                    | -102.1                    | -102.1 0.14 (1)   |       |                           |               | 10.00               |
| H-B    | -845 / 0                  | 0.0                       | 0.0 0.08 (1)      |       |                           |               | 7.81                |
| F-D    | -845 / 0                  | 0.0                       | 0.0 0.08 (1)      |       |                           |               | 7.81                |
| H-G    | 0 / 0                     | -38.5                     | -38.5 0.27 (3)    |       |                           |               | 10.00               |
| G-F    | 0 / 0                     | -38.5                     | -38.5 0.27 (3)    |       |                           |               | 10.00               |

TOTAL WEIGHT = 2 X 50 = 99 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |            |
|------------|------------|
| TOP CH. LL | = 29.1 PSF |
| DL         | = 6.0 PSF  |
| BOT CH. LL | = 10.5 PSF |
| DL         | = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012
- CSA 085-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.37")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")  
ALLOWABLE DEFL.(TL) = L/360 (0.37")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.41/1.00 (B-C-1), BC=0.27/1.00 (G-H-3),  
WB=0.09/1.00 (D-G-1), SS=0.17/1.00 (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.

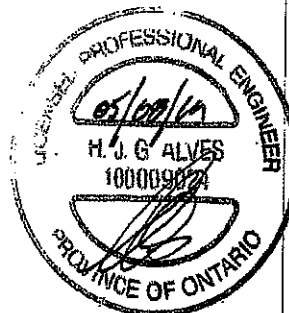
#### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-----------------|-------------|---------------|
| MAX             | MIN         | MAX           |
| MT20            | 518         | 354           |
|                 | 1657        | 783           |
|                 | 1957        | 1656          |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (D) (INPUT = 0.90)  
JSI METAL= 0.21 (D) (INPUT = 1.00)

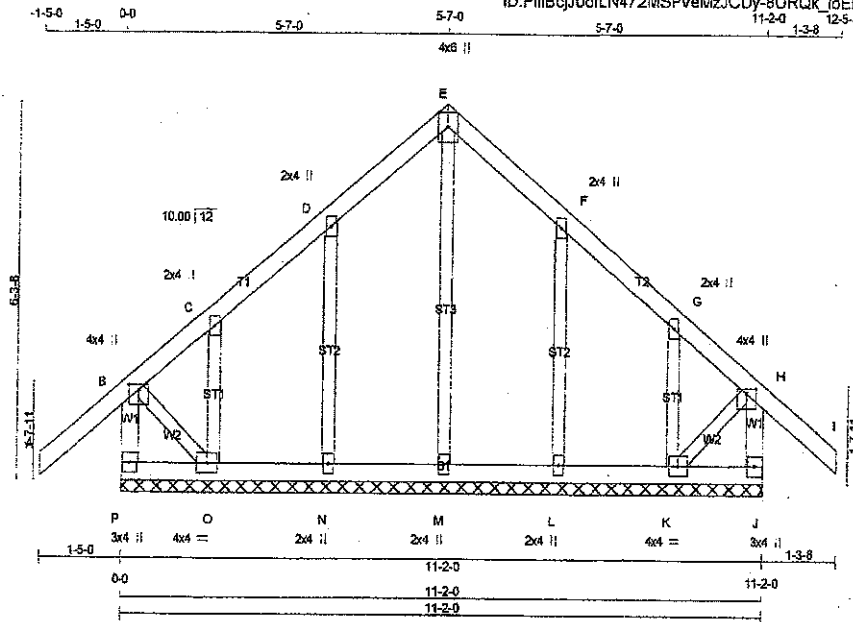


DWG NO. TAM 191/0801  
STRUCTURAL  
COMPONENT ONLY

|          |            |          |     |             |                  |          |
|----------|------------|----------|-----|-------------|------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | GREEN PARK HOMES | DRWG NO. |
| 402975   | G9         | 1        | 1   | TRUSS DESC. |                  |          |

Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 08:55:57 2019 Page 1  
ID: F1fB0j00rLN472MSPveMzJCdy-8URQk IQEk?2fMxYf\_IzXxZivGoyJfrYm0GYozldKW



Scale = 1/32"

| LUMBER                          |      |        |        |
|---------------------------------|------|--------|--------|
| N.L.G.A. RULES                  | SIZE | LUMBER | DESCR. |
| CHORDS                          |      |        |        |
| P - B                           | 2x4  | DRY    | No.2   |
| A - E                           | 2x4  | DRY    | No.2   |
| E - I                           | 2x4  | DRY    | No.2   |
| J - H                           | 2x4  | DRY    | No.2   |
| P - J                           | 2x4  | DRY    | No.2   |
| ALL WEBS                        | 2x3  | DRY    | No.2   |
| ALL GABLE WEBS                  | 2x3  | DRY    | No.2   |
| DRY: SEASONED LUMBER.           |      |        |        |
| GABLE STUDS SPACED AT 2-0-0 OC. |      |        |        |

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 |                           |                        |                           | WEBS  |                           |                           |  |
|--------|---------------------------|------------------------|---------------------------|-------|---------------------------|---------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF)       | MAX. UNBRACED LENGTH (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (LC) |  |
| FR-TO  |                           | FROM TO                |                           | FR-TO |                           |                           |  |
| P-B    | -331/0                    | 0.0 0.0 0.04 (1)       | 7.81                      | M-E   | -154/0                    | 0.09 (1)                  |  |
| A-B    | 0/49                      | -102.1 -102.1 0.17 (1) | 10.00                     | N-D   | -250/0                    | 0.08 (1)                  |  |
| B-C    | -69/0                     | -102.1 -102.1 0.16 (1) | 6.25                      | O-C   | -80/0                     | 0.01 (1)                  |  |
| C-D    | -3/0                      | -102.1 -102.1 0.07 (1) | 10.00                     | L-F   | -247/0                    | 0.08 (1)                  |  |
| D-E    | -25/0                     | -102.1 -102.1 0.07 (1) | 6.25                      | K-G   | -96/0                     | 0.02 (1)                  |  |
| E-F    | -25/0                     | -102.1 -102.1 0.07 (1) | 6.25                      | B-O   | 0/21                      | 0.00 (1)                  |  |
| F-G    | -4/0                      | -102.1 -102.1 0.07 (1) | 10.00                     | K-H   | 0/22                      | 0.00 (1)                  |  |
| G-H    | -60/0                     | -102.1 -102.1 0.13 (1) | 6.25                      |       |                           |                           |  |
| H-I    | 0/45                      | -102.1 -102.1 0.14 (1) | 10.00                     |       |                           |                           |  |
| J-H    | -305/0                    | 0.0 0.0 0.03 (1)       | 7.81                      |       |                           |                           |  |
| P-O    | 0/0                       | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |
| O-N    | 0/13                      | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |
| N-M    | 0/8                       | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |
| M-L    | 0/8                       | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |
| L-K    | 0/13                      | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |
| K-J    | 0/0                       | -38.5 -38.5 0.02 (3)   | 10.00                     |       |                           |                           |  |

TOTAL WEIGHT = 54 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 29.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.17/1.00 (A-B:1), BC=0.02/1.00 (N-O:3),  
WB=0.09/1.00 (E-M:1), SS=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

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

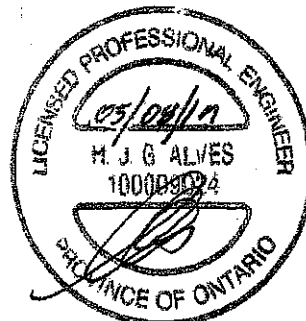
#### NAIL VALUES

| PLATE   | GRIP(DRY) | SHEAR    | SECTION   |
|---------|-----------|----------|-----------|
| (PSI)   | (PL)      | (PL)     | (PL)      |
| MAX MIN | MAX MIN   | MAX MIN  | MAX MIN   |
| MT20    | 618 354   | 1657 788 | 1987 1656 |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

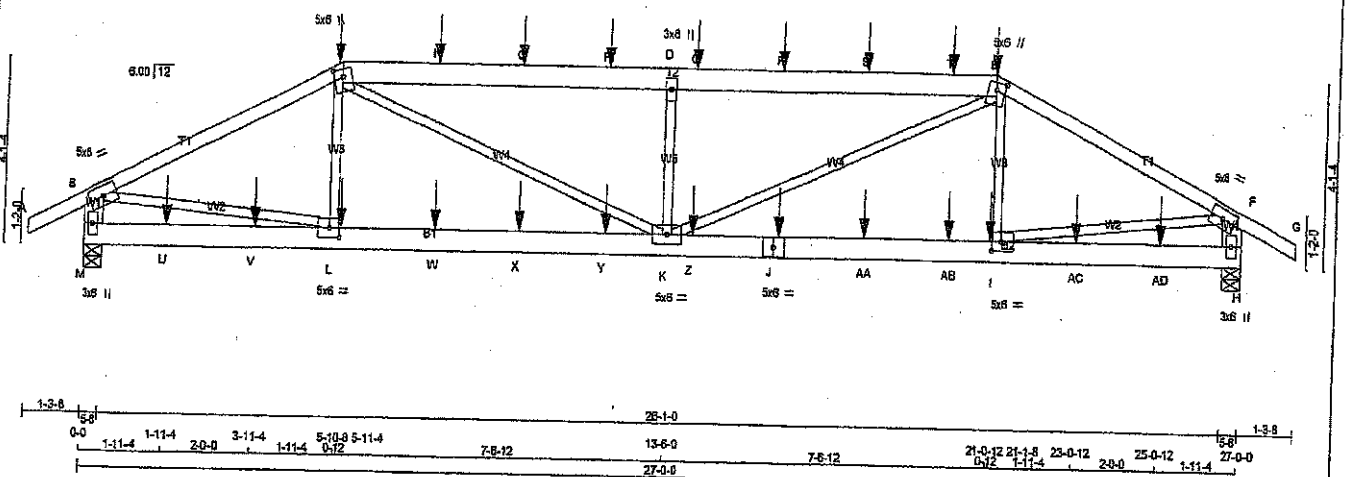
JSI GRIP= 0.25 (B) (INPUT = 0.90)  
JSI METAL= 0.13 (F) (INPUT = 1.00)



DRWG NO. TAM 17910920  
STRUCTURAL  
COMPONENT ONLY

|                                 |                          |                      |                 |                                      |          |
|---------------------------------|--------------------------|----------------------|-----------------|--------------------------------------|----------|
| JOB NAME<br><b>402939</b>       | TRUSS NAME<br><b>T21</b> | QUANTITY<br><b>1</b> | PLY<br><b>2</b> | JOB DESC.<br><b>GREEN PARK HOMES</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington |                          |                      |                 | TRUSS DESC.                          |          |

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Tue May 7 17:48:13 2019 Page 1  
 ID: yH3luQzwKBaXQAh?nsf8URzKCtp-qVvnxrdSag6XyilP\_FslsBCy48h4xqRDaeIHyczlqdW  
 27-0-0 29-3-8 1-3-8  
 Scale = 1/4" = 1'-0"



| LUMBER | N.L.G.A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|--------|----------------|--------|------|--------|--------|
| A - C  | 2x4            | DRY    | No.2 | SPF    |        |
| C - E  | 2x6            | 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  | 2x8            | DRY    | No.2 | SPF    |        |
| J - H  | 2x8            | DRY    | No.2 | SPF    |        |

ALL WEBS 2x3 DRY No.2 SPF  
 EXCEPT  
 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)  |
| E-G 1 12                                |                      | SIDE (61.0)  |
| C-E 2 12                                |                      | SIDE (61.0)  |
| M-B 2 12                                |                      | TOP          |
| H-F 2 12                                |                      | TOP          |
| BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS |                      |              |
| M-J 2 12                                |                      | SIDE (183.1) |
| J-H 2 12                                |                      | SIDE (183.1) |
| WEBS: (0.122"x3") SPIRAL NAILS          |                      |              |
| L-C 1 6                                 |                      | SIDE (1.4)   |
| I-E 1 6                                 |                      | SIDE (1.4)   |
| 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 TRANSFERRING. 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    |
|-----------------------------|---------|--------|-----|-----|------|------|
| B                           | TWVW    | MT20   | 5.0 | 6.0 |      |      |
| C                           | TWVW    | MT20   | 5.0 | 6.0 | 2.00 | 2.50 |
| D                           | TWVW    | MT20   | 3.0 | 6.0 |      |      |
| E                           | TWVW    | MT20   | 5.0 | 6.0 | 2.00 | 2.50 |
| F                           | TWVW    | MT20   | 5.0 | 6.0 |      |      |
| H                           | BMV1+p  | MT20   | 3.0 | 6.0 |      |      |
| I                           | BMVW    | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| J                           | BS-I    | MT20   | 5.0 | 6.0 |      |      |
| K                           | BMVW    | MT20   | 5.0 | 6.0 |      |      |
| L                           | BMVW    | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| M                           | BMV1+p  | MT20   | 3.0 | 6.0 |      |      |

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

| BEARINGS | FACTORED       |                | MAXIMUM FACTORED |      | INPUT | REQD. |
|----------|----------------|----------------|------------------|------|-------|-------|
|          | GROSS REACTION | GROSS REACTION | DOWN             | UP   |       |       |
| JT       | VERT           | HORZ           | DOWN             | HORZ | IN-SX | IN-SX |
| M        | 3270           | 0              | 3270             | 0    | 5-8   | 5-8   |
| H        | 3325           | 0              | 3325             | 0    | 5-8   | 5-8   |

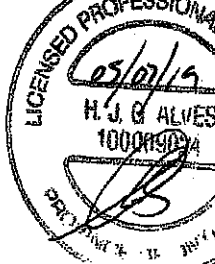
| UNFACTORED REACTIONS | 1ST CASE |        | MAX. MIN. COMPONENT REACTIONS |            | DEAD  | SOIL |
|----------------------|----------|--------|-------------------------------|------------|-------|------|
|                      | COMBINED | SNOW   | LIVE                          | PERM. LIVE |       |      |
| JT                   | 2443     | 1351/0 | 487/0                         | 0/0        | 605/0 | 0/0  |
| M                    | 2485     | 1373/0 | 487/0                         | 0/0        | 616/0 | 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 = 3.88 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                                                                               |                           |                     |                     |                      |       | WEBS  |                           |                     |                     |                      |       |
|--------------------------------------------------------------------------------------|---------------------------|---------------------|---------------------|----------------------|-------|-------|---------------------------|---------------------|---------------------|----------------------|-------|
| MEMB.                                                                                | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD | FACTORED HORZ. LOAD | MAX. FACTORED LENGTH | FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD | FACTORED HORZ. LOAD | MAX. FACTORED LENGTH | FR-TO |
| R-TO                                                                                 |                           | FROM                | TO                  |                      |       | L-C   |                           |                     |                     |                      |       |
| A-B                                                                                  | 0/31                      | -102.1              | -102.1              | 0.07 (1)             | 10.00 | L-C   | -90/347                   | 0.04 (3)            |                     |                      |       |
| B-C                                                                                  | -4802/0                   | -102.1              | -102.1              | 0.54 (1)             | 3.92  | C-K   | 0/2416                    | 0.30 (1)            |                     |                      |       |
| C-N                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  | K-E   | -1559/0                   | 0.19 (1)            |                     |                      |       |
| N-O                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  | E-K   | 0/2317                    | 0.23 (1)            |                     |                      |       |
| O-P                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  | I-E   | -71/381                   | 0.05 (3)            |                     |                      |       |
| P-D                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  | B-L   | 0/4343                    | 0.54 (1)            |                     |                      |       |
| D-Q                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  | I-F   | 0/4433                    | 0.55 (1)            |                     |                      |       |
| Q-R                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  |       |                           |                     |                     |                      |       |
| R-S                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  |       |                           |                     |                     |                      |       |
| S-T                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  |       |                           |                     |                     |                      |       |
| T-E                                                                                  | -5483/0                   | -102.1              | -102.1              | 0.48 (1)             | 4.20  |       |                           |                     |                     |                      |       |
| E-F                                                                                  | -4902/0                   | -102.1              | -102.1              | 0.55 (1)             | 3.88  |       |                           |                     |                     |                      |       |
| F-G                                                                                  | 0/31                      | -102.1              | -102.1              | 0.07 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| M-B                                                                                  | -3144/0                   | 0.0                 | 0.0                 | 0.11 (1)             | 7.78  |       |                           |                     |                     |                      |       |
| H-F                                                                                  | -3201/0                   | 0.0                 | 0.0                 | 0.11 (1)             | 7.74  |       |                           |                     |                     |                      |       |
|  |                           |                     |                     |                      |       |       |                           |                     |                     |                      |       |
| U                                                                                    | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |
| V                                                                                    | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |
| L                                                                                    | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |
| W                                                                                    | 0/4307                    | -38.5               | -38.5               | 0.38 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| X                                                                                    | 0/4307                    | -38.5               | -38.5               | 0.38 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| Y                                                                                    | 0/4307                    | -38.5               | -38.5               | 0.38 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| K                                                                                    | 0/4307                    | -38.5               | -38.5               | 0.38 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| Z                                                                                    | 0/4396                    | -38.5               | -38.5               | 0.39 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| J                                                                                    | 0/4396                    | -38.5               | -38.5               | 0.39 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| AA                                                                                   | 0/4396                    | -38.5               | -38.5               | 0.39 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| AB                                                                                   | 0/4396                    | -38.5               | -38.5               | 0.39 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| I                                                                                    | 0/4396                    | -38.5               | -38.5               | 0.39 (1)             | 10.00 |       |                           |                     |                     |                      |       |
| AC                                                                                   | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |
| AD                                                                                   | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |
| H                                                                                    | 0/0                       | -38.5               | -38.5               | 0.13 (3)             | 10.00 |       |                           |                     |                     |                      |       |

| STORED CONCENTRATED LOADS (LBS) |      |      |      |       |      |       |     |     |  | HEEL | CONN. |
|---------------------------------|------|------|------|-------|------|-------|-----|-----|--|------|-------|
| LOC.                            | LC1  | MAX. | MAX+ | FACE  | DIR. | TYPE  |     |     |  |      |       |
| 5-10-8                          | -473 | -473 | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |
| 21-1-8                          | -473 | -473 | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |
| 21-0-12                         | -55  | -70  | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |
| 16-1-4                          | -55  | -70  | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |
| 5-11-4                          | -55  | -70  | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |
| 8-1-4                           | -123 | -123 | ---  | FRONT | VERT | TOTAL | --- | --- |  |      |       |

# DESIGN CRITERIA

SPECIFIED LOADS:  
 TOP CH. LL = 28.1 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NSCC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 8 OF CBC 2018, CBC 2012  
 - CSA D86-08, CSA 083-14  
 - TPIC 2011, TPIC 2014

(55% OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.90")  
 CALCULATED VERT. DEFL. (LL) = L/999 (0.13")  
 ALLOWABLE DEFL. (TL) = L/360 (0.90")  
 CALCULATED VERT. DEFL. (TL) = L/999 (0.22")

CSL: TC=0.55/1.00 (E-F), BC=0.39/1.00 (I-K-1), WB=0.55/1.00 (F-1), SS=0.25/1.00 (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 |           |      |       |      |         |
|-------------|-----------|------|-------|------|---------|
| DATE        | GRIP(DRY) |      | SHEAR |      | SECTION |
|             | (PSI)     | (PL) | (PSI) | (PL) | (PL)    |
|             | MAX       | MIN  | MAX   | MIN  | MAX     |
| MT20        | 618       | 354  | 1657  | 788  | 1987    |

1658

DATE PLACEMENT TOL. = 0.250 inches

DATE RATION TOL. = 5.0 Deg.

GRIP = 0.88 (L) (INPUT = 0.90)

MTFTAI = 0.55 (L) (INPUT = 0.60)

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

GRIP = 0.88 (L) (INPUT = 0.90)

GRIP METAL = 0.55 (I) (INPUT = 1.00)

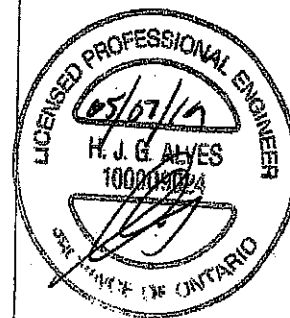
DATE: 05/07/19

1/2

|                                 |                   |               |          |                                                                                                                                                                   |          |
|---------------------------------|-------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| JOB NAME<br>402939              | TRUSS NAME<br>T21 | QUANTITY<br>1 | PLY<br>2 | JOB DESC.<br>GREEN PARK HOMES                                                                                                                                     | DRWG NO. |
| Tamarack Roof Truss, Burlington |                   |               |          | Version 6.230 S Nov 17 2018 MITek Industries, Inc. Tue May 7 17:48:13 2019 Page 2<br>ID: vH3luQzWkBaXQAh?hsf8URzKCTp-qVvnxrdSag6XyilP FslabCy48h4xqRDaeIHycZlqdVv |          |

FACTORED CONCENTRATED LOADS (LBS)

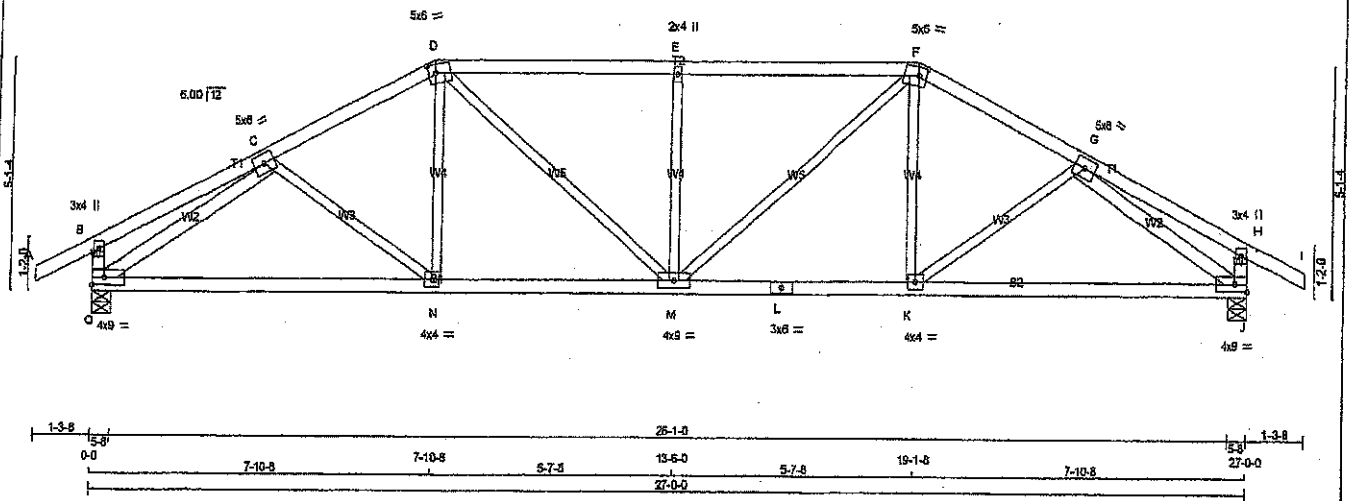
| JT | LOC.    | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|---------|------|------|------|-------|------|-------|------|-------|
| O  | 10-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| P  | 12-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| Q  | 14-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| R  | 16-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| S  | 18-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| T  | 20-1-4  | -123 | -123 | --   | FRONT | VERT | TOTAL | --   | --    |
| U  | 1-11-4  | -55  | -74  | --   | FRONT | VERT | TOTAL | --   | --    |
| V  | 3-11-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| W  | 8-1-4   | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| X  | 10-1-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| Y  | 12-1-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| Z  | 14-1-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| AA | 16-1-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| AB | 20-1-4  | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| AC | 23-0-12 | -55  | -70  | --   | FRONT | VERT | TOTAL | --   | --    |
| AD | 25-0-12 | -55  | -74  | --   | FRONT | VERT | TOTAL | --   | --    |



ENVE NO. TAM 1910779  
STRUCTURAL  
CERTIFICATE ONLY

7/2

|                                                                                    |                          |                      |                 |                                                                                   |          |
|------------------------------------------------------------------------------------|--------------------------|----------------------|-----------------|-----------------------------------------------------------------------------------|----------|
| JOB NAME<br><b>402939</b>                                                          | TRUSS NAME<br><b>T22</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>GREEN PARK HOMES</b>                                              | DRWG NO. |
| Tamarack Roof Truss, Burlington                                                    |                          |                      |                 | Version 6.250 S Nov 17 2018 Mitek Industries, Inc. Tue May 7 17:48:14 2019 Page 1 |          |
| ID: yH3luQzwKBaXQAh?hsf8URzKCTp-lI3A8Be4LzEOasHbXyN_7OK7GYlgDEMouVqU2ziqdv         |                          |                      |                 | 27-0-0 28-3-8 1-3-8                                                               |          |
| 1-3-8 0-0 4-0-8 4-0-8 3-10-0 7-10-8 5-7-8 13-5-0 5-7-8 19-1-8 3-10-0 22-11-8 4-0-8 |                          |                      |                 | Scale = 1/4" = 1'-0"                                                              |          |



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

DRY: SEASONED LUMBER.

#### PLATES (table 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 |      |      |
| D TTWW-m | MT20   | 5.0 | 6.0 | 2.25 | 2.00 |
| E TMWW-w | MT20   | 2.0 | 4.0 |      |      |
| F TTWW-m | MT20   | 5.0 | 6.0 | 2.25 | 2.00 |
| G TMWW-t | MT20   | 5.0 | 6.0 |      |      |
| H TMV+p  | MT20   | 3.0 | 4.0 |      |      |
| J BMVW-t | MT20   | 4.0 | 9.0 |      | Edge |
| K BMWW-t | MT20   | 4.0 | 4.0 |      |      |
| L BS-t   | MT20   | 3.0 | 6.0 |      |      |
| M BMVW-w | MT20   | 4.0 | 9.0 |      |      |
| N BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| O BMVW-t | MT20   | 4.0 | 9.0 |      | Edge |

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

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

| BEARINGS |      | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT | HORZ                    | DOWN                            | HORZ      | UPLIFT   |
| O        | 2037 | 0                       | 2037                            | 0         | 0        |
| J        | 2037 | 0                       | 2037                            | 0         | 0        |

#### UNFACTORED REACTIONS

| JT | 1ST LCASE | SNOW    | LIVE    | PERM LIVE | WIND  | DEAD    | SOIL  |
|----|-----------|---------|---------|-----------|-------|---------|-------|
| O  | 1514      | 863 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 367 / 0 | 0 / 0 |
| J  | 1514      | 863 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 367 / 0 | 0 / 0 |

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

#### BRACING

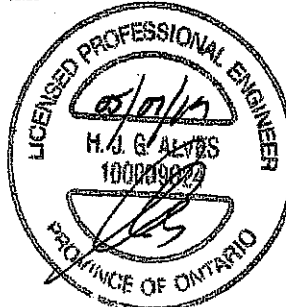
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.68 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           | WEBS  |                           |
|--------|---------------------------|-------|---------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | MEMB. | MAX. FACTORED FORCE (LBS) |
| FR-TO  |                           | FR-TO |                           |
| A-B    | 0 / 31                    | C-N   | -3 / 138                  |
| B-C    | 0 / 19                    | N-D   | 0 / 375                   |
| C-D    | -2593 / 0                 | D-M   | 0 / 647                   |
| D-E    | -2746 / 0                 | M-E   | -702 / 0                  |
| E-F    | -2746 / 0                 | F-G   | 0 / 647                   |
| F-G    | -2593 / 0                 | G-H   | 0 / 375                   |
| G-H    | 0 / 19                    | H-I   | -3 / 138                  |
| H-I    | 0 / 31                    | I-J   | -2768 / 0                 |
| I-J    | -299 / 0                  | J-K   | -2768 / 0                 |
| K-L    | -299 / 0                  | L-M   | 0 / 375                   |
| L-M    | 0 / 19                    | M-N   | -3 / 138                  |
| M-N    | 0 / 31                    | N-O   | -2768 / 0                 |
| N-O    | -299 / 0                  | O-P   | -2768 / 0                 |
| O-P    | 0 / 19                    | P-Q   | 0 / 375                   |
| P-Q    | 0 / 31                    | Q-R   | -3 / 138                  |
| Q-R    | -299 / 0                  | R-S   | -2768 / 0                 |
| R-S    | 0 / 19                    | S-T   | 0 / 375                   |
| S-T    | 0 / 31                    | T-U   | -3 / 138                  |
| T-U    | -299 / 0                  | U-V   | -2768 / 0                 |
| U-V    | 0 / 19                    | V-W   | 0 / 375                   |
| V-W    | 0 / 31                    | W-X   | -3 / 138                  |
| W-X    | -299 / 0                  | X-Y   | -2768 / 0                 |
| X-Y    | 0 / 19                    | Y-Z   | 0 / 375                   |
| Y-Z    | 0 / 31                    | Z-A   | -3 / 138                  |
| Z-A    | -299 / 0                  | A-B   | -2768 / 0                 |



#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. O.C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/699 (0.18")  
ALLOWABLE DEFL.(TL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.30")

CSI: TC=0.52/1.00 (D-E:1), BC=0.71/1.00 (K-M:2), WB=0.77/1.00 (G-J:1), SS=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

AUTOSOLVE HEELS OFF

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

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1688

PLATE PLACEMENT TOL. = 0.250 inches

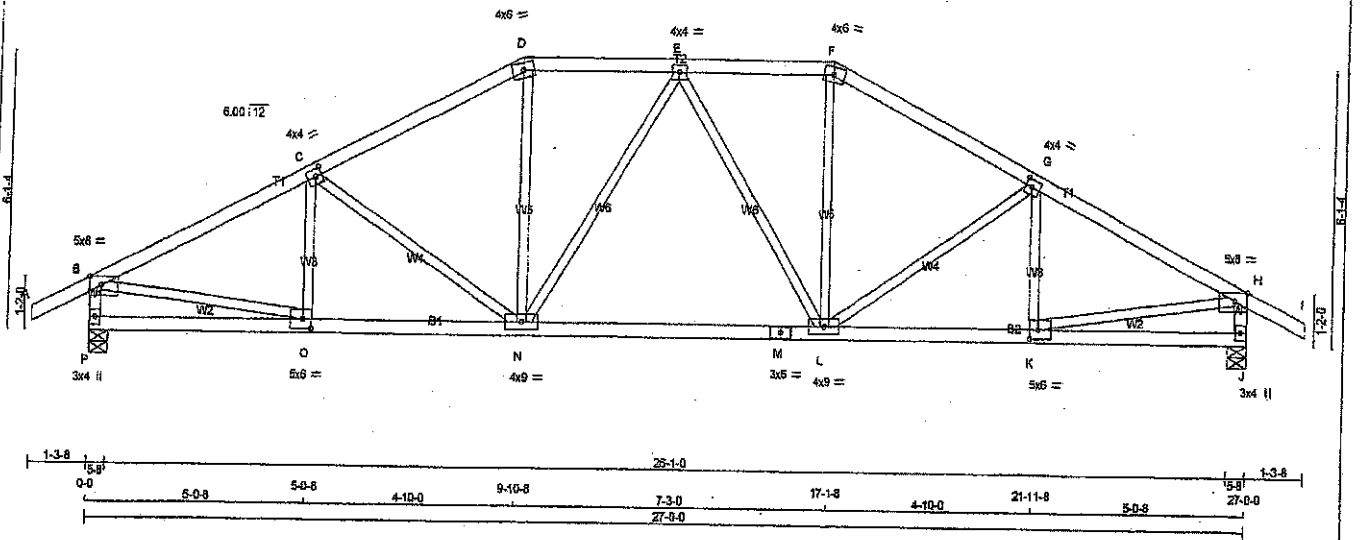
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90)  
JSI METAL= 0.73 (L) (INPUT = 1.00)

DESIGNED BY: 179/0780  
STRUCTURAL  
ENGINEER



|                                                                                                        |                          |                      |                 |                                      |          |
|--------------------------------------------------------------------------------------------------------|--------------------------|----------------------|-----------------|--------------------------------------|----------|
| JOB NAME<br><b>402939</b>                                                                              | TRUSS NAME<br><b>T23</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>GREEN PARK HOMES</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington                                                                        |                          |                      |                 | TRUSS DESC.                          |          |
| Version 8.230 S Nov 17 2018 MIT Industries, Inc. Tue May 7 17:48:15 2019 Page 1                        |                          |                      |                 |                                      |          |
| ID: yH3luQzwKBaXQAh?hsf8URzKCTp-mudYMx6IHMF0sn5fuDfcHqYKoPkwW1YE00vzlqdU                               |                          |                      |                 |                                      |          |
| 1-3-8 0-0 5-0-8 5-0-8 4-10-0 9-10-8 3-7-8 13-8-0 3-7-8 17-1-8 4-10-0 21-11-8 5-0-8 27-0-0 28-3-6 1-3-8 |                          |                      |                 |                                      |          |
| Scale = 1/4" = 1'-0"                                                                                   |                          |                      |                 |                                      |          |



| LUMBER | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|--------|-------------------|--------|------|--------|--------|
| A - D  | 2x4 DRY No.2      | SPF    |      |        |        |
| E - F  | 2x4 DRY No.2      | SPF    |      |        |        |
| G - I  | 2x4 DRY No.2      | SPF    |      |        |        |
| J - B  | 2x4 DRY No.2      | SPF    |      |        |        |
| P - H  | 2x4 DRY No.2      | SPF    |      |        |        |
| J - M  | 2x4 DRY No.2      | SPF    |      |        |        |
| M - J  | 2x4 DRY No.2      | SPF    |      |        |        |

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

| PLATES (table is in inches) | PLATES | W   | LEN | Y    | X    |
|-----------------------------|--------|-----|-----|------|------|
| JT TYPE                     | MT20   | 5.0 | 8.0 | Edge | 3.50 |
| B TMVW-p                    | MT20   | 4.0 | 4.0 | 2.00 | 1.75 |
| C TMVWV-l                   | MT20   | 4.0 | 4.0 |      |      |
| D TTV-m                     | MT20   | 4.0 | 4.0 |      |      |
| E TMVWV-l                   | MT20   | 4.0 | 4.0 |      |      |
| F TTV-m                     | MT20   | 4.0 | 4.0 |      |      |
| G TMVWV-l                   | MT20   | 4.0 | 4.0 | 2.00 | 1.75 |
| H TMVW-p                    | MT20   | 5.0 | 8.0 | Edge | 3.50 |
| J BMV1+p                    | MT20   | 3.0 | 4.0 |      |      |
| K BMVWV-l                   | MT20   | 5.0 | 8.0 | 2.50 | 2.25 |
| L BMVWVW-l                  | MT20   | 4.0 | 9.0 |      |      |
| M BS-l                      | MT20   | 3.0 | 6.0 |      |      |
| N BMVWVW-l                  | MT20   | 4.0 | 9.0 |      |      |
| O BMVWV-l                   | MT20   | 5.0 | 8.0 | 2.50 | 2.25 |
| P BMV1+p                    | MT20   | 3.0 | 4.0 |      |      |

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

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

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | RECORD |
|----------|----------------|------------------|-------|--------|
|          | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |
| JT VERT  | HORZ           | DOWN             | HORZ  | UPLIFT |
| P        | 2037           | 0                | 2037  | 0      |
| J        | 2037           | 0                | 2037  | 0      |

#### UNFACTORED REACTIONS

| 1ST CASE    | MAX/MIN | COMPONENT REACTIONS |           |       |       |         |       |  |
|-------------|---------|---------------------|-----------|-------|-------|---------|-------|--|
| JT COMBINED | SNOW    | LIVE                | PERM.LIVE | WIND  | DEAD  | SOIL    |       |  |
| P           | 1514    | 863 / 0             | 284 / 0   | 0 / 0 | 0 / 0 | 367 / 0 | 0 / 0 |  |
| J           | 1514    | 863 / 0             | 284 / 0   | 0 / 0 | 0 / 0 | 367 / 0 | 0 / 0 |  |

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

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 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 | MAX. FACTORED | FACTORED             | WEBS                   | MAX. FACTORED    |
|--------|---------------|----------------------|------------------------|------------------|
| MEMB.  | FORCE (LBS)   | VERT. LOAD LC1 (PLF) | MAX. MEMB. FORCE (LBS) | MAX. FORCE (LBS) |
| FR-TO  |               | FROM TO              | LENGTH FR-TO           |                  |
| A-B    | 0 / 31        | -102.1 -102.1        | 0.13 (1)               | 10.00            |
| B-C    | -2663 / 0     | -102.1 -102.1        | 0.41 (1)               | 3.88             |
| C-D    | -2337 / 0     | -102.1 -102.1        | 0.36 (1)               | 4.14             |
| D-E    | -2078 / 0     | -102.1 -102.1        | 0.20 (1)               | 4.53             |
| E-F    | -2078 / 0     | -102.1 -102.1        | 0.20 (1)               | 4.53             |
| F-G    | -2337 / 0     | -102.1 -102.1        | 0.36 (1)               | 4.14             |
| G-H    | -2663 / 0     | -102.1 -102.1        | 0.41 (1)               | 3.88             |
| H-I    | 0 / 31        | -102.1 -102.1        | 0.13 (1)               | 10.00            |
| P-B    | -1951 / 0     | 0.0 0.0              | 0.20 (1)               | 6.03             |
| J-H    | -1951 / 0     | 0.0 0.0              | 0.20 (1)               | 6.03             |
| P-O    | 0 / 0         | -38.5 -38.5          | 0.16 (3)               | 10.00            |
| O-N    | 0 / 2404      | -38.5 -38.5          | 0.56 (1)               | 10.00            |
| N-M    | 0 / 2211      | -38.5 -38.5          | 0.53 (2)               | 10.00            |
| M-L    | 0 / 2211      | -38.5 -38.5          | 0.53 (2)               | 10.00            |
| L-K    | 0 / 2404      | -38.5 -38.5          | 0.56 (1)               | 10.00            |
| K-J    | 0 / 0         | -38.5 -38.5          | 0.16 (3)               | 10.00            |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 069-09, CSA 068-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LOAD

ALLOWABLE DEFL.(LL) = L/900 (0.90")  
CALCULATED VERT. DEFL.(LL) = 1/909 (0.13")  
ALLOWABLE DEFL.(TL) = L/900 (0.90")  
CALCULATED VERT. DEFL.(TL) = 1/909 (0.23")

CSI: TO=0.41/1.00 (G-H-1), BC=0.58/1.00 (K-L-1),  
WB=0.55/1.00 (H-K-1), SSI=0.22/1.00 (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

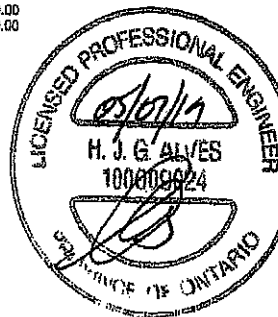
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 610 354 1867 789 1997 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

ISI GRIP= 0.85 (Q) (INPUT = 0.90)  
ISI METAL= 0.65 (M) (INPUT = 1.00)



DR: JED TAM 17910781  
STRUCTURAL  
C: JED TAM ONLY

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

| CHORDS        |             |                  |                 | WEBS                |       |             |               |
|---------------|-------------|------------------|-----------------|---------------------|-------|-------------|---------------|
| MAX. FACTORED |             | FACTORED         |                 | MAX. FACTORED       |       |             |               |
| MEMB.         | FORCE (LBS) | VERT. LOAD (LBS) | MAX. CSI (LC)   | MAX. UNBRAC. LENGTH | MEMB. | FORCE (LBS) | MAX. CSI (LC) |
| FR-TO         |             | FROM TO          |                 |                     | FR-TO |             |               |
| A-B           | 0/31        | -102.1           | -102.1 0.13 (1) | 10.00               | N-C   | -84 / 185   | 0.04 (3)      |
| B-C           | -2694 / 0   | -102.1           | -102.1 0.61 (1) | 3.83                | C-M   | -892 / 0    | 0.67 (1)      |
| C-D           | -2111 / 8   | -102.1           | -102.1 0.53 (1) | 4.11                | M-D   | 0 / 537     | 0.12 (1)      |
| D-E           | -1868 / 0   | -102.1           | -102.1 0.18 (1) | 4.76                | D-L   | 0 / 4       | 0.00 (1)      |
| E-F           | -2113 / 8   | -102.1           | -102.1 0.53 (1) | 4.11                | L-E   | 0 / 541     | 0.12 (1)      |
| F-G           | -2693 / 0   | -102.1           | -102.1 0.61 (1) | 3.63                | L-F   | -869 / 0    | 0.66 (1)      |
| G-H           | 0/31        | -102.1           | -102.1 0.13 (1) | 10.00               | J-F   | -86 / 185   | 0.04 (3)      |
| O-B           | -1942 / 0   | 0.0              | 0.0 0.20 (1)    | 6.04                | B-N   | 0 / 2462    | 0.55 (1)      |
| O-G           | -1942 / 0   | 0.0              | 0.0 0.20 (1)    | 8.04                | J-G   | 0 / 2461    | 0.55 (1)      |
| D-N           | 0/0         | -38.5            | -38.5 0.27 (3)  | 10.00               |       |             |               |
| M-N           | 0 / 2438    | -38.5            | -38.5 0.58 (2)  | 10.00               |       |             |               |
| M-L           | 0 / 1866    | -38.5            | -38.5 0.40 (1)  | 10.00               |       |             |               |
| K             | 0 / 2437    | -38.5            | -38.5 0.57 (2)  | 10.00               |       |             |               |
| J             | 0 / 2437    | -38.5            | -38.5 0.57 (2)  | 10.00               |       |             |               |
| I             | 0/0         | -38.5            | -38.5 0.27 (3)  | 10.00               |       |             |               |

[M] [F]

ISI GRIP= 0.89 (E) (INPUT = 0.80 )  
ISI METAL= 0.71 (K) (INPUT = 1.00 )

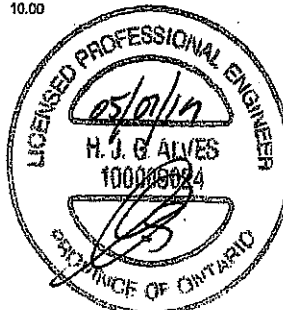
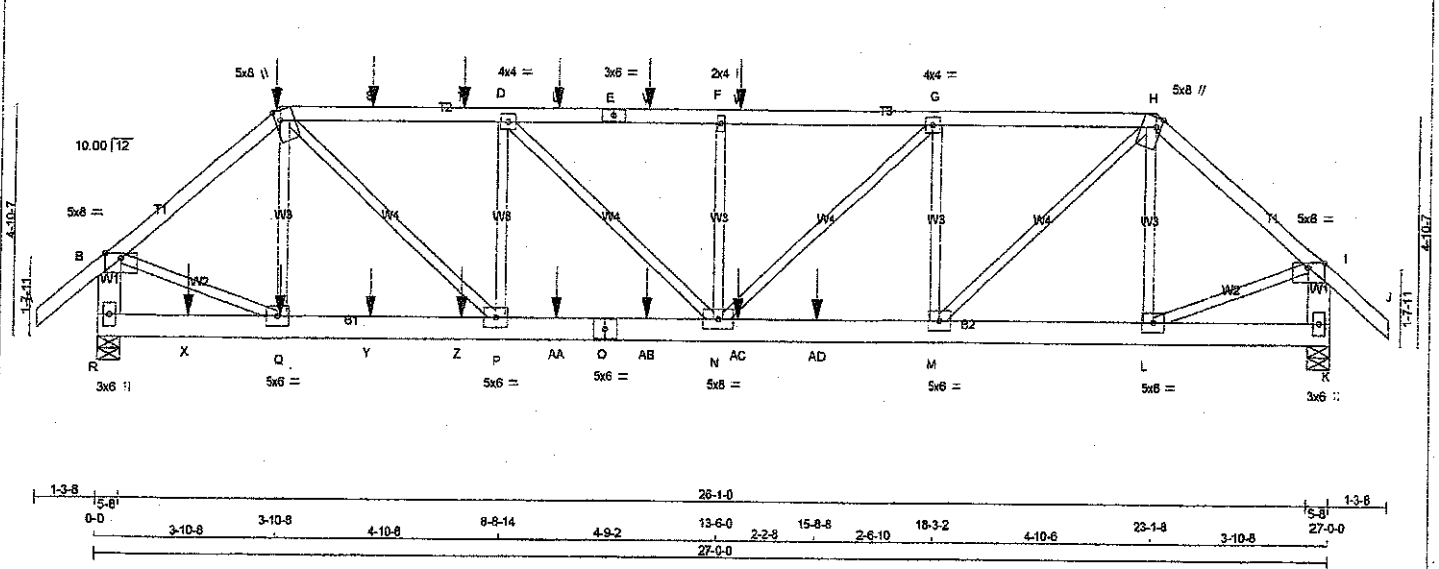


EXHIBIT A-1 (AM) 79/0782  
NATURAL  
C. ...





TOTAL WEIGHT = 2 X 133 = 266 lb

| CHORDS | SIZE | LUMBER | DESCR. |
|--------|------|--------|--------|
| A - C  | 2x4  | DRY    | No.2   |
| C - E  | 2x4  | DRY    | No.2   |
| E - H  | 2x4  | DRY    | No.2   |
| H - J  | 2x4  | DRY    | No.2   |
| R - B  | 2x6  | DRY    | No.2   |
| K - I  | 2x6  | DRY    | No.2   |
| R - O  | 2x6  | DRY    | No.2   |
| O - K  | 2x6  | DRY    | No.2   |

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    |       |                      |             |
| A-C                                     | 1     | 12                   | SIDE(61.0)  |
| C-E                                     | 1     | 12                   | SIDE(61.0)  |
| E-H                                     | 1     | 12                   | SIDE(61.0)  |
| H-J                                     | 1     | 12                   | SIDE(61.0)  |
| R-B                                     | 2     | 12                   | TOP         |
| K-I                                     | 2     | 12                   | TOP         |
| BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS |       |                      |             |
| R-O                                     | 2     | 12                   | SIDE(183.1) |
| O-K                                     | 2     | 12                   | SIDE(183.1) |
| WEBS: (0.122"x3") SPIRAL NAILS          |       |                      |             |
| 2x3                                     | 1     | 6                    | SIDE(0.0)   |

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 in inches)

| JT | TYPE   | PLATES | W   | LEN | Y         | X |
|----|--------|--------|-----|-----|-----------|---|
| B  | TMWV-p | MT20   | 5.0 | 8.0 | Edge      |   |
| C  | TTWV-m | MT20   | 5.0 | 8.0 | Edge 1.25 |   |
| D  | TMWV-t | MT20   | 4.0 | 4.0 |           |   |
| E  | TS-t   | MT20   | 3.0 | 6.0 |           |   |
| F  | TMWV-w | MT20   | 2.0 | 4.0 |           |   |
| G  | TMWV-t | MT20   | 4.0 | 4.0 |           |   |
| H  | TTWV-m | MT20   | 5.0 | 8.0 | Edge 1.25 |   |
| I  | TMWV-p | MT20   | 5.0 | 8.0 | Edge      |   |
| K  | BMV1-p | MT20   | 3.0 | 6.0 |           |   |
| L  | M.P.Q. |        |     |     |           |   |
| L  | BMWV-t | MT20   | 5.0 | 8.0 |           |   |
| N  | BMWV-t | MT20   | 5.0 | 8.0 |           |   |
| O  | BS-t   | MT20   | 5.0 | 6.0 |           |   |
| R  | BMV1-p | MT20   | 3.0 | 6.0 |           |   |

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

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

| BEARINGS |                | FACTORED |      | MAXIMUM FACTORED |      | INPUT |        | REQRD |       |
|----------|----------------|----------|------|------------------|------|-------|--------|-------|-------|
| JT       | GROSS REACTION | VERT     | HORZ | GROSS REACTION   | DOWN | HORZ  | UPLIFT | BRG   | IN-SX |
| R        | 3067           | 0        | 0    | 3067             | 0    | 0     | 0      | 5-8   | 5-8   |
| K        | 2763           | 0        | 0    | 2763             | 0    | 0     | 0      | 5-8   | 5-8   |

UNFACTORED REACTIONS

| JT | 1ST CASE | 2ND CASE | 3RD CASE | 4TH CASE | 5TH CASE | 6TH CASE | 7TH CASE | 8TH CASE |
|----|----------|----------|----------|----------|----------|----------|----------|----------|
| R  | 2274     | 1311/0   | 412/0    | 0/0      | 0/0      | 560/0    | 0/0      | 0/0      |
| K  | 2047     | 1188/0   | 368/0    | 0/0      | 0/0      | 491/0    | 0/0      | 0/0      |

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.04 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        |             |                  |               | WEBS          |             |               |          |
|---------------|-------------|------------------|---------------|---------------|-------------|---------------|----------|
| MAX. FACTORED |             | FACTORED         |               | MAX. FACTORED |             | FACTORED      |          |
| MEMB.         | FORCE (LBS) | VERT. LOAD (LBS) | MAX. CSI (LC) | MEMB.         | FORCE (LBS) | MAX. CSI (LC) | FACTORED |
| FR-TO         |             | FROM TO          | LENGTH        | FR-TO         |             |               |          |
| A-B           | 0/45        | -102.1 -102.1    | 0.08 (1)      | 10.00         | Q-C         | -406/44       | 0.07 (1) |
| B-C           | -3032/0     | -102.1 -102.1    | 0.19 (1)      | 5.12          | C-P         | 0/2393        | 0.30 (1) |
| C-S           | -4075/0     | -102.1 -102.1    | 0.37 (1)      | 4.34          | P-D         | -1438/0       | 0.24 (1) |
| S-T           | -4075/0     | -102.1 -102.1    | 0.37 (1)      | 4.34          | D-N         | 0/919         | 0.11 (1) |
| T-D           | -4075/0     | -102.1 -102.1    | 0.37 (1)      | 4.34          | N-F         | -616/0        | 0.10 (1) |
| D-U           | -4743/0     | -102.1 -102.1    | 0.40 (1)      | 4.04          | N-G         | 0/1001        | 0.12 (1) |
| U-E           | -4743/0     | -102.1 -102.1    | 0.40 (1)      | 4.04          | M-G         | -1228/0       | 0.21 (1) |
| E-V           | -4743/0     | -102.1 -102.1    | 0.40 (1)      | 4.04          | M-H         | 0/2681        | 0.33 (1) |
| V-F           | -4743/0     | -102.1 -102.1    | 0.40 (1)      | 4.04          | L-H         | -509/0        | 0.09 (1) |
| F-W           | -4743/0     | -102.1 -102.1    | 0.29 (1)      | 4.18          | B-Q         | 0/2430        | 0.30 (1) |
| W-G           | -4743/0     | -102.1 -102.1    | 0.29 (1)      | 4.18          | L-I         | 0/2148        | 0.27 (1) |
| G-H           | -4015/0     | -102.1 -102.1    | 0.28 (1)      | 4.51          |             |               |          |
| H-I           | -2680/0     | -102.1 -102.1    | 0.18 (1)      | 5.38          |             |               |          |
| I-J           | 0/45        | -102.1 -102.1    | 0.08 (1)      | 10.00         |             |               |          |
| R-B           | -3002/0     | 0.0 0.0          | 0.11 (1)      | 7.81          |             |               |          |
| K-I           | -2692/0     | 0.0 0.0          | 0.10 (1)      | 7.81          |             |               |          |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.    | LC1  | MAX. | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|---------|------|------|------|------|------|-------|------|-------|
| C  | 3-10-8  | -274 | -274 | -    | BACK | VERT | TOTAL | -    | -     |
| Q  | 3-11-4  | -96  | -96  | -    | BACK | VERT | TOTAL | -    | -     |
| S  | 5-11-4  | -96  | -96  | -    | BACK | VERT | TOTAL | -    | -     |
| T  | 7-11-4  | -96  | -96  | -    | BACK | VERT | TOTAL | -    | -     |
| U  | 9-11-4  | -96  | -96  | -    | BACK | VERT | TOTAL | -    | -     |
| V  | 11-11-4 | -96  | -96  | -    | BACK | VERT | TOTAL | -    | -     |

DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, OBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.60")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.10")  
ALLOWABLE DEFL. (TL) = L/360 (0.60")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.17")

CS: TC=0.40/1.00 (D-F-1), BC=0.53/1.00 (M-N-1), WB=0.33/1.00 (H-M-1), SS=0.19/1.00 (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) SHEAR SECTION (PSI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1867 1656

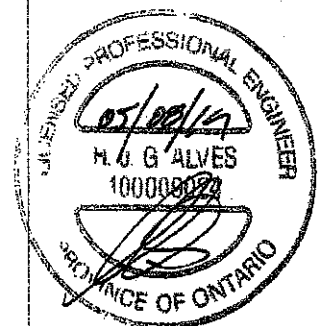
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

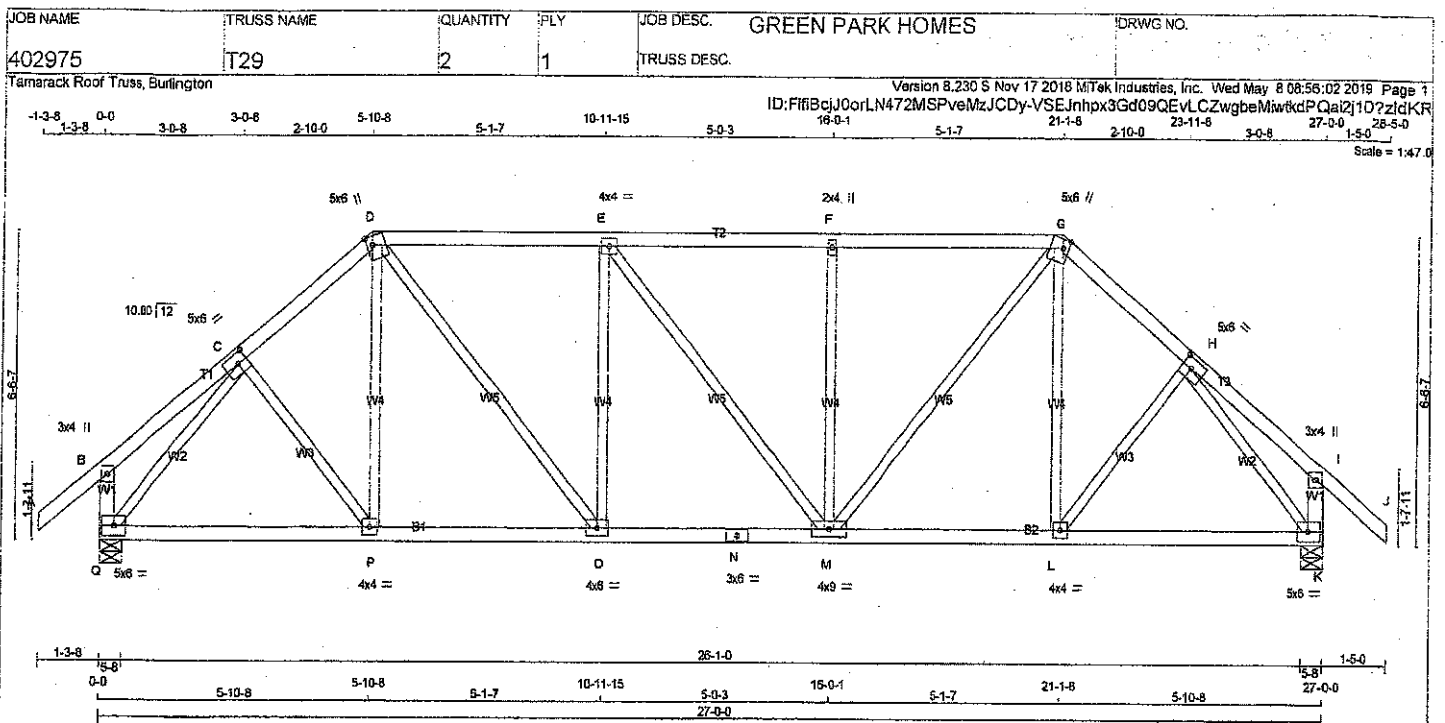
SI GRIP=0.89 (C) (INPUT = 0.90)  
SI METAL=0.65 (O) (INPUT = 1.00)

DWG NO. TAM 7710924  
STRUCTURAL  
COMPONENT ONLY

| FACTORED CONCENTRATED LOADS (LBS) |         |      |      |      |      |      |       |      |       |
|-----------------------------------|---------|------|------|------|------|------|-------|------|-------|
| JT                                | LOC.    | LC1  | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
| W                                 | 13-11-4 | -96  | -96  | —    | BACK | VERT | TOTAL | —    | —     |
| X                                 | 1-11-4  | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| Y                                 | 5-11-4  | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| Z                                 | 7-11-4  | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| AA                                | 9-11-4  | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| AB                                | 11-11-4 | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| AC                                | 13-11-4 | -36  | -46  | —    | BACK | VERT | TOTAL | —    | —     |
| AD                                | 15-8-8  | -745 | -745 | —    | BACK | VERT | TOTAL | —    | —     |



DWG NO. TAM 1910924  
 STRUCTURAL  
 COMPONENT ONLY 7/2



TOTAL WEIGHT = 2 X 125 = 251 lb

| LUMBER            |      |        |        |
|-------------------|------|--------|--------|
| N. L. G. A. RULES |      |        |        |
| CHORDS            | SIZE | LUMBER | DESCR. |
| A - D             | 2x4  | DRY    | No.2   |
| D - G             | 2x4  | DRY    | No.2   |
| G - J             | 2x4  | DRY    | No.2   |
| Q - B             | 2x4  | DRY    | No.2   |
| K - I             | 2x4  | DRY    | No.2   |
| Q - N             | 2x4  | DRY    | No.2   |
| N - K             | 2x4  | DRY    | No.2   |

ALL WEBS 2x3 DRY No.2  
EXCEPT

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-1                    | MT20   | 5.0 | 6.0 | 2.50 2.50 |
| D TTWW+m                    | MT20   | 5.0 | 6.0 | 2.25 1.50 |
| E TMWW-1                    | MT20   | 4.0 | 4.0 |           |
| F TMWW+w                    | MT20   | 2.0 | 4.0 |           |
| G TTWW+m                    | MT20   | 5.0 | 6.0 | 2.25 1.50 |
| H TMWW-1                    | MT20   | 5.0 | 6.0 | 2.50 2.50 |
| I TMV+p                     | MT20   | 3.0 | 4.0 |           |
| K BMWW-1                    | MT20   | 5.0 | 6.0 |           |
| L BMWW-1                    | MT20   | 4.0 | 4.0 |           |
| M BMWW-1                    | MT20   | 4.0 | 6.0 |           |
| N BS-1                      | MT20   | 3.0 | 6.0 |           |
| O BMWW-1                    | MT20   | 4.0 | 6.0 |           |
| P BMWW-1                    | MT20   | 4.0 | 4.0 |           |
| Q BMWW-1                    | MT20   | 5.0 | 6.0 |           |

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

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| JT | VERT                    | HORZ                            | DOWN      | HORZ     |
| Q  | 2040                    | 0                               | 2040      | 0        |
| K  | 2053                    | 0                               | 2053      | 0        |

##### UNFACTORED REACTIONS

|    | 1ST LOASE | SNOW    | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|-----------|---------|---------|-----------|-------|---------|-------|
| JT | COMBINED  |         |         |           |       |         |       |
| Q  | 1516      | 865 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 388 / 0 | 0 / 0 |
| K  | 1525      | 872 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 389 / 0 | 0 / 0 |

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

##### 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 |                           |                           |                            | WEBS  |                           |                            |  |
|--------|---------------------------|---------------------------|----------------------------|-------|---------------------------|----------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH FR-TO |  |
| A-B    | 0 / 45                    | -102.1 -102.1             | 0.14 (1)                   | C-P   | 0 / 186                   | 0.04 (2)                   |  |
| B-C    | 0 / 18                    | -102.1 -102.1             | 0.12 (1)                   | P-D   | 0 / 193                   | 0.05 (3)                   |  |
| C-D    | -1877 / 0                 | -102.1 -102.1             | 0.16 (1)                   | D-O   | 0 / 957                   | 0.22 (1)                   |  |
| D-E    | -2032 / 0                 | -102.1 -102.1             | 0.44 (1)                   | O-E   | -557 / 0                  | 0.39 (1)                   |  |
| E-F    | -2031 / 0                 | -102.1 -102.1             | 0.44 (1)                   | E-M   | -3 / 0                    | 0.00 (1)                   |  |
| F-G    | -2030 / 0                 | -102.1 -102.1             | 0.44 (1)                   | M-F   | -598 / 0                  | 0.39 (1)                   |  |
| G-H    | -1877 / 0                 | -102.1 -102.1             | 0.16 (1)                   | M-G   | 0 / 954                   | 0.21 (1)                   |  |
| H-I    | 0 / 18                    | -102.1 -102.1             | 0.12 (1)                   | L-G   | 0 / 193                   | 0.05 (3)                   |  |
| I-J    | 0 / 49                    | -102.1 -102.1             | 0.17 (1)                   | L-H   | 0 / 187                   | 0.04 (2)                   |  |
| Q-B    | -261 / 0                  | 0.0                       | 0.03 (1)                   | Q-C   | -2137 / 0                 | 0.76 (1)                   |  |
| K-I    | -274 / 0                  | 0.0                       | 0.03 (1)                   | H-K   | -2137 / 0                 | 0.76 (1)                   |  |
| Q-P    | 0 / 1314                  | -38.5 -38.5               | 0.40 (2)                   |       |                           |                            |  |
| P-O    | 0 / 1424                  | -38.5 -38.5               | 0.42 (2)                   |       |                           |                            |  |
| O-N    | 0 / 2032                  | -38.5 -38.5               | 0.41 (1)                   |       |                           |                            |  |
| N-M    | 0 / 2032                  | -38.5 -38.5               | 0.41 (1)                   |       |                           |                            |  |
| M-L    | 0 / 1425                  | -38.5 -38.5               | 0.42 (2)                   |       |                           |                            |  |
| L-K    | 0 / 1314                  | -38.5 -38.5               | 0.40 (2)                   |       |                           |                            |  |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |            |
|------------|------------|
| TOP CH. LL | = 29.1 PSF |
| DL         | = 6.0 PSF  |
| BOT CH. LL | = 10.5 PSF |
| DL         | = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2010, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.90")  
CALCULATED VERT. DEFL.(LL) =  $L/999$  (0.08")  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.90")  
CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.14")

CSI: TC=0.44/1.00 (D-E-1), BC=0.42/1.00 (L-M-2), WB=0.78/1.00 (H-K-1), SSI=0.24/1.00 (D-E-1)

DOI 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.

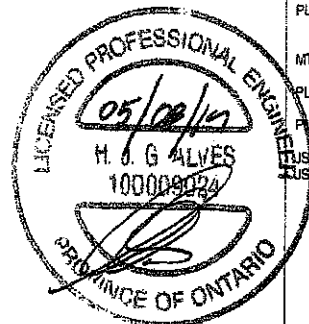
##### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-----------------|-------------|---------------|
| MT20            | 618         | 354           |
| 1687            | 788         | 1987          |
| 1658            |             |               |

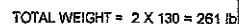
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 8.0 Deg.

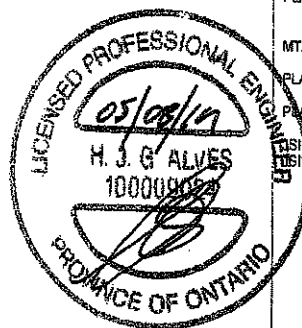
GRIP = 0.89 (G) (INPUT = 0.90)  
METAL = 0.72 (N) (INPUT = 1.00)

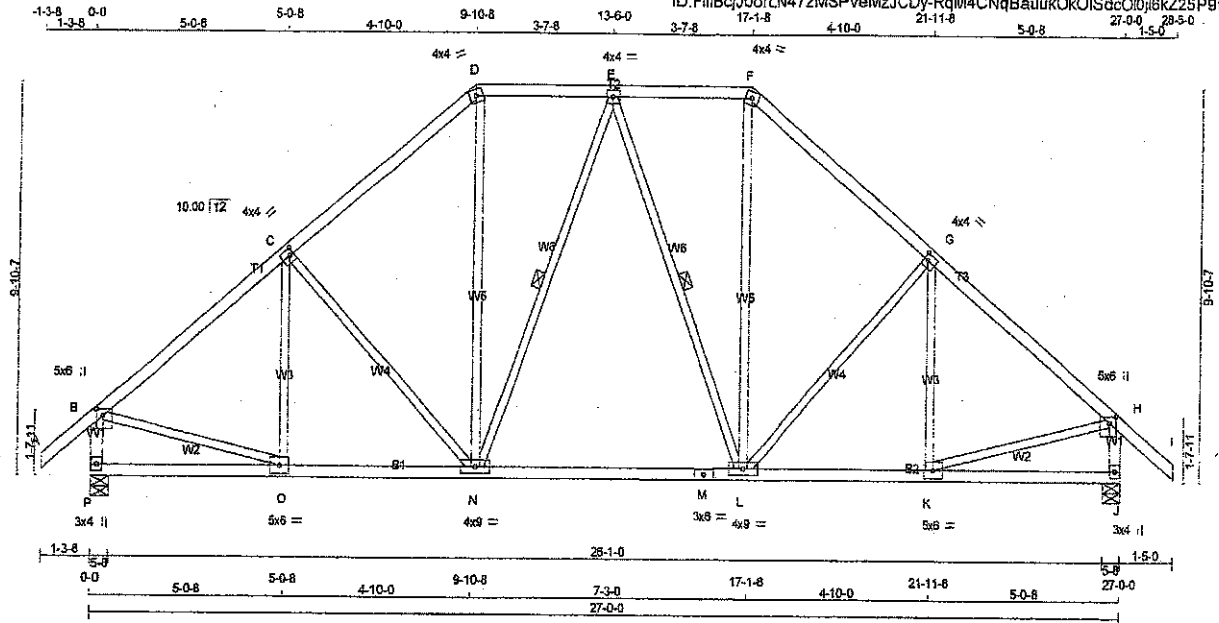


DWG NO. TAM 11910925  
STRUCTURAL  
COMPONENT ONLY



DWG NO. TAM 77910.926  
STRUCTURAL  
COMPONENT ONLY





TOTAL WEIGHT = 2 X 135 = 270 lb (M)

#### 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    |
| P - B  | 2x4  | DRY No.2 | SPF    |
| J - H  | 2x4  | DRY No.2 | SPF    |
| M - M  | 2x4  | DRY No.2 | SPF    |
| P - J  | 2x4  | DRY No.2 | SPF    |

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMVW+p | MT20   | 5.0 | 6.0 | 2.00 | 2.00 |
| C  | TMVW-t | MT20   | 4.0 | 4.0 | 2.00 | 1.25 |
| D  | TTW-m  | MT20   | 4.0 | 4.0 |      |      |
| E  | TMVW-t | MT20   | 4.0 | 4.0 |      |      |
| F  | TTW-m  | MT20   | 4.0 | 4.0 |      |      |
| G  | TMVW-t | MT20   | 4.0 | 4.0 | 2.00 | 1.25 |
| H  | TMVW+p | MT20   | 5.0 | 6.0 | 2.00 | 2.00 |
| J  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |
| K  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| L  | BMVW-t | MT20   | 4.0 | 9.0 |      |      |
| M  | BS-t   | MT20   | 3.0 | 6.0 |      |      |
| N  | BMVW-t | MT20   | 4.0 | 9.0 |      |      |
| O  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| P  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |

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

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| JT | VERT                    | DOWN                            | UP        | IN-SX    |
| P  | 2040                    | 0                               | 0         | 5-8      |
| J  | 2053                    | 0                               | 0         | 5-8      |

##### UNFACTORED REACTIONS

|    | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS |         |            |       |         |       |
|----|-----------|-------------------------------|---------|------------|-------|---------|-------|
| JT | COMBINED  | SNOW                          | LIVE    | PERM. LIVE | WIND  | DEAD    | SOIL  |
| P  | 1516      | 865 / 0                       | 284 / 0 | 0 / 0      | 0 / 0 | 368 / 0 | 0 / 0 |
| J  | 1525      | 872 / 0                       | 284 / 0 | 0 / 0      | 0 / 0 | 369 / 0 | 0 / 0 |

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

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 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 E-N, E-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 |                           |                           |                           | WEBS  |                           |                           |  |
|--------|---------------------------|---------------------------|---------------------------|-------|---------------------------|---------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (LC) |  |
| FR-TO  |                           |                           |                           | FR-TO |                           |                           |  |
| A-B    | 0 / 45                    | -102.1                    | -102.1 0.14 (1)           | O-C   | -189 / 79                 | 0.10 (1)                  |  |
| B-C    | -1890 / 0                 | -102.1                    | -102.1 0.39 (1)           | C-N   | -339 / 0                  | 0.37 (1)                  |  |
| C-D    | -1678 / 0                 | -102.1                    | -102.1 0.36 (1)           | N-D   | 0 / 712                   | 0.18 (1)                  |  |
| D-E    | -1262 / 0                 | -102.1                    | -102.1 0.17 (1)           | E-N   | -231 / 0                  | 0.18 (1)                  |  |
| E-F    | -1262 / 0                 | -102.1                    | -102.1 0.17 (1)           | E-L   | -231 / 0                  | 0.18 (1)                  |  |
| F-G    | -1676 / 0                 | -102.1                    | -102.1 0.36 (1)           | L-F   | 0 / 712                   | 0.16 (1)                  |  |
| G-H    | -1880 / 0                 | -102.1                    | -102.1 0.39 (1)           | L-G   | -339 / 0                  | 0.37 (1)                  |  |
| H-I    | 0 / 49                    | -102.1                    | -102.1 0.17 (1)           | K-G   | -189 / 79                 | 0.10 (1)                  |  |
| P-B    | -1957 / 0                 | 0.0                       | 0.0 0.21 (1)              | B-O   | 0 / 1529                  | 0.34 (1)                  |  |
| J-H    | -1970 / 0                 | 0.0                       | 0.0 0.21 (1)              | K-H   | 0 / 1529                  | 0.34 (1)                  |  |
| P-O    | 0 / 0                     | -38.5                     | -38.5 0.16 (3)            |       |                           |                           |  |
| O-N    | 0 / 1481                  | -38.5                     | -38.5 0.43 (2)            |       |                           |                           |  |
| N-M    | 0 / 1342                  | -38.5                     | -38.5 0.41 (2)            |       |                           |                           |  |
| M-L    | 0 / 1342                  | -38.5                     | -38.5 0.41 (2)            |       |                           |                           |  |
| L-K    | 0 / 1481                  | -38.5                     | -38.5 0.43 (2)            |       |                           |                           |  |
| K-J    | 0 / 0                     | -38.5                     | -38.5 0.16 (3)            |       |                           |                           |  |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|                       |               |
|-----------------------|---------------|
| TOP CH.               | LL = 28.1 PSF |
| DL = 6.0 PSF          |               |
| BOT CH.               | LL = 10.5 PSF |
| DL = 7.0 PSF          |               |
| TOTAL LOAD = 52.5 PSF |               |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2012  
- CSA 086-06, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")  
ALLOWABLE DEFL.(TL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.39/1.00 (G-H), BC=0.43/1.00 (K-L), WS=0.37/1.00 (G-L), SS=0.19/1.00 (G-H)

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

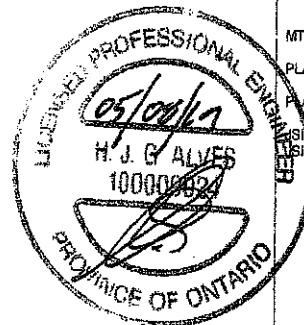
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

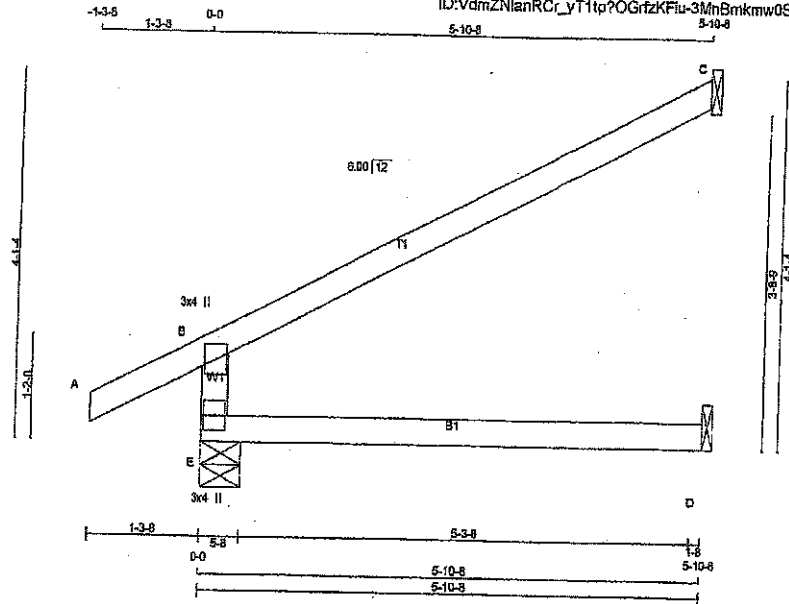
GRIP= 0.87 (B) (INPUT = 0.90)  
METAL= 0.42 (B) (INPUT = 1.00)



DWG NO. TAM 19/09/27  
STRUCTURAL  
COMPONENT ONLY



|                                 |                  |                |          |                               |          |
|---------------------------------|------------------|----------------|----------|-------------------------------|----------|
| JOB NAME<br>402938              | TRUSS NAME<br>J1 | QUANTITY<br>19 | PLY<br>1 | JOB DESC.<br>GREEN PARK HOMES | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |                |          | TRUSS DESC.                   |          |



| 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 |   |   |

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

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|-------------------------|------|---------------------------------|------|-----------------|----------------|
|    | VERT                    | HORZ | DOWN                            | HORZ |                 |                |
| E  | 646                     | 0    | 646                             | 0    | 5-8             | 5-8            |
| C  | 225                     | 0    | 225                             | 0    | 1-8             | 1-8            |
| D  | 93                      | 0    | 119                             | 0    | 1-8             | 1-8            |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| JT | COMBINED | 1ST LCASE |        | MAX. MIN. COMPONENT REACTIONS |       | WIND DEAD | SOIL  |
|----|----------|-----------|--------|-------------------------------|-------|-----------|-------|
|    |          | SNOW      | LIVE   | PERM. LIVE                    | WIND  |           |       |
| E  | 473      | 282 / 0   | 72 / 0 | 0 / 0                         | 0 / 0 | 109 / 0   | 0 / 0 |
| C  | 154      | 128 / 0   | 0 / 0  | 0 / 0                         | 0 / 0 | 28 / 0    | 0 / 0 |
| D  | 85       | 0 / 0     | 51 / 0 | 0 / 0                         | 0 / 0 | 34 / 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 = 8.25 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)

| MEMB. | FR-TO | CHORDS                    |                           | WEBS                      |                           |
|-------|-------|---------------------------|---------------------------|---------------------------|---------------------------|
|       |       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (LBS) | MAX. FACTORED FORCE (LBS) | MAX. FACTORED FORCE (LBS) |
| E-B   |       | -514 / 0                  | 0.0                       | 0.0                       | 0.22 (3)                  |
| A-B   |       | 0 / 31                    | -102.1                    | -102.1                    | 0.13 (1)                  |
| B-C   |       | -34 / 0                   | -102.1                    | -102.1                    | 0.50 (1)                  |
| E-D   |       | 0 / 0                     | -38.5                     | -38.5                     | 0.22 (3)                  |



TOTAL WEIGHT = 19 X 17 = 319 lb

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. G/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-06, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL. (LL) =  $L/908$  (0.04")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL. (TL) =  $L/942$  (0.07")

CSI: TC=0.80/1.00 (B-C-1), BC=0.22/1.00 (D-E-3), WB=0.00/1.00 (n/a-0), SSI=0.25/1.00 (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.

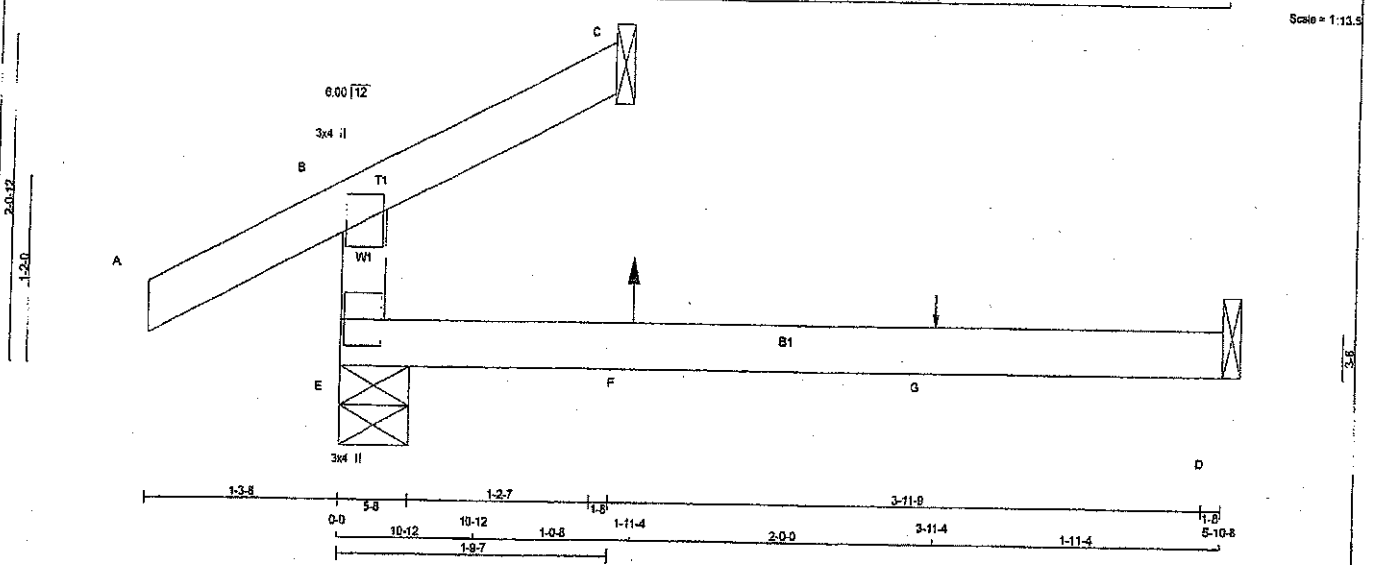
NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1667 1658

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.21 (E) (INPUT = 0.90)  
JSI METAL=0.14 (B) (INPUT = 1.00)

DWG NO. TAM 1910753  
STRUCTURAL  
COMPONENT ONLY



**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 |   |   |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG | REQ'D BRG |
|----|-------------------------|------|---------------------------------|------|-----------|-----------|
|    | VERT                    | HORZ | DOWN                            | HORZ |           |           |
| E  | 352                     | 0    | 352                             | 0    | 5-8       | 5-8       |
| C  | 94                      | 0    | 97                              | 0    | 1-8       | 1-8       |
| D  | 94                      | 0    | 123                             | 0    | 1-8       | 1-8       |

SEE MITEK STANDARD DETAIL B37921H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

| JT | 1ST CASE |         | MAX/MIN COMPONENT REACTIONS |       |       |       |
|----|----------|---------|-----------------------------|-------|-------|-------|
|    | SNOW     | LIVE    | PERM. LIVE                  | WIND  | DEAD  | SOIL  |
| E  | 258      | 155 / 0 | 42 / 0                      | 0 / 0 | 0 / 0 | 0 / 0 |
| C  | 78       | 24 / 0  | 26 / 0                      | 0 / 0 | 0 / 0 | 0 / 0 |
| D  | 88       | 0 / -3  | 53 / 0                      | 0 / 0 | 0 / 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)

| MEMB. | MAX. FACTORED FORCE (LBS) | CHORDS           |                           | WEBS                      |                        | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |
|-------|---------------------------|------------------|---------------------------|---------------------------|------------------------|---------------------------|------------------------|
|       |                           | VERT. LOAD (LBS) | FACTORED VERT. LOAD (LBS) | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |                           |                        |
|       |                           | FR-TO            | FR-TO                     | FR-TO                     | FR-TO                  |                           |                        |
| E-B   | -229 / 26                 | 0.0              | 0.0                       | 0.0                       | 0.18 (3)               | 7.81                      |                        |
| A-B   | 0 / 31                    | -102.1           | -102.1                    | 0.15 (1)                  | 10.00                  |                           |                        |
| B-C   | 0 / 27                    | -102.1           | -102.1                    | 0.16 (3)                  | 10.00                  |                           |                        |
| E-F   | 0 / 0                     | -38.5            | -38.5                     | 0.23 (3)                  | 10.00                  |                           |                        |
| F-G   | 0 / 0                     | -38.5            | -38.5                     | 0.23 (3)                  | 10.00                  |                           |                        |
| G-D   | 0 / 0                     | -38.5            | -38.5                     | 0.23 (3)                  | 10.00                  |                           |                        |

**FACTORED CONCENTRATED LOADS (LBS)**

| JT | LOC.   | LC1 | MAX | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|-----|------|-------|------|-------|------|-------|
| F  | 1-11.4 | 8   | 1   | 13   | FRONT | VERT | TOTAL | -    | -     |
| G  | 3-11.4 | 1   | 1   | -    | FRONT | VERT | TOTAL | -    | -     |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 29.1 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. G.C.**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF NBCC 2010, OSC 2012  
 - CSA 086-09, CSA 086-14  
 - TPIC 2011, TPIC 2014

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

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
 CALCULATED VERT. DEFL.(LL) = L/998 (0.05")  
 ALLOWABLE DEFL.(TL) = L/360 (0.20")  
 CALCULATED VERT. DEFL.(TL) = L/838 (0.08")

CS1: TC=0.18/1.00 (B-E-3), BC=0.23/1.00 (D-E-3), WB=0.00/1.00 (max), SS=0.14/1.00 (D-E-3)

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 RIGHT HEEL ONLY

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

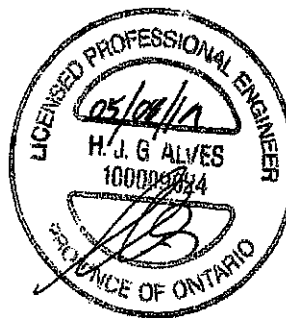
**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1687 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

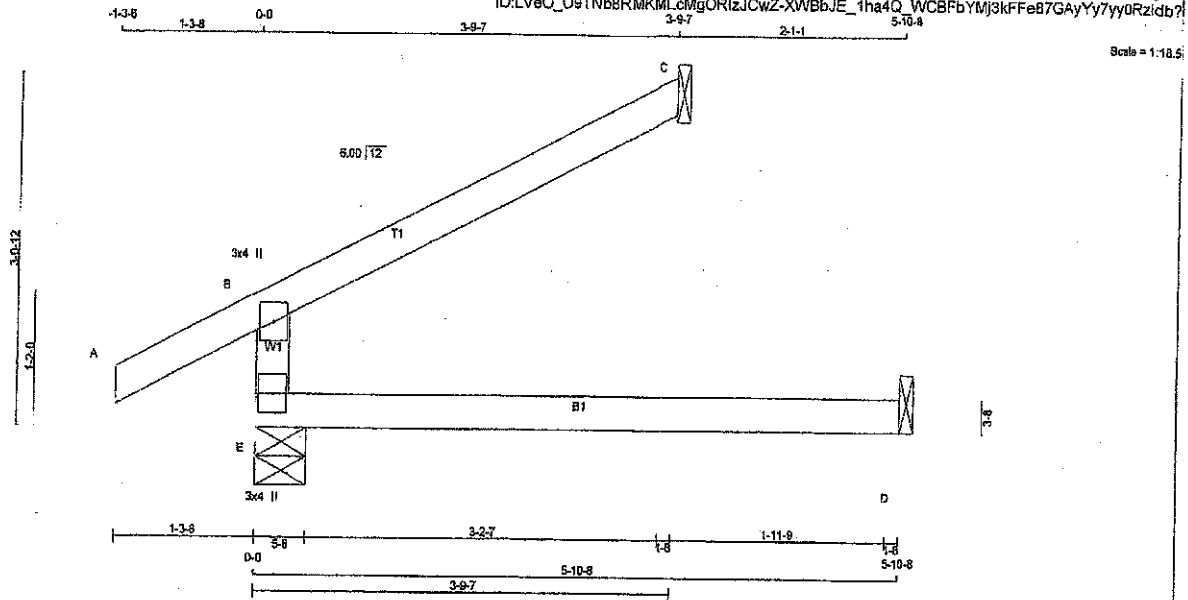
JSI GRIP= 0.10 (E) (INPUT = 0.90 )  
 JSI METAL= 0.05 (B) (INPUT = 1.00 )

DWG NO. TAM 1910798  
 STRUCTURAL  
 COMPONENT ONLY



|                                 |                  |               |          |                               |          |
|---------------------------------|------------------|---------------|----------|-------------------------------|----------|
| JOB NAME<br>402973              | TRUSS NAME<br>J3 | QUANTITY<br>2 | PLY<br>1 | JOB DESC.<br>GREEN PARK HOMES | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          | TRUSS DESC.                   |          |

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| LUMBER            |         |        |        |
|-------------------|---------|--------|--------|
| N. L. G. A. RULES | SIZE    | LUMBER | DESCR. |
| CHORDS            |         |        |        |
| 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 |

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

| BEARINGS       |                  |       |       |
|----------------|------------------|-------|-------|
| FACTORED       | MAXIMUM FACTORED | INPUT | REQD  |
| GROSS REACTION | GROSS REACTION   | BRG   | BRG   |
| JT VERT        | JT VERT          | IN-SX | IN-SX |
| E 513          | 513              | 0     | 5-8   |
| C 145          | 145              | 0     | 5-8   |
| D 93           | 119              | 0     | 1-8   |

SEE MI TEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

| UNFACTORED REACTIONS |         |                     |           |
|----------------------|---------|---------------------|-----------|
| 1ST LCASE            | MAX MIN | COMPONENT REACTIONS |           |
| JT COMBINED          | SNOW    | LIVE                | PERM.LIVE |
| E 382                | 216/0   | 72/0                | 0/0       |
| C 100                | 83/0    | 0/0                 | 0/0       |
| D 85                 | 0/0     | 51/0                | 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.  | MAX. FACTORED | FACTORED                                              | WEBS                         |
| FR-TO  | FORCE (LBS)   | VERT. LOAD LC: MAX (PLF) CSI (LC) UNBRAC LENGTH FR-TO | MAX. FACTORED (LBS) CSI (LC) |
| E-B    | -380/0        | 0.0 0.0 0.21 (3) 7.81                                 |                              |
| A-B    | 0/31          | -102.1 -102.1 0.13 (1) 10.00                          |                              |
| B-C    | -22/0         | -102.1 -102.1 0.25 (1) 6.25                           |                              |
| E-D    | 0/0           | -38.5 -38.5 0.21 (3) 10.00                            |                              |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2018, OBC 2012  
- CSA 088-09, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(58 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = 1/988 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = 1/942 (0.07")

CSI: TC=0.25/1.00 (B-C:1), BC=0.21/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SSI=0.17/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 818 354 1657 785 1987 1555

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.90)  
JSI METAL= 0.11 (B) (INPUT = 1.00)

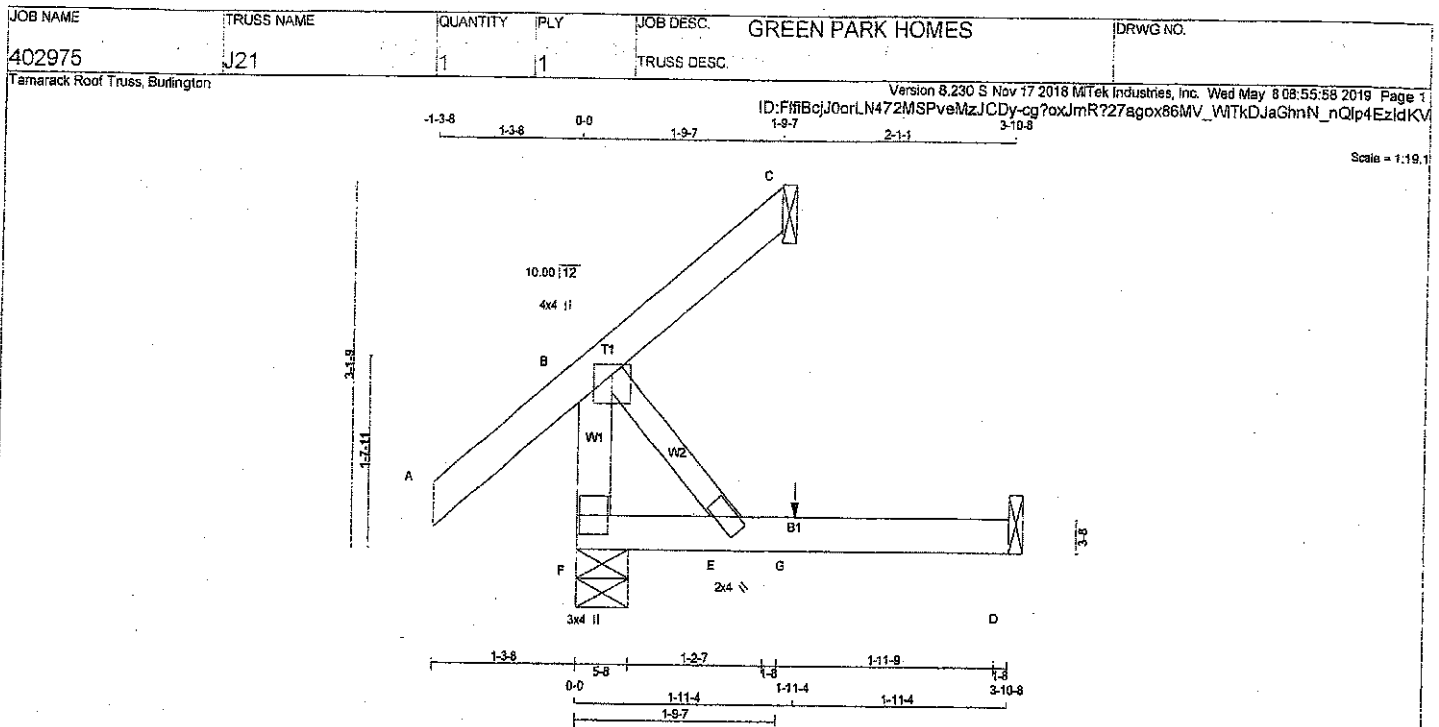


DWG NO. TAM 11910799  
STRUCTURAL  
COMPONENT ONLY









**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  | BMV+w  | MT20   | 2.0 | 4.0 |      |      |
| F  | BMV+p  | MT20   | 3.0 | 4.0 |      |      |

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

**BEARINGS**

| JT | VERT | HORZ | MAXIMUM FACTORED GROSS REACTION | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|------|------|---------------------------------|-----------------|----------------|
| F  | 362  | 0    | 362                             | 0               | 5-8            |
| C  | 36   | 0    | 36                              | 0               | 1-8            |
| D  | 75   | 0    | 95                              | 0               | 1-8            |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

**UNFACTORED REACTIONS**

| JT | COMBINED | SNOW   | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|----|----------|--------|------|------------|------|------|------|
| F  | 265      | 164/0  | 41/0 | 0/0        | 0/0  | 61/0 | 0/0  |
| C  | 25       | 21/-31 | 0/0  | 0/0        | 0/0  | 4/0  | 0/0  |
| D  | 68       | 0/0    | 41/0 | 0/0        | 0/0  | 27/0 | 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 |                           |                           |                        | WEBS                 |       |                           |               |
|--------|---------------------------|---------------------------|------------------------|----------------------|-------|---------------------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 MAX. CS1 (LC) | MAX. UNBRACED LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC) |
| FR-TO  |                           |                           |                        |                      | FR-TO |                           |               |
| F-B    | -288/0                    | 0.0                       | 0.0 0.03 (1)           | 7.81                 | B-E   | 0/0                       | 0.00 (1)      |
| A-B    | 0/45                      | -102.1                    | -102.1 0.15 (1)        | 10.00                |       |                           |               |
| B-C    | -35/0                     | -102.1                    | -102.1 0.15 (1)        | 6.25                 |       |                           |               |
| F-E    | 0/0                       | -38.5                     | -38.5 0.12 (2)         | 10.00                |       |                           |               |
| E-G    | 0/0                       | -38.5                     | -38.5 0.14 (3)         | 10.00                |       |                           |               |
| G-D    | 0/0                       | -38.5                     | -38.5 0.14 (3)         | 10.00                |       |                           |               |

**FACTORED CONCENTRATED LOADS (LBS)**

| JT | LOC.   | LC1 | MAX. | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|------|------|-------|------|-------|------|-------|
| G  | 1-11.4 | 1   | 1    |      | FRONT | VERT | TOTAL |      |       |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 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 (0.02")

CSI: TC=0.15/1.00 (A-B:1), BC=0.14/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SS=0.10/1.00 (B-C: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 RIGHT HEEL ONLY

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

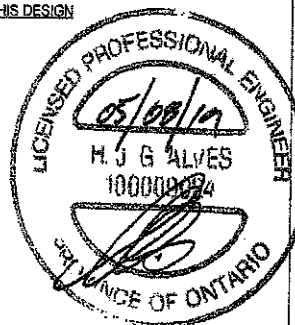
**NAIL VALUES**

| PLATE | GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-------|-----------|-------------|---------------|
| MT20  | 618       | 354         | 1687          |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

SI GRIP= 0.22 (B) (INPUT = 0.90)  
SI METAL= 0.08 (B) (INPUT = 1.00)



JOB NO. TAM 719/0921  
STRUCTURAL  
COMPONENT ONLY

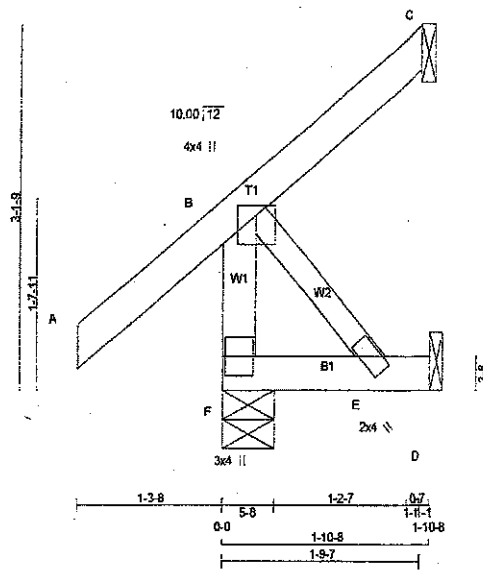
|          |            |          |     |             |                  |          |
|----------|------------|----------|-----|-------------|------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | GREEN PARK HOMES | DRWG NO. |
| 402975   | J22        | 1        | 1   | TRUSS DESC. |                  |          |

Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2016 Mitek Industries, Inc. Wed May 8 08:55:59 2019 Page 1  
ID: FfBcJ0orLN472MSPveMzJCDy-4tYB9fm3mLFRlyWKf40D2y0vBjy8QEd804VNgzldKLU

-1-3-8 1-3-8 0-0 1-9-7 1-10-8

Scale = 1:19.1



TOTAL WEIGHT = 10 lb

| LUMBER                |      |        |        |
|-----------------------|------|--------|--------|
| N. L. G. A. RULES     |      |        |        |
| CHORDS                | SIZE | LUMBER | DESCR. |
| F - B                 | 2x4  | DRY    | No.2   |
| A - C                 | 2x4  | DRY    | No.2   |
| F - D                 | 2x4  | DRY    | No.2   |
| ALL WEBS              | 2x3  | DRY    | No.2   |
| DRY, SEASONED LUMBER. |      |        |        |

| DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER |                         |                                 |           |          |       |       |  |
|-----------------------------------------------------------------------------------------------|-------------------------|---------------------------------|-----------|----------|-------|-------|--|
| BEARINGS                                                                                      |                         |                                 |           |          |       |       |  |
| JT                                                                                            | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG | IN-SX | IN-SX |  |
| F                                                                                             | 324                     | 0                               | 324       | 0        | 5-8   | 5-8   |  |
| C                                                                                             | 36                      | 0                               | 36        | 0        | 1-8   | 1-8   |  |
| D                                                                                             | 36                      | 0                               | 46        | 0        | 1-8   | 1-8   |  |

| DESIGN CRITERIA        |    |   |          |
|------------------------|----|---|----------|
| SPECIFIED LOADS:       |    |   |          |
| TOP CH.                | LL | = | 29.1 PSF |
|                        | DL | = | 6.0 PSF  |
| BOT CH.                | LL | = | 10.5 PSF |
|                        | DL | = | 7.0 PSF  |
| TOTAL LOAD = 52.5 PSF  |    |   |          |
| SPACING = 24.0 IN. C/C |    |   |          |

| PLATES (table is in inches) |        |        |     |     |           |
|-----------------------------|--------|--------|-----|-----|-----------|
| JT                          | TYPE   | PLATES | W   | LEN | X         |
| B                           | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 2.00 |
| E                           | BMVW+p | MT20   | 2.0 | 4.0 |           |
| F                           | BMV1+p | MT20   | 3.0 | 4.0 |           |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D  
PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

| UNFACTORED REACTIONS |           |                               |        |            |       |        |       |
|----------------------|-----------|-------------------------------|--------|------------|-------|--------|-------|
| JT                   | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS |        |            |       |        |       |
| F                    | COMBINED  | SNOW                          | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
| F                    | 230       | 164 / 0                       | 20 / 0 | 0 / 0      | 0 / 0 | 47 / 0 | 0 / 0 |
| C                    | 25        | 21 / -31                      | 0 / 0  | 0 / 0      | 0 / 0 | 4 / 0  | 0 / 0 |
| D                    | 33        | 0 / 0                         | 20 / 0 | 0 / 0      | 0 / 0 | 13 / 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 |                           |                           |                        | WEBS  |                           |                        |  |
|--------|---------------------------|---------------------------|------------------------|-------|---------------------------|------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CSI (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |  |
| FR-TO  |                           | FROM TO                   |                        | FR-TO |                           |                        |  |
| F-B    | -288 / 0                  | 0.0                       | 0.03 (1)               | B-E   | 0 / 0                     | 0.00 (1)               |  |
| A-B    | 0 / 45                    | -102.1                    | -102.1 0.14 (1)        |       |                           |                        |  |
| B-C    | -35 / 0                   | -102.1                    | -102.1 0.13 (1)        |       |                           |                        |  |
| F-E    | 0 / 0                     | -38.5                     | -38.5 0.03 (3)         |       |                           |                        |  |
| E-D    | 0 / 0                     | -38.5                     | -38.5 0.03 (3)         |       |                           |                        |  |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 088-14  
- TPIC 2011, TPIC 2014

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

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 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=0.14/1.00 (A-B-1), BC=0.03/1.00 (E-F-3), WB=0.00/1.00 (B-E-1), SS=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

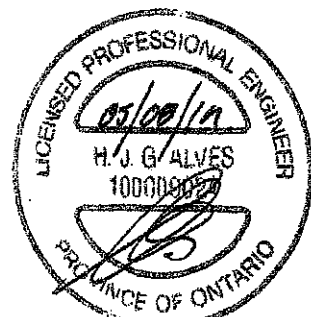
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| NAIL VALUES |           |       |         |     |           |
|-------------|-----------|-------|---------|-----|-----------|
| PLATE       | GRIP(DRY) | SHEAR | SECTION |     |           |
|             | (PSI)     | (PLI) | (PLI)   |     |           |
| MT20        | 618       | 354   | 1687    | 788 | 1987 1656 |

PLATE PLACEMENT TOL = 0.250 inches

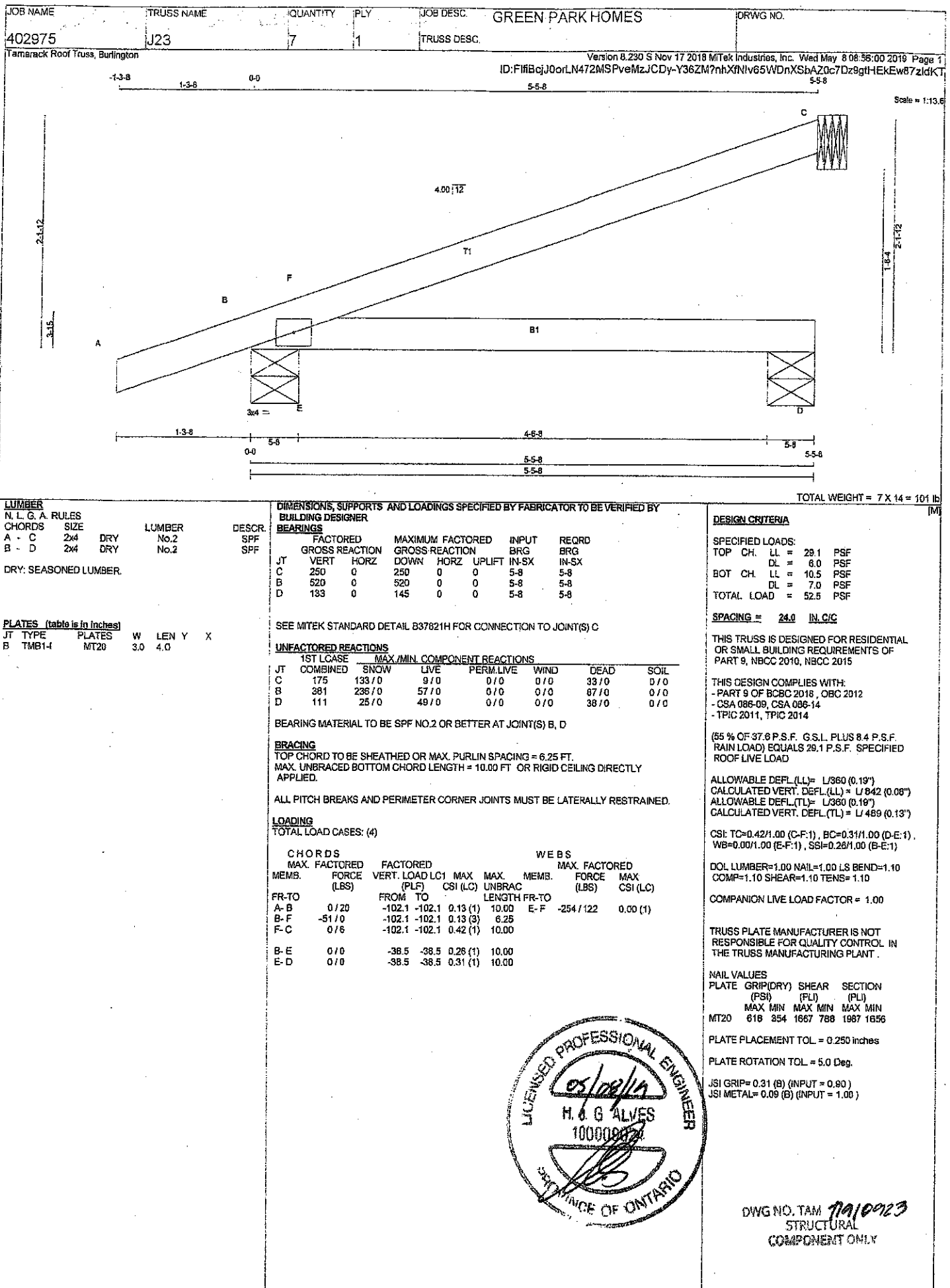
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.90)  
JSI METAL= 0.08 (B) (INPUT = 1.00)



DRWG NO. TAM 1910922  
STRUCTURAL  
COMPONENT ONLY







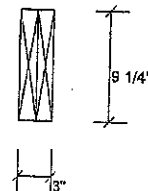
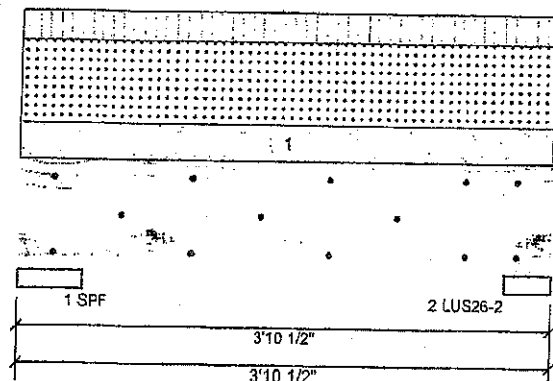
isDesign™

Client:  
Project:  
Address:Date: 5/8/2019  
Designer:  
Job Name: 201018  
Project #:

Page 1 of 2

**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level

**Member Information**

Type: Girder  
Plies: 2  
Moisture Condition: Dry  
Deflection LL: 360  
Deflection TL: 360  
Importance: Normal

Application: Roof (Residential)  
Slope: 0/12  
Design Method: LSD  
Building Code: NBCC 2015  
Load Sharing: No  
Deck: Not Checked  
Vibration: Not Checked

**Unfactored Reactions UNPATTERNED lb (Uplift)**

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1   | 138  | 171  | 388  | 0    |
| 2   | 130  | 180  | 364  | 0    |

**Bearings and Factored Reactions**

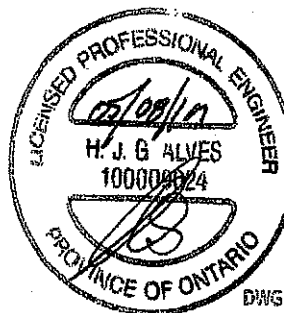
| Bearing     | Length | Cap. React | D/L lb    | Total | Ld. Case | Ld. Comb.        |
|-------------|--------|------------|-----------|-------|----------|------------------|
| 1 - SPF     | 5.800" | 9%         | 214 / 721 | 935   | L        | 1.25D+1.5S<br>+L |
| 2 - LUS26-2 | 4.000" | 12%        | 201 / 676 | 876   | L        | 1.25D+1.5S<br>+L |

**Analysis Results**

| Analysis     | Actual             | Location | Allowed       | Capacity    | Comb.            | Case |
|--------------|--------------------|----------|---------------|-------------|------------------|------|
| Moment       | 801 ft-lb          | 2'       | 6038 ft-lb    | 0.100 (10%) | 1.25D+1.5S<br>+L | L    |
| Unbraced     | 801 ft-lb          | 2'       | 5734 ft-lb    | 0.105 (10%) | 1.25D+1.5S<br>+L | L    |
| Shear        | 750 lb             | 1'2"     | 3984 lb       | 0.188 (19%) | 1.25D+1.5S<br>+L | L    |
| LL Defl inch | 0.002<br>(L/19241) | 2'       | 0.107 (L/360) | 0.020 (2%)  | S+0.5L           | L    |
| TL Defl inch | 0.003<br>(L/14002) | 2'       | 0.107 (L/360) | 0.030 (3%)  | D+S+0.5L         | L    |

**Design Notes**

- 1 Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on single ply width.



DWG NO. TAM 1010811  
STRUCTURAL  
CONSTRUCTION 1/2

| ID | Load Type | Location | Trib Width | Side      | Dead   | Live     | Snow     | Wind  | Comments |
|----|-----------|----------|------------|-----------|--------|----------|----------|-------|----------|
| 1  | Uniform   |          | 6-7-0      | Near Face | 13 PSF | 10.5 PSF | 29.5 PSF | 0 PSF |          |

**Manufacturer Info**

Tamarack Roof Trusses  
3289 North Service Rd., ON  
Canada  
L7N3G2  
(605) 355-1115



This design is valid until 12/11/2021





isDesign™

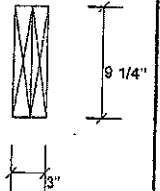
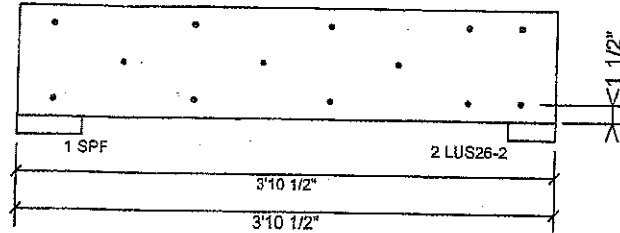
Client:  
Project:  
Address:

Date: 5/8/2019  
Designer:  
Job Name: 201018  
Project#:

Page 2 of 2

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c.. Maximum end distance not to exceed 6"

|                          |              |
|--------------------------|--------------|
| Capacity                 | 68.7 %       |
| Load                     | 233.7 PLF    |
| Yield Limit per Foot     | 340.0 PLF    |
| Yield Limit per Fastener | 113.3 lb.    |
| Yield Mode               | 9            |
| Edge Distance            | 1 1/2"       |
| Min. End Distance        | 3"           |
| Load Combination         | 1.25D+1.5S+L |
| Duration Factor          | 1.00         |



DWG NO. IAM 17910811  
STRUCTURAL  
COMPONENT ONLY 2/2

#### Manufacturer Info

Tamarack Roof Trusses  
3289 North Service Rd., ON  
Canada  
L7N3G2  
(805) 335-1115



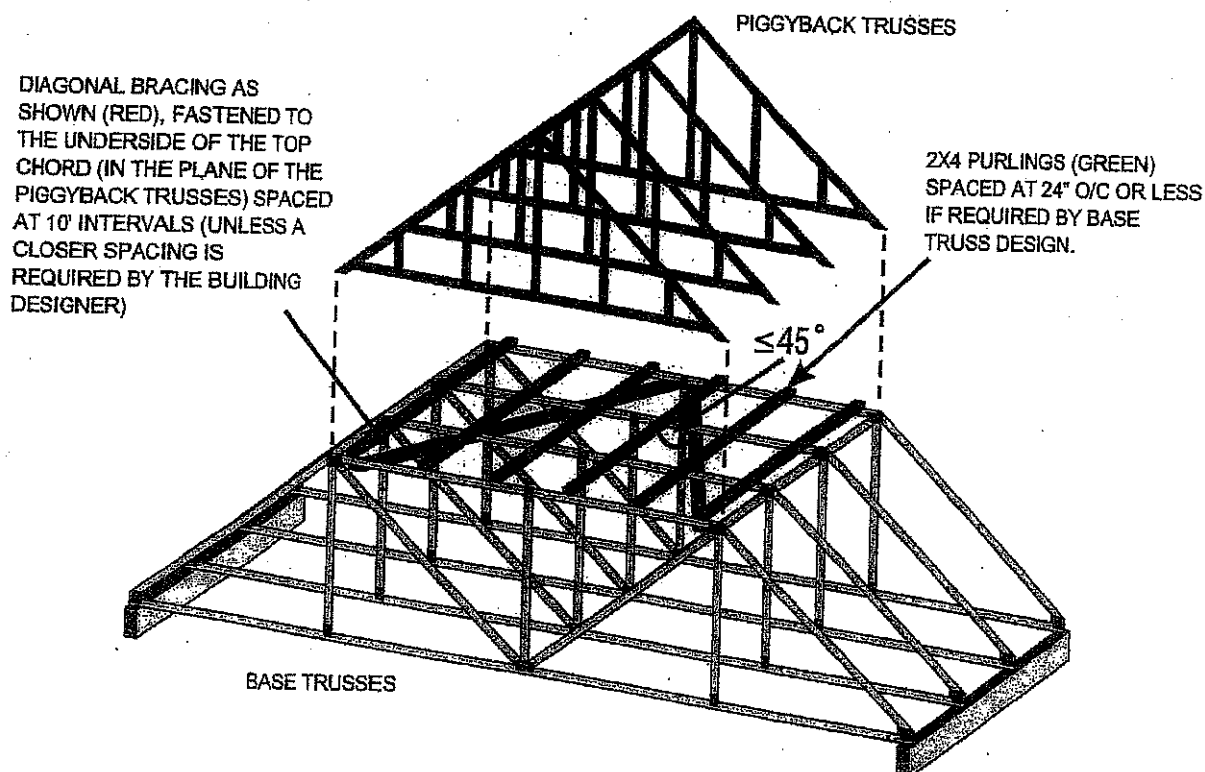
This design is valid until 12/11/2021

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.

# 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:

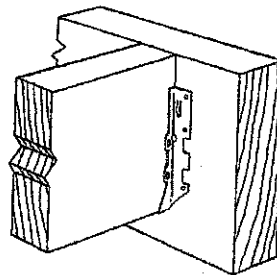
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

## Installation:

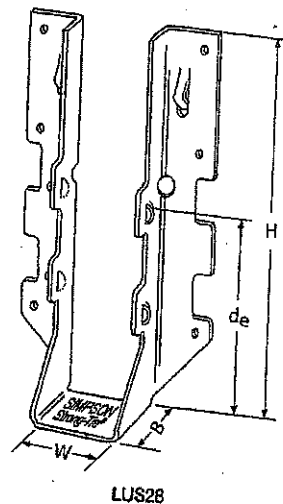
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire,  
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

## Options:

- These hangers cannot be modified

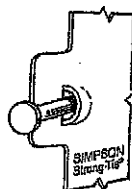


Typical LUS  
Installation



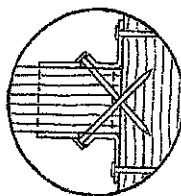
| Model No. | Ga. | Dimensions (in.) |       |       |                             | Fasteners |         | Factored Resistance (lb.)        |                                  |                                  |                                  |
|-----------|-----|------------------|-------|-------|-----------------------------|-----------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|           |     | W                | H     | B     | d <sub>e</sub> <sup>1</sup> | Face      | Joist   | D.Fir-L                          |                                  | S.P.-F                           |                                  |
|           |     |                  |       |       |                             |           |         | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) |
| LUS24     | 18  | 1 1/8            | 3 1/2 | 1 1/4 | 1 15/16                     | (4) 10d   | (2) 10d | 710                              | 1630                             | 645                              | 1155                             |
| LUS24-2   | 18  | 3 1/8            | 3 1/2 | 2     | 1 15/16                     | (4) 16d   | (2) 16d | 835                              | 2020                             | 590                              | 1435                             |
| LUS26     | 18  | 1 1/8            | 4 1/4 | 1 1/4 | 3 3/8                       | (4) 10d   | (4) 10d | 1420                             | 2170                             | 1290                             | 1630                             |
| LUS26-2   | 18  | 3 1/8            | 4 1/4 | 2     | 4                           | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 1920                             |
| LUS26-3   | 18  | 4 1/8            | 4 1/4 | 2     | 3 1/4                       | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 2340                             |
| LUS28     | 18  | 1 1/8            | 6 1/2 | 1 1/4 | 3 3/8                       | (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 1/8            | 6 1/4 | 2     | 3 3/4                       | (6) 16d   | (4) 16d | 1720                             | 3325                             | 1545                             | 2375                             |
| LUS210    | 18  | 1 1/8            | 7 1/4 | 1 1/4 | 3 3/8                       | (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 1/8            | 8 3/8 | 2     | 5 1/4                       | (8) 16d   | (6) 16d | 2580                             | 3345                             | 2320                             | 2375                             |

1. d<sub>e</sub> is the distance from the seat of the hanger to the highest joist nail.

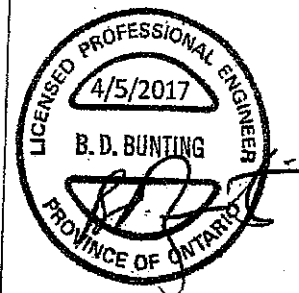


Dome Double  
Shear Nailing  
prevents tabs  
breaking off  
(available on  
some models).

U.S. Patent  
5,603,580



Double  
Shear  
Nailing  
Top View.



DESIGN

(800) 999-5099  
strongtie.com

# 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:

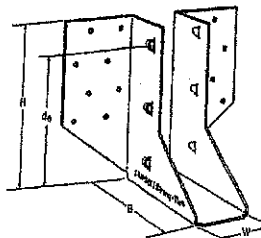
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

## Installation:

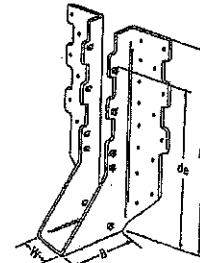
- Use all specified fasteners
- Nails: 16d  $\approx$  0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

## Options:

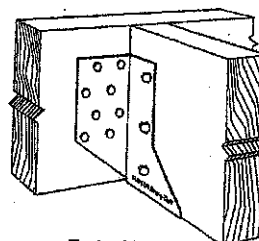
- See current catalogue for options



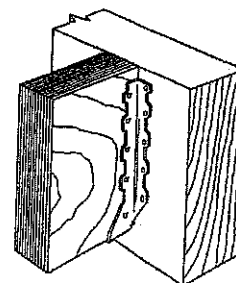
LJS26DS



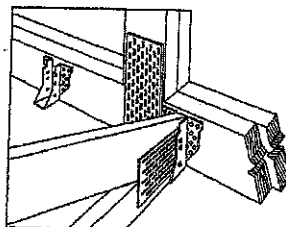
HUS210  
(HUS26, HUS28, similar)



Typical LJS26DS  
Installation



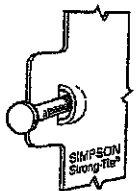
Typical HUS  
Installation



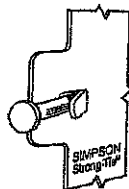
Typical HUS Installation  
(Truss Designer to provide fastener  
quantity for connecting multiple  
members together)

| Model No.  | Ga. | Dimensions (in.) |       |       |                             | Fasteners |          | Factored Resistance (lb.)        |                                  |                                  |                                  |
|------------|-----|------------------|-------|-------|-----------------------------|-----------|----------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|            |     | W                | H     | B     | d <sub>1</sub> <sup>1</sup> | Face      | Joist    | D.Fr-L                           |                                  | S-P-F                            |                                  |
|            |     |                  |       |       |                             |           |          | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>u</sub> =1.00) | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>u</sub> =1.00) |
| LJS26DS    | 18  | 1 1/16           | 5     | 3 1/2 | 4 1/4                       | (16) 16d  | (6) 16d  | 2055                             | 4265                             | 1460                             | 4115                             |
| HUS26      | 18  | 1 1/8            | 5 1/2 | 3     | 3 1/4                       | (14) 16d  | (8) 16d  | 2705                             | 4940                             | 2065                             | 3875                             |
| HUS28      | 16  | 1 1/8            | 7 1/2 | 3     | 6 1/2                       | (22) 16d  | (8) 16d  | 3605                             | 5365                             | 2675                             | 4345                             |
| HUS210     | 16  | 1 1/8            | 9 1/2 | 3     | 7 3/4                       | (30) 16d  | (10) 16d | 4505                             | 5795                             | 4010                             | 4740                             |
| HUS1.81/10 | 16  | 1 1/4            | 9     | 3     | 8                           | (30) 16d  | (10) 16d | 4505                             | 6450                             | 4010                             | 5200                             |

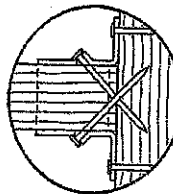
1. d<sub>1</sub> is the distance from the seat of the hanger to the highest joist nail.



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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# 

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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

### 

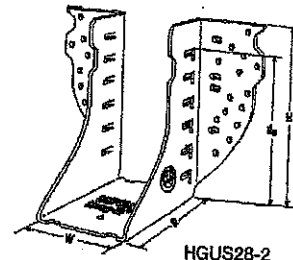
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

### 

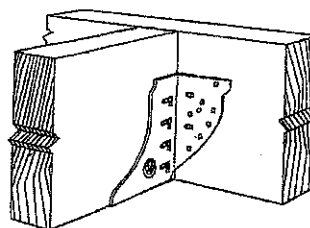
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

### 

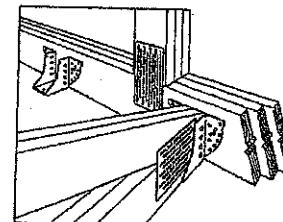
- See current catalogue for options



HGUS28-2



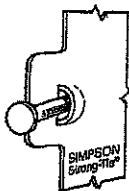
Typical HGUS Installation



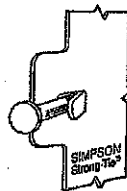
Typical HGUS Installation  
(Truss Designer to provide fastener quantity for connecting multiple members together)

| Model No. | Ga. | Dimensions (in.) |        |   |                | Fasteners |          | Factored Resistance (lb.)        |                                  |                                  |                                  |
|-----------|-----|------------------|--------|---|----------------|-----------|----------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|           |     | W                | H      | B | d <sub>1</sub> | Face      | Joist    | D.Fir-L                          |                                  | S-P-F                            |                                  |
|           |     |                  |        |   |                |           |          | Uplift<br>(K <sub>1</sub> =1.15) | Normal<br>(K <sub>2</sub> =1.00) | Uplift<br>(K <sub>1</sub> =1.15) | Normal<br>(K <sub>2</sub> =1.00) |
| HGUS26    | 12  | 1 1/8            | 5 3/8  | 5 | 4 1/2          | (20) 16d  | (8) 16d  | 2685                             | 6625                             | 2685                             | 5700                             |
| HGUS26-2  | 12  | 3 1/8            | 5 1/8  | 4 | 4 1/8          | (20) 16d  | (8) 16d  | 4385                             | 8950                             | 3100                             | 6355                             |
| HGUS26-3  | 12  | 4 1/8            | 5 1/8  | 4 | 4 1/8          | (20) 16d  | (8) 16d  | 4385                             | 8950                             | 3100                             | 6355                             |
| HGUS26-4  | 12  | 6 1/8            | 5 1/8  | 4 | 4 1/8          | (20) 16d  | (8) 16d  | 4385                             | 8950                             | 3100                             | 6355                             |
| HGUS28    | 12  | 1 1/8            | 7 1/8  | 5 | 6 1/8          | (36) 16d  | (12) 16d | 3310                             | 7675                             | 3100                             | 6900                             |
| HGUS28-2  | 12  | 3 1/8            | 7 1/8  | 4 | 6 1/8          | (36) 16d  | (12) 16d | 6070                             | 12980                            | 4310                             | 9215                             |
| HGUS28-3  | 12  | 4 1/8            | 7 1/8  | 4 | 6 1/8          | (36) 16d  | (12) 16d | 6070                             | 12980                            | 4310                             | 9215                             |
| HGUS28-4  | 12  | 6 1/8            | 7 1/8  | 4 | 6 1/8          | (36) 16d  | (12) 16d | 6070                             | 12980                            | 4310                             | 9215                             |
| HGUS210-2 | 12  | 3 1/8            | 9 1/8  | 4 | 8 1/8          | (46) 16d  | (16) 16d | 6840                             | 14645                            | 4855                             | 10400                            |
| HGUS210-3 | 12  | 4 1/8            | 9 1/8  | 4 | 8 1/8          | (46) 16d  | (16) 16d | 6840                             | 14645                            | 4855                             | 10400                            |
| HGUS210-4 | 12  | 6 1/8            | 9 1/8  | 4 | 8 1/8          | (46) 16d  | (16) 16d | 6840                             | 14645                            | 4855                             | 10400                            |
| HGUS212-4 | 12  | 6 1/8            | 10 1/8 | 4 | 10 1/8         | (56) 16d  | (20) 16d | 7640                             | 14995                            | 5425                             | 10645                            |
| HGUS214-4 | 12  | 6 1/8            | 12 1/8 | 4 | 11 1/8         | (66) 16d  | (22) 16d | 10130                            | 16400                            | 7195                             | 11645                            |

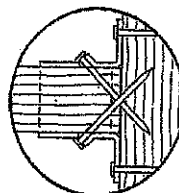
1. d<sub>1</sub> is the distance from the seat of this hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).  
U.S. Patent 5,803,580



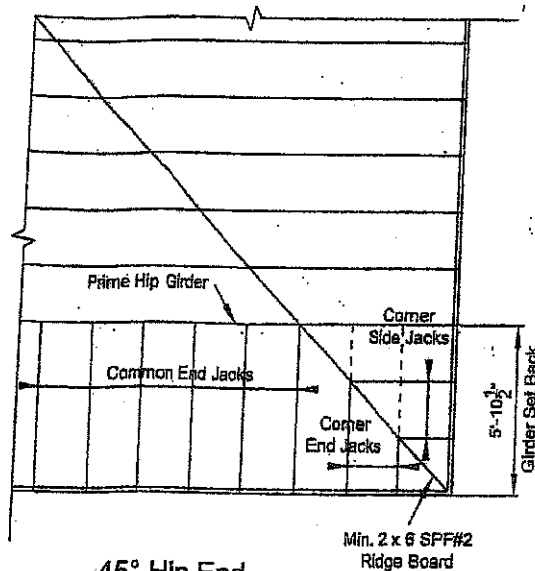
Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



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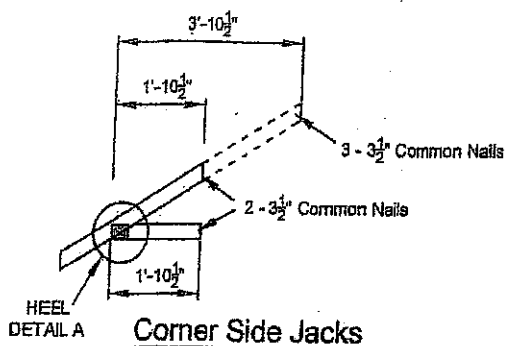
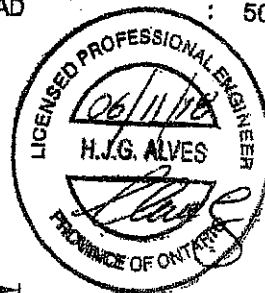
**45° Hip End**

**LUMBER SPECIFICATION**

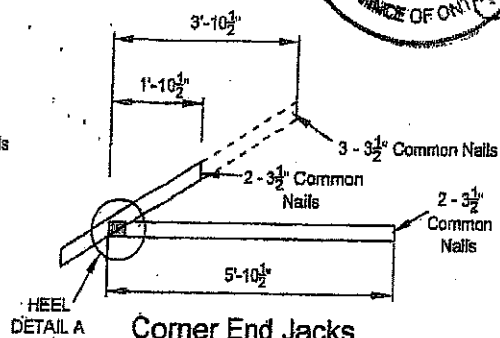
TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

**DESIGN LOAD**

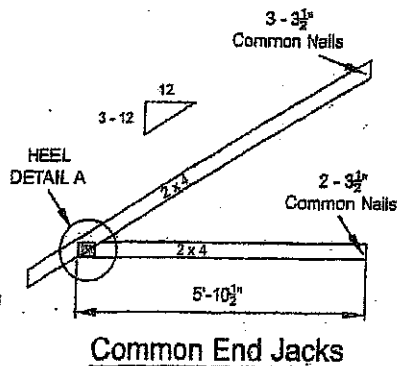
TOP CHORD SNOW LOAD : 40.5 P.S.F.  
 TOP CHORD DEAD LOAD : 3.0 P.S.F.  
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.  
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.  
**TOTAL LOAD : 50.5 P.S.F**



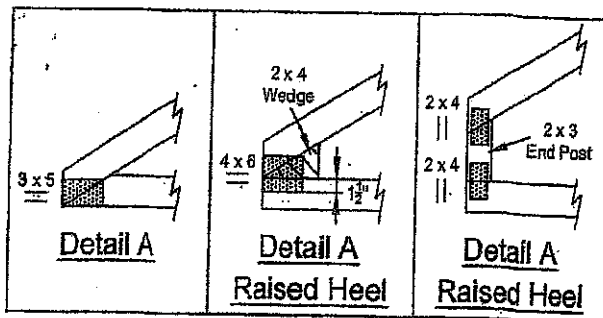
**Corner Side Jacks**



**Corner End Jacks**



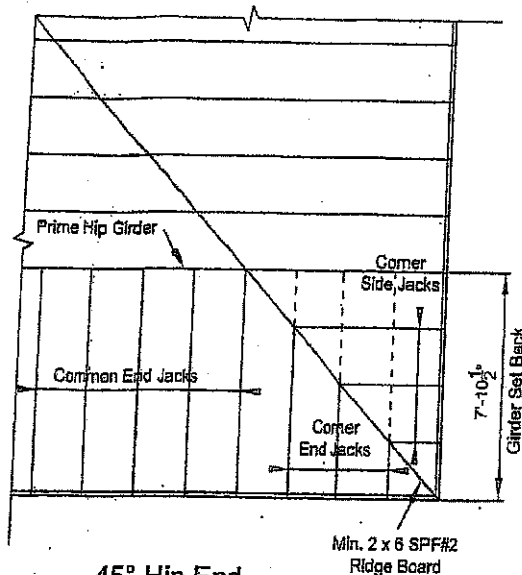
**Common End Jacks**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

T-180021





45° Hip End

### LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2

BOTTOM CHORD : 2 x 4 SPF#2

WEBS : 2 x 3 SPF#2

UNLESS OTHERWISE SHOWN

### DESIGN LOAD

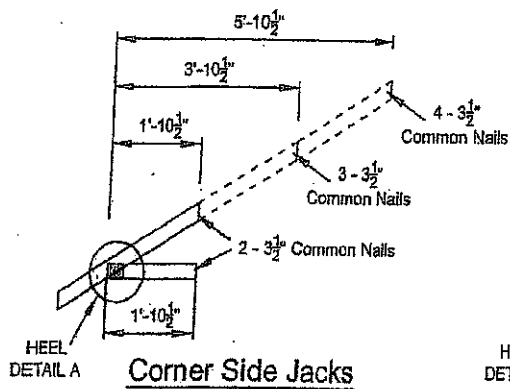
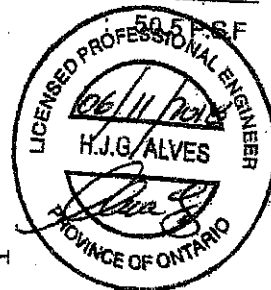
TOP CHORD SNOW LOAD : 40.5 P.S.F.

TOP CHORD DEAD LOAD : 3.0 P.S.F.

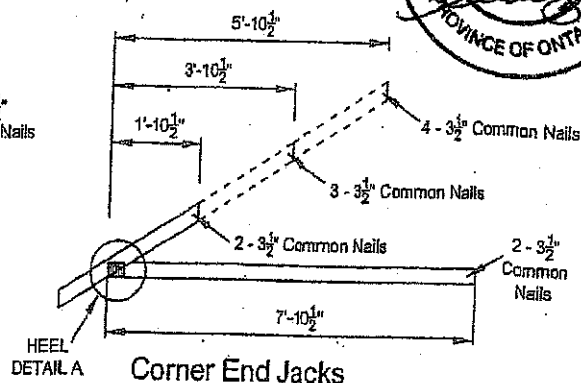
BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.

BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

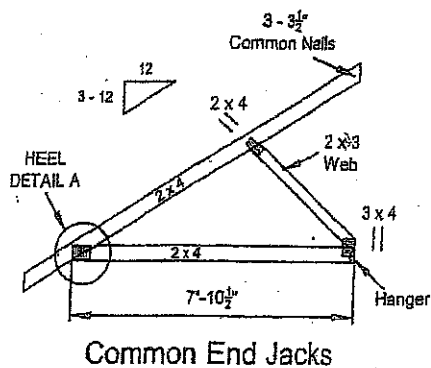
TOTAL LOAD



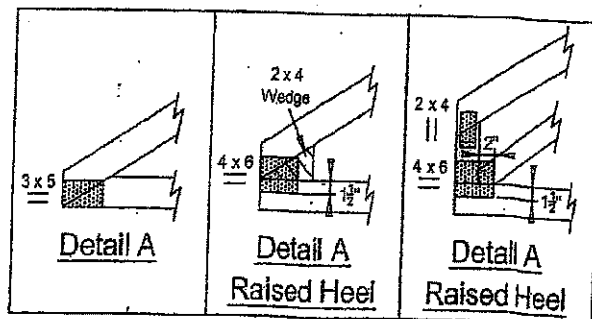
Corner Side Jacks



Corner End Jacks



Common End Jacks

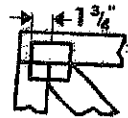


NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

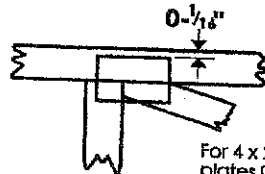
T-1800217

## Symbols

### PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/8\" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\*Plate location details available in MiTek 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, I or Eliminator bracing if indicated.

### BEARING

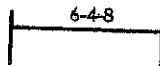


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

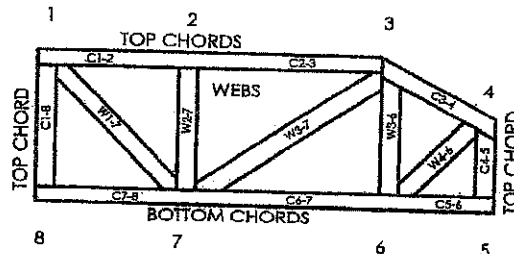
### Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses  
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



dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



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

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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MiTek Engineering Reference Sheet: MII-7473C rev. 10-08

## 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 T, I, or Eliminator 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 TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
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 TPIC Quality Criteria.



## Alves Engineering Services Inc.

5208 Easton road  
Burlington, Ontario L7L 6N6  
(289) 259 5455

### 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-1800213

Feb 09, 2018