



Job Track: **51012**  
 Plan Log: **203593**  
 Layout ID: **413359**

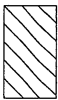
Builder / Location: **ROYAL PINE HOMES / RICHMOND HILL**  
 Project: **CENTREFIELD**  
 Date: **2020-10-14** Sales: **Mario DiCaro** Designer: **LC**

Model / Elevation: **38-07 / A**  
 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  
 Mtek Ver 8.3.3.247

ASPHALT SHINGLES  
 12" FINISHED OH.  
 R.T.M.C.  
 2X6 EXTERIOR WALLS  
 2X6 FASCIA BOARD

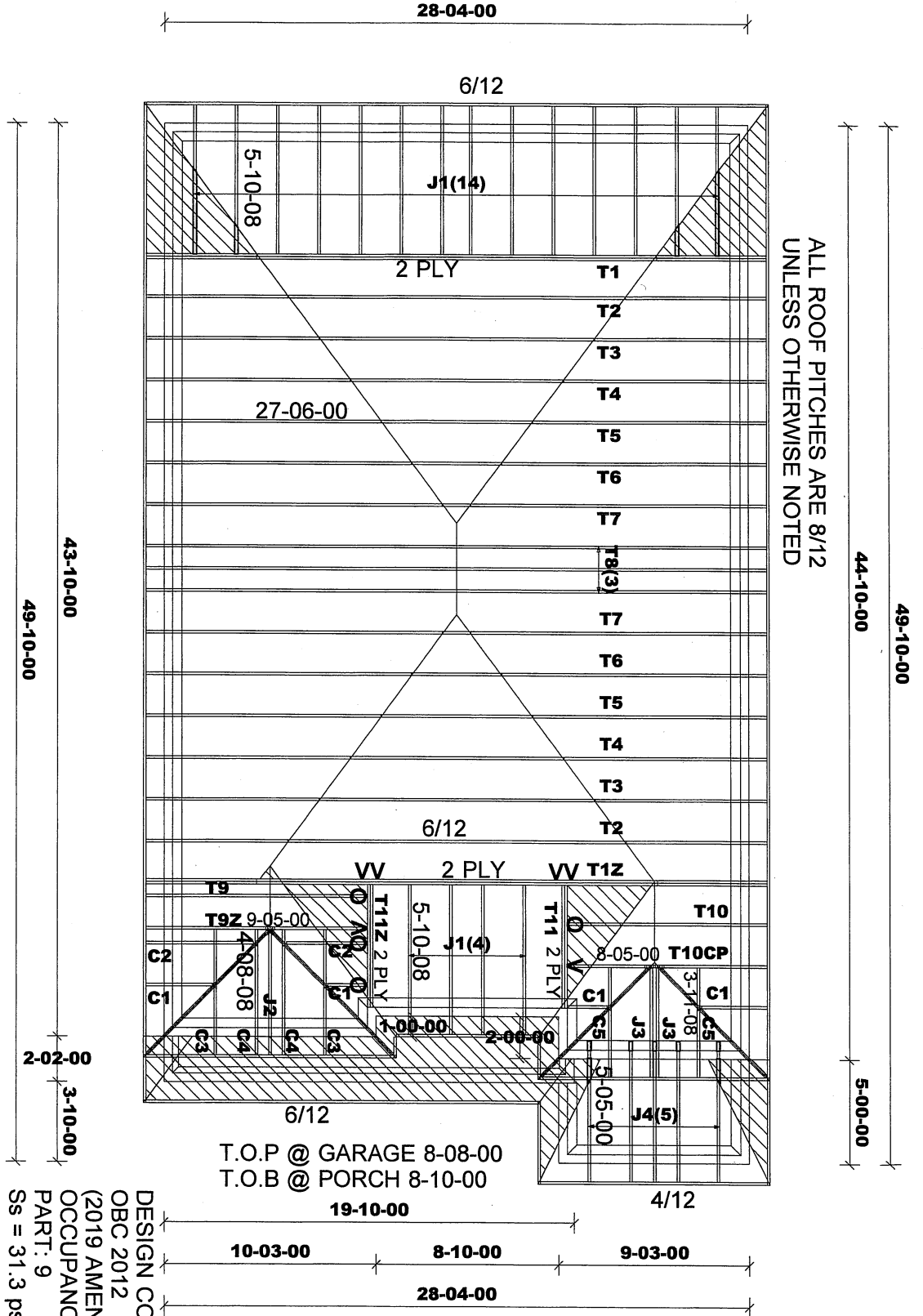
HARDWARE:  
 LUS24 - (O)  
 LUS26DS - (V)  
 LUS26-2 - (VV)

DENOTES  
 CONV.  
 FRAMING



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

DESIGN CONFORMS WITH  
 OBC 2012  
 (2019 AMENDMENT)  
 OCCUPANCY: RESIDENTIAL  
 PART: 9  
 Ss = 31.3 psf Sr = 8.4 psf



ALL ROOF PITCHES ARE 8/12  
 UNLESS OTHERWISE NOTED

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C.2012 (2019 AMENDMENT) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O.C. WITH A 2X4 VERT. POST TO THE TRUSS UNDER NEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6"



Job Track: **51012**  
 Plan Log: **203593**  
 Layout ID: **413367**

Builder / Location: **ROYAL PINE HOMES / RICHMOND HILL**  
 Project: **CENTREFIELD**  
 Date: **2020-10-14** Sales: **Mario DiCaro** Designer: **LC**

Model / Elevation: **38-07 / B**  
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 Mlek ver 8.3.3.247

ASPHALT SHINGLES  
 12" FINISHED OH.  
 R.T.M.C.  
 2X6 EXTERIOR WALLS  
 2X6 FASCIA BOARD

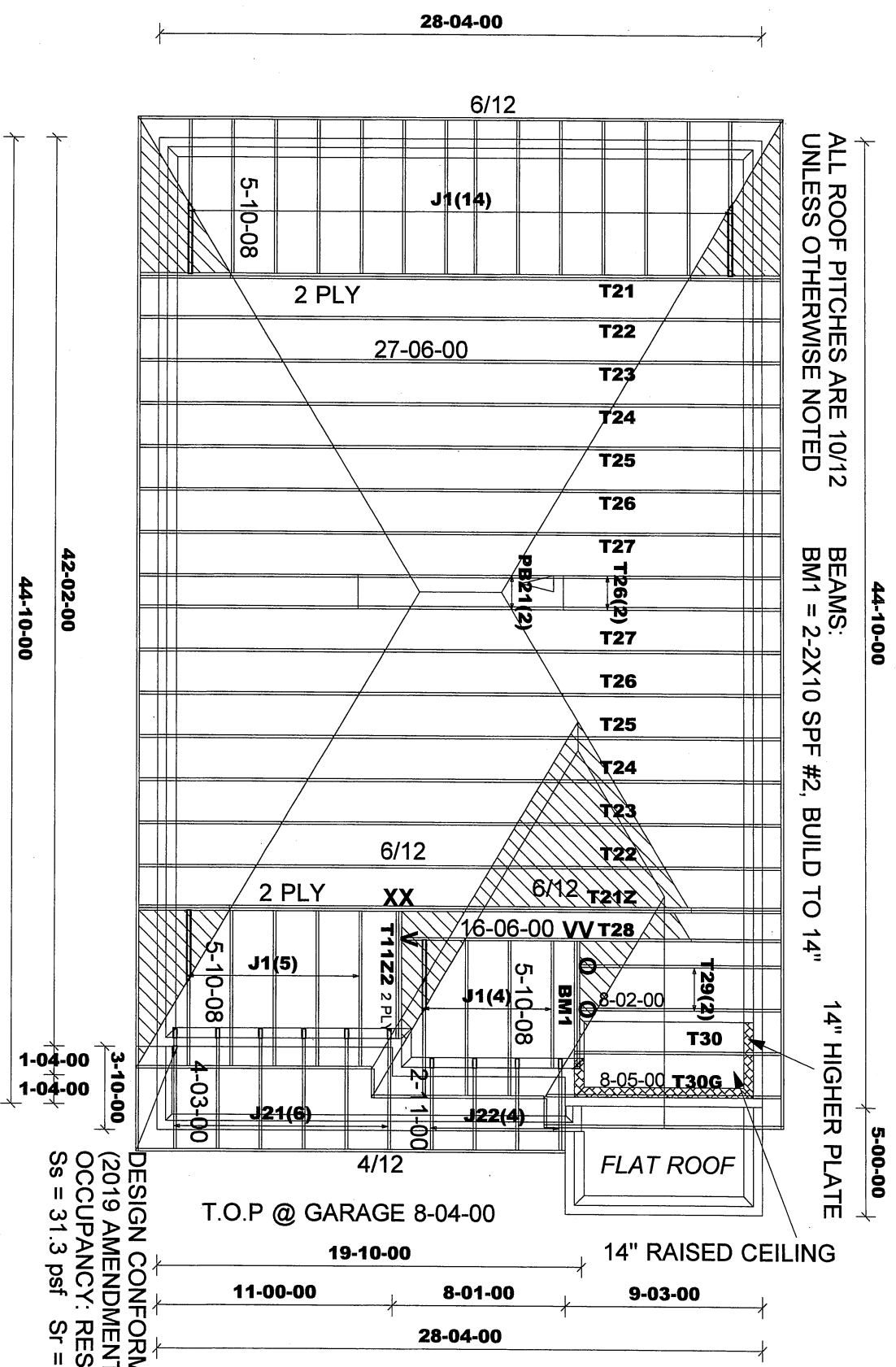
HARDWARE:  
 LUS24 - (O)  
 LJS26DS - (V)  
 LUS26-2 - (VV)  
 HGUS26-2 - (XX)

DENOTES  
 CONV.  
 FRAMING



DESIGN LOADS:  
 TC SL = 25.6 psf  
 TC DL = 6.0 psf  
 BC LL = 0.0 psf  
 BC DL = 7.4 psf

DESIGN CONFORMS WITH OBC 2012  
 (2019 AMENDMENT)  
 OCCUPANCY: RESIDENTIAL PART: 9  
 Ss = 31.3 psf Sr = 8.4 psf

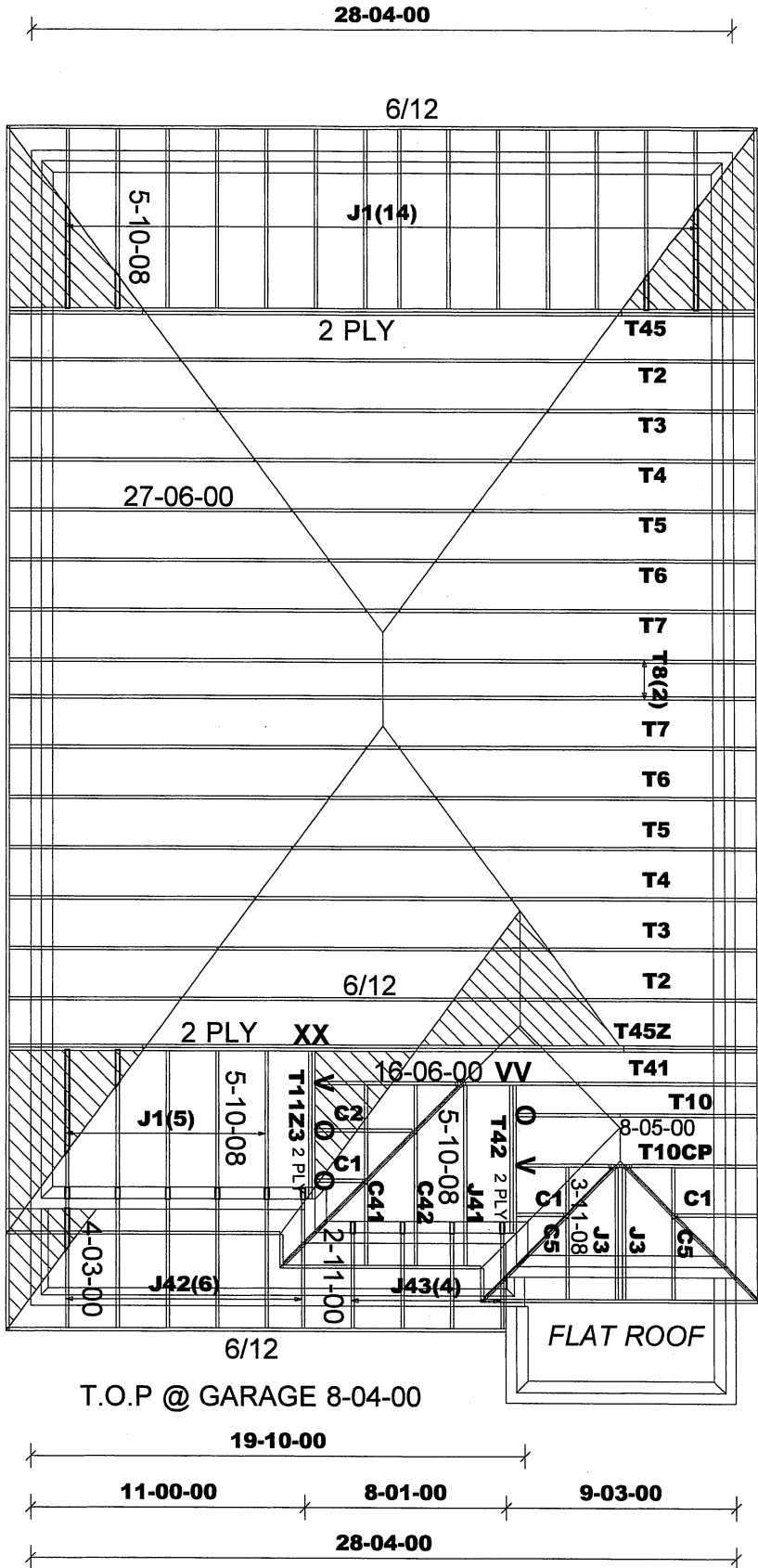


ALL ROOF PITCHES ARE 10/12  
 UNLESS OTHERWISE NOTED

BEAMS:  
 BM1 = 2-2X10 SPF #2, BUILD TO 14"

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C.2012 (2019 AMENDMENT) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O.C. WITH A 2X4 VERT. POST TO THE TRUSS UNDER NEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6"

ALL ROOF PITCHES ARE 6/12  
UNLESS OTHERWISE NOTED

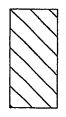


ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C.2012 (2019 AMENDMENT) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O.C. WITH A 2X4 VERT. POST TO THE TRUSS UNDER NEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6"

ASPHALT SHINGLES  
12" FINISHED OH.  
R.T.M.C.  
2X6 EXTERIOR WALLS  
2X6 FASCIA BOARD

HARDWARE:  
LUS24 - (O)  
LUS26DS - (V)  
LUS26-2 - (VV)  
HGUS26-2 - (XX)

DENOTES  
CONV.  
FRAMING



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

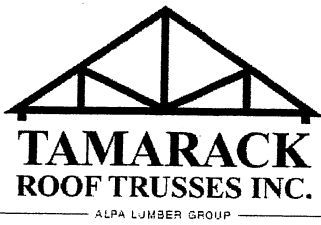
DESIGN CONFORMS WITH OBC 2012  
(2019 AMENDMENT)  
OCCUPANCY: RESIDENTIAL PART: 9  
Ss = 31.3 psf Sr = 8.4 psf

**TAMARACK**  
ROOF TRUSSES, INC.  
Job Track: **51012**  
Plan Log: **2035993**  
Layout ID: **413376**

Builder / Location:  
**ROYAL PINE HOMES / RICHMOND HILL**  
Project: **CENTREFIELD**  
Date: 2020-10-14 Sales: Mario DiCaro Designer: LC

Model / Elevation:  
**38-07 / C**

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Mlek Ver 8.3.3.247



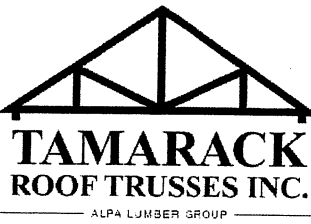
# DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: ROYAL PINE HOMES  
 Project: CENTREFIELD  
 Location: RICHMOND HILL  
 Model: 38-07  
 Lot #:   
 Elevation: A

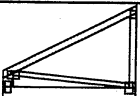
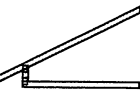
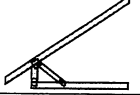
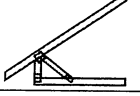
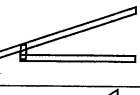
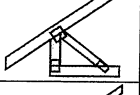
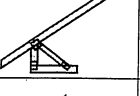
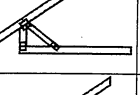
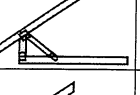
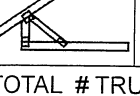
Job Track: 51012  
 PlanLog: 203593  
 Layout ID: 413359  
 Ref #  
 Page: 1 of 2  
 Date: 10-14-2020  
 Designer: Leo Chen  
 Sales Rep: Mario DiCano

## Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	PLY						LEFT RIGHT	LEFT RIGHT					
	1 2-ply	T1 Hip Girder	8 /12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	255.83 157.33				
	1 2-ply	T1Z Hip Girder	8 /12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	255.83 157.33				
	2	T2 Hip	8 /12	27-06-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	223.36 139.67				
	2	T3 Hip	8 /12	27-06-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	228.75 144.00				
	2	T4 Hip	8 /12	27-06-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	247.62 158.33				
	2	T5 Hip	8 /12	27-06-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	249.03 156.00				
	2	T6 Hip	8 /12	27-06-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	248.92 155.33				
	2	T7 Hip	8 /12	27-06-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	261.71 166.00				
	3	T8 Common	8 /12	27-06-00	10-06-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	386.82 241.00				
	1	T9 Common	8 /12	9-05-00	4-06-08	2 x 4	1-03-08	1-04-13 1-04-13	38.4 24.33				
	1	T9Z Common Girder	8 /12	9-05-00	4-06-08	2 x 4	1-03-08	1-04-13 1-04-13	38.4 24.33				
	1	T10 Common	8 /12	8-05-00	4-02-08	2 x 4	1-03-08	1-04-13 1-04-13	34.82 22.00				
	1	T10CP Hip Girder	8 /12	8-05-00	4-00-08	2 x 4	1-03-08	1-04-13 1-04-13	34.61 22.00				
	1 2-ply	T11 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	54.54 34.67				

 <p><b>TAMARACK</b> ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	<b>DELIVERY SHIPLIST</b>				Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-07 Lot #: Elevation: A	Job Track: 51012 PlanLog: 203593 Layout ID: 413359 Ref # Page: 2 of 2 Date: 10-14-2020 Designer: Leo Chen Sales Rep: Mario DiCano
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### Roof Trusses

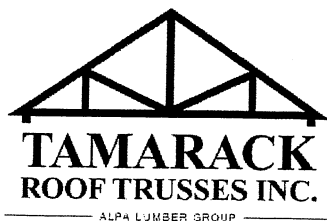
PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	PLY						LEFT RIGHT	LEFT RIGHT					
	1 2-ply	T11Z Monopitch Girder	6/12	5-10-08	4-01-04	2 x 4 2 x 6			1-02-00 4-01-04		54.54 34.67		
	18	J1 Jack-Open	6/12	5-10-08	4-01-04	2 x 4	1-03-08		1-02-00 4-01-04		302.3 192.00		
	1	J2 Jack-Open	8/12	4-08-08	4-06-08	2 x 4	1-03-08		1-04-13 4-06-08		16.26 10.33		
	2	J3 Jack-Open	8/12	3-11-08	4-00-08	2 x 4	1-03-08		1-04-13 4-00-08		28.76 18.00		
	5	J4 Jack-Open	4/12	5-05-00	2-06-13	2 x 4	1-03-08		9-03 2-06-13		73.25 50.00		
	4	C1 Jack-Open	8/12	1-10-15	2-08-02	2 x 4	1-03-08 1-01		1-04-13 2-08-02		37.36 25.33		
	2	C2 Jack-Open	8/12	2-00-00	4-00-02	2 x 4	1-03-08 1-10-15		1-04-13 2-08-13		24.16 15.33		
	2	C3 Jack-Open	8/12	1-10-15	2-08-02	2 x 4	1-03-08 2-09-09		1-04-13 2-08-02		24.86 16.67		
	2	C4 Jack-Open	8/12	3-10-15	4-00-02	2 x 4	1-03-08 9-09		1-04-13 4-00-02		30.34 19.33		
	2	C5 Jack-Open	8/12	1-10-15	2-08-02	2 x 4	1-03-08 2-00-09		1-04-13 2-08-02		23.15 15.33		

TOTAL # TRUSS= 65      TOTAL BFT OF ALL TRUSSES= 1999.31      BFT.      TOTAL WEIGHT OF ALL TRSSES 3173.6      LBS

### HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	LJS26DS	
4	Hardware	LUS24	
2	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 8



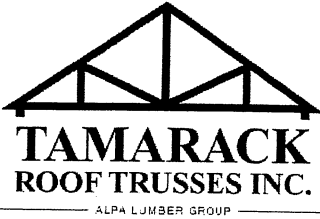
# DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: ROYAL PINE HOMES  
 Project: CENTREFIELD  
 Location: RICHMOND HILL  
 Model: 38-07  
 Lot #:   
 Elevation: B

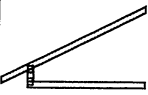
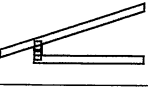
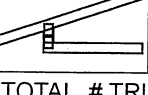
Job Track: 51012  
 PlanLog: 203593  
 Layout ID: 413367  
 Ref #:  
 Page: 1 of 2  
 Date: 10-14-2020  
 Designer: Leo Chen  
 Sales Rep: Mario DiCano

## Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	PLY						LEFT RIGHT	LEFT RIGHT					
	1 2-ply	T11Z2 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6			1-02-00 4-01-04		54.54 34.67		
	1 2-ply	T21 Hip Girder	10 /12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08		1-07-11 1-07-11		261.22 165.33		
	1 2-ply	T21Z Hip Girder	10 /12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08		1-07-11 1-07-11		261.22 165.33		
	2	T22 Hip	10 /12	27-06-00	5-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		225.29 144.67		
	2	T23 Hip	10 /12	27-06-00	6-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		237.51 149.33		
	2	T24 Hip	10 /12	27-06-00	7-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		261.71 164.00		
	2	T25 Hip	10 /12	27-06-00	8-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		261.82 165.33		
	4	T26 Hip	10 /12	27-06-00	9-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		552.53 348.67		
	2	T27 Hip	10 /12	27-06-00	10-01-04	2 x 4	1-03-08 1-03-08		1-07-11 1-07-11		288.05 183.33		
	1	T28 Hip Girder	10 /12	16-06-00	4-01-04	2 x 4 2 x 6		1-03-08	1-07-11 1-07-11		79.61 51.67		
	2	T29 Common	10 /12	8-02-00	5-01-12	2 x 4		1-03-08	1-07-11 1-10-03		73.87 49.00		
	1	T30 Common	10 /12	8-05-00	4-11-09	2 x 4		1-03-08 1-03-08	5-11 5-11		29.97 20.00		
	1	T30G GABLE	10 /12	8-05-00	4-11-09	2 x 4		1-03-08 1-03-08	5-11 5-11		31.99 20.67		
	2	PB21 Piggyback	10 /12	9-07-10	2-00-04	2 x 4					56.12 38.33		

 <p><b>TAMARACK</b> ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	<b>DELIVERY SHIPLIST</b>	
	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-07 Lot #: Elevation: B	Job Track: 51012 PlanLog: 203593 Layout ID: 413367 Ref # Page: 2 of 2 Date: 10-14-2020 Designer: Leo Chen Sales Rep: Mario DiCano

### Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	PLY						LEFT RIGHT	LEFT RIGHT					
	23	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	386.27 245.33				
	6	J21 Jack-Open	4 /12	4-03-00	2-04-03	2 x 4	1-03-08	11-03 2-04-03	72.65 48.00				
	4	J22 Jack-Open	4 /12	2-11-00	1-10-14	2 x 4	1-03-08	11-03 1-10-14	35.94 24.00				

TOTAL # TRUSS= 60

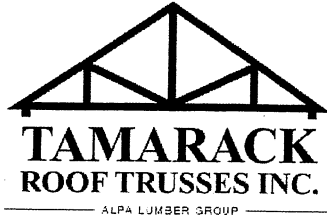
TOTAL BFT OF ALL TRUSSES= 2017.66 BFT.

TOTAL WEIGHT OF ALL TRSSES 3170.35 LBS

### HARDWARE

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

TOTAL NUMBER OF ITEMS= 5



# DELIVERY SHIPLIST

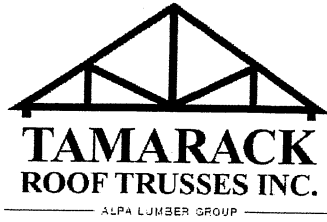
Lumber Yard: TAMARACK LUMBER  
 Builder: ROYAL PINE HOMES  
 Project: CENTREFIELD  
 Location: RICHMOND HILL  
 Model: 38-07  
 Lot #:   
 Elevation: C

Job Track: 51012  
 PlanLog: 203593  
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 Page: 1 of 2  
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 Designer: Leo Chen  
 Sales Rep: Mario DiCano

## Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	PLY						LEFT RIGHT	LEFT RIGHT					
	2	T2 Hip	8 / 12	27-06-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	223.36 139.67				
	2	T3 Hip	8 / 12	27-06-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	228.75 144.00				
	2	T4 Hip	8 / 12	27-06-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	247.62 158.33				
	2	T5 Hip	8 / 12	27-06-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	249.03 156.00				
	2	T6 Hip	8 / 12	27-06-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	248.92 155.33				
	2	T7 Hip	8 / 12	27-06-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	261.71 166.00				
	2	T8 Common	8 / 12	27-06-00	10-06-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	257.88 160.67				
	1	T10 Common	8 / 12	8-05-00	4-02-08	2 x 4	1-03-08	1-04-13 1-04-13	34.82 22.00				
	1	T10CP Hip Girder	8 / 12	8-05-00	4-00-08	2 x 4	1-03-08	1-04-13 1-04-13	34.61 22.00				
	1 2-ply	T11Z3 Monopitch Girder	6 / 12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	54.54 34.67				
	1	T41 Hip Girder	8 / 12	16-06-00	5-03-13	2 x 4 2 x 6	1-03-08	1-04-13 1-04-13	78.03 48.17				
	1 2-ply	T42 Monopitch Girder	8 / 12	5-10-08	5-03-13	2 x 4 2 x 6		1-04-13 5-03-13	59.58 37.33				
	1 2-ply	T45 Hip Girder	8 / 12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	251.16 155.33				
	1 2-ply	T45Z Hip Girder	8 / 12	27-06-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	251.16 155.33				





# DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: ROYAL PINE HOMES  
 Project: CENTREFIELD  
 Location: RICHMOND HILL  
 Model: 38-07  
 Lot #:   
 Elevation: C

Job Track: 51012  
 PlanLog: 203593  
 Layout ID: 413376  
 Ref #  
 Page: 2 of 2  
 Date: 10-14-2020  
 Designer: Leo Chen  
 Sales Rep: Mario DiCano

## Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG		HEEL HEIGHT		LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
							LEFT RIGHT	LEFT RIGHT					
	19	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	319.1 202.67				
	2	J3 Jack-Open	8 /12	3-11-08	4-00-08	2 x 4	1-03-08	1-04-13 4-00-08	28.76 18.00				
	1	J41 Jack-Open	8 /12	5-10-08	5-03-13	2 x 4	1-03-08	1-04-13 5-03-13	19.19 11.67				
	6	J42 Jack-Open	6 /12	4-03-00	3-03-08	2 x 4	1-03-08	1-02-00 3-03-08	77.22 52.00				
	4	J43 Jack-Open	6 /12	2-11-00	2-07-08	2 x 4	1-03-08	1-02-00 2-07-08	38.6 24.00				
	3	C1 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 1-01	1-04-13 2-08-02	28.02 19.00				
	1	C2 Jack-Open	8 /12	2-00-00	4-00-02	2 x 4	1-03-08 1-10-15	1-04-13 2-08-13	12.08 7.67				
	2	C5 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 2-00-09	1-04-13 2-08-02	23.15 15.33				
	1	C41 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 3-11-09	1-04-13 2-08-02	13.76 9.00				
	1	C42 Jack-Open	8 /12	3-10-15	4-00-02	2 x 4	1-03-08 1-11-09	1-04-13 4-00-02	16.5 10.33				

TOTAL # TRUSS= 65

TOTAL BFT OF ALL TRUSSES= 1924.5

BFT.

TOTAL WEIGHT OF ALL TRSSES 3057.53 LBS

## HARDWARE

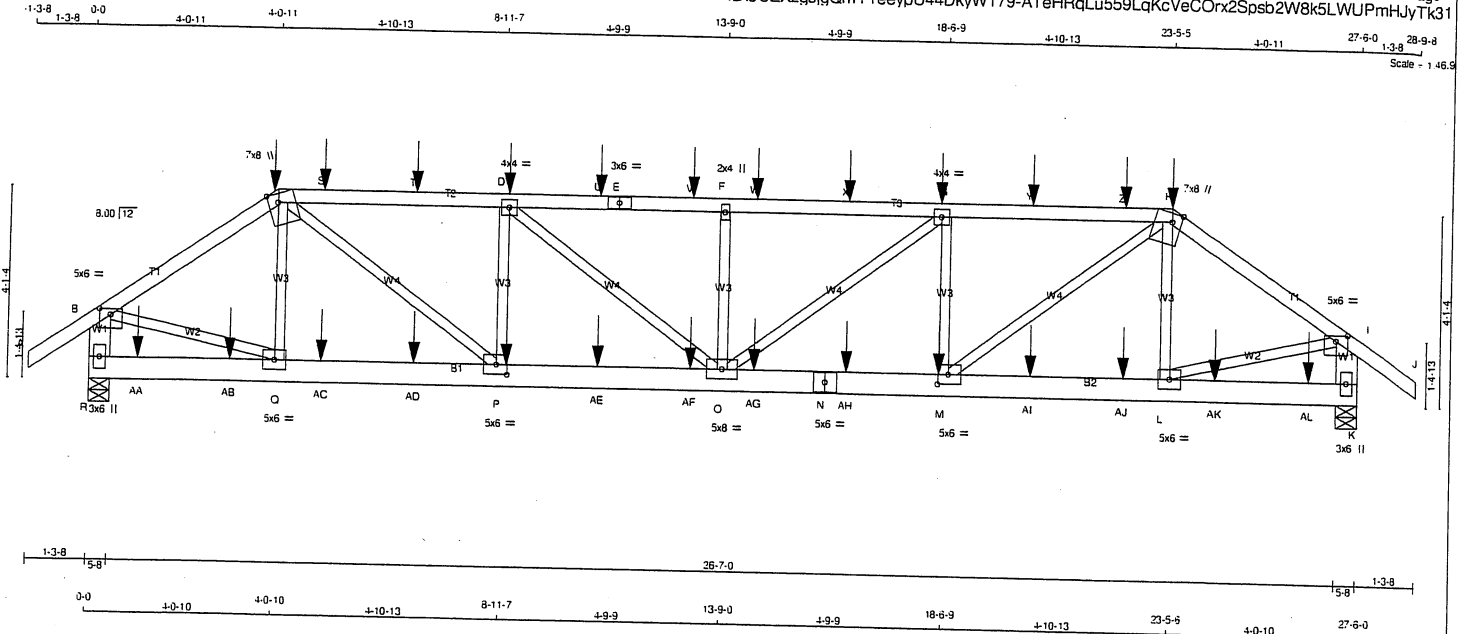
QTY	TYPE	MODEL	LENGTH
1	Hardware	HGUS26-2	
2	Hardware	LJS26DS	
3	Hardware	LUS24	
1	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 7

JOB NAME 413359	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:37:16 2020 Page 1  
ID:9CZxZqsigQmYTeypU44DkyWT79-ATeHRqLu559LqKcVeCOx2Spsb2W8k5LWUPmHJyTK31



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
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 - N	2x6	DRY	No.2
N - K	2x6	DRY	No.2
ALL WEBS EXCEPT			
	2x3	DRY	No.2

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	12	SIDE(61.0)
C-E	12	SIDE(61.0)
E-H	12	SIDE(61.0)
H-J	12	SIDE(61.0)
R-B	12	TOP
K-I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
R-N	12	SIDE(183.1)
N-K	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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 PLYS FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED DOWN		INPUT UPLIFT		REQRD BRG IN-SX	
JT	R	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
JT	R	2685	0	2685	0	0	5-8	5-8	5-8
K		2685	0	2685	0	0	5-8	5-8	5-8

**UNFACTORED REACTIONS**

JT	R	1ST CASE		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
		COMBINED	SNOW	LIVE	PERM. LIVE			
JT	R	1898	1253.0	0	0	0	645	0
K		1898	1253.0	0	0	0	645	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 = 4.02 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. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO					FR-TO		
A-B	0.35	-91.8	-91.8	0.07 (1)	10.00	Q-C	-443
B-C	-3070.0	-91.8	-91.8	0.19 (1)	5.10	C-P	0.2250
C-S	-4331.0	-91.8	-91.8	0.36 (1)	4.25	P-D	-1212
S-T	-4331.0	-91.8	-91.8	0.36 (1)	4.25	D-O	0.665
T-D	-4331.0	-91.8	-91.8	0.36 (1)	4.25	O-F	-675
D-U	-4856.0	-91.8	-91.8	0.38 (1)	4.02	F-G	0.665
U-E	-4856.0	-91.8	-91.8	0.38 (1)	4.02	G-H	-1212
E-V	-4856.0	-91.8	-91.8	0.38 (1)	4.02	H-I	0.2250
V-F	-4856.0	-91.8	-91.8	0.38 (1)	4.02	I-H	-443
F-W	-4856.0	-91.8	-91.8	0.38 (1)	4.02	H-Q	0.2623
W-X	-4856.0	-91.8	-91.8	0.38 (1)	4.02	Q-I	0.2623
X-G	-4856.0	-91.8	-91.8	0.38 (1)	4.02	L-I	0.32 (11)
G-Y	-4331.0	-91.8	-91.8	0.36 (1)	4.25		
Y-Z	-4331.0	-91.8	-91.8	0.36 (1)	4.25		
Z-H	-4331.0	-91.8	-91.8	0.36 (1)	4.25		
H-I	-3070.0	-91.8	-91.8	0.19 (1)	5.10		
I-J	0.35	-91.8	-91.8	0.07 (1)	10.00		
R-B	-2633.0	0.0	0.0	0.09 (1)	7.81		
K-I	-2633.0	0.0	0.0	0.09 (1)	7.81		

**DESIGN CRITERIA**

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

**SPECIFIED LOADS:**

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

SPACING = 24.0 IN. C/C

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

\*\*\* NON STANDARD GIRDER \*\*\*

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

**THIS DESIGN COMPLIES WITH:**

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L.999 (0.10")  
ALLOWABLE DEFL.(TL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L.999 (0.19")

CSI: TC=0.38/1.00 (F-G:1), BC=0.33/1.00 (M-O:1)  
WB=0.32/1.00 (I-L:1). SSI=0.16/1.00 (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)	(PLI)
MAX	MIN	MAX
MT20	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.62 (Q) (INPUT = 0.90)  
JSI METAL= 0.43 (N) (INPUT = 1.00)



Structural component only  
DWG# T-2022000

JOB NAME 413359	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 20:37:16 2020 Page 2  
ID:9CZXzasiqOmYTeypU44DkyWT79-ATeHRqLu559LqKcVeCOrx2Spsb2W8k5LWUJpMhJyTk31

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	7.0	8.0	Edge	2.50
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW-m	MT20	7.0	8.0	Edge	2.50
I	TMVW-p	MT20	5.0	6.0	1.50	3.00
K	BMV1+p	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMWW-t	MT20	5.0	6.0	2.50	2.75
N	BS-t	MT20	5.0	6.0		
O	BMWWW-t	MT20	5.0	8.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75
Q	BMWW-t	MT20	5.0	6.0		
R	BMV1+p	MT20	3.0	6.0		

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

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-11	-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11	-171	-171	---	FRONT	VERT	SNOW	---	C1
D	9-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
G	18-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
H	23-5-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
H	23-5-5	-171	-171	---	FRONT	VERT	SNOW	---	C1
M	18-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
P	9-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
S	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
T	7-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
U	11-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
V	13-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
W	14-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
X	16-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Y	20-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Z	22-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AA	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AB	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AC	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AD	7-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AE	11-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AF	13-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AG	14-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AH	16-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AI	20-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AJ	22-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AK	24-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AL	26-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

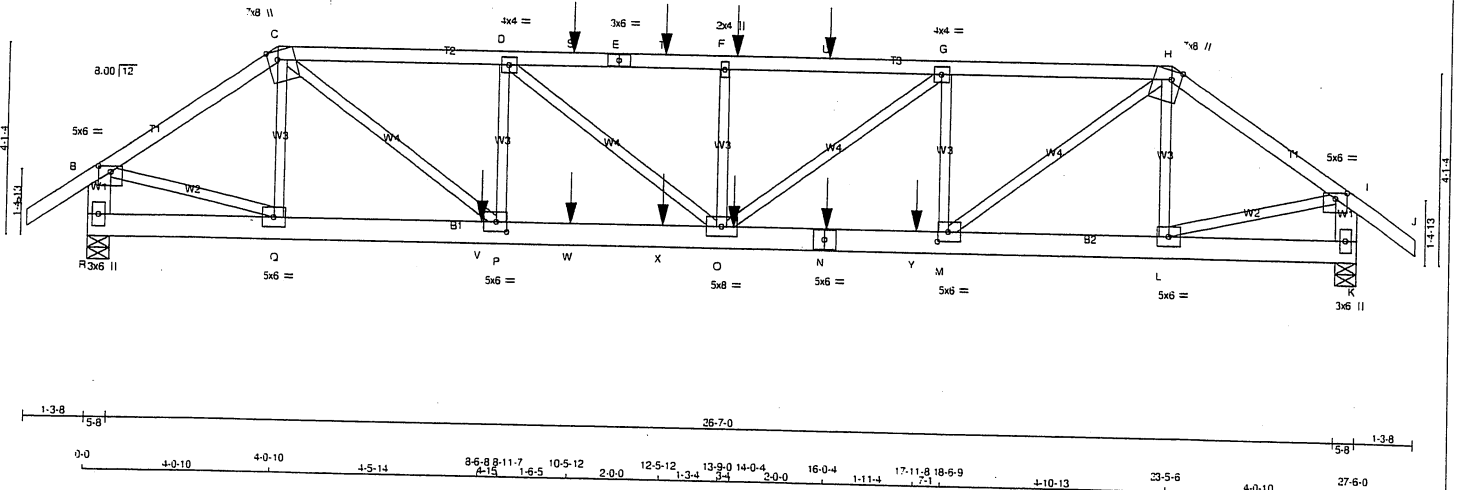
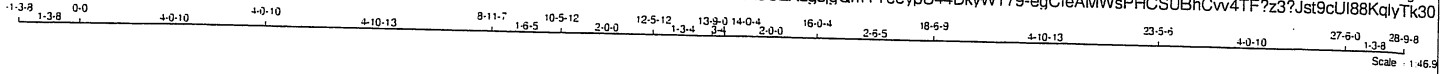


Structural component only  
DWG# T-2022000

JOB NAME <b>413359</b>	TRUSS NAME <b>T1Z</b>	QUANTITY <b>1</b>	PLY <b>2</b>	JOB DESC. <b>ROYAL PINE HOMES</b>	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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**LUMBER**

N. L. G. A. RULES	CHORDS	SIZE	DRY	No.2	DESCR.	SPF
A - C	2x4	DRY	No.2	SPF		
C - E	2x4	DRY	No.2	SPF		
E - H	2x4	DRY	No.2	SPF		
H - J	2x4	DRY	No.2	SPF		
R - B	2x6	DRY	No.2	SPF		
K - I	2x6	DRY	No.2	SPF		
R - N	2x6	DRY	No.2	SPF		
N - K	2x6	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	12	TOP
C-E	12	SIDE(0.0)
E-H	12	SIDE(61.0)
H-J	12	TOP
R-B	12	TOP
K-I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
R-N	12	SIDE(183.1)
N-K	12	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT	3072	0	3072	0	5-8	5-8
R	3072	0	3072	0	5-8	5-8
K	3205	0	3205	0	5-8	5-8

**UNFACTORED REACTIONS**

1ST LOASE	MAX. MIN. COMPONENT REACTIONS					
	JT COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
R	2165	1460	0	0	0	706
K	2258	1528	0	0	0	730

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		UNBRAC LENGTH	WEBS		FACTORED	
	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)		MEMB. FORCE (LBS)	MAX CSI (LC)	MEMB. FORCE (LBS)	MAX CSI (LC)
FR-TO									
A-B	0	35	-91.8	-91.8	0.07 (1)	10.00	Q-C	-521	0
B-C	-3637	0	-91.8	-91.8	0.21 (1)	4.75	C-P	0	3589
C-D	-5866	0	-91.8	-91.8	0.36 (1)	3.75	P-D	-1283	0
D-S	-6763	0	-91.8	-91.8	0.41 (1)	3.47	D-O	0	1135
S-E	-6763	0	-91.8	-91.8	0.41 (1)	3.47	O-F	-725	0
E-T	-6763	0	-91.8	-91.8	0.41 (1)	3.47	F-G	0	550
T-F	-6763	0	-91.8	-91.8	0.41 (1)	3.47	M-G	-854	0
F-U	-6763	0	-91.8	-91.8	0.40 (1)	3.49	M-H	0	4038
U-G	-6763	0	-91.8	-91.8	0.40 (1)	3.49	L-H	-729	0
G-H	-6328	0	-91.8	-91.8	0.36 (1)	3.64	B-O	0	3107
H-I	-3769	0	-91.8	-91.8	0.21 (1)	4.68	L-I	0	3219
I-J	0	35	-91.8	-91.8	0.07 (1)	10.00			
R-B	-3061	0	0.0	0.0	0.11 (1)	7.81			
K-I	-3161	0	0.0	0.0	0.11 (1)	7.77			
R-Q	0	0	-18.5	-18.5	0.04 (1)	10.00			
Q-V	0	3007	-18.5	-18.5	0.31 (1)	10.00			
V-P	0	3007	-18.5	-18.5	0.31 (1)	10.00			
P-W	0	5867	-18.5	-18.5	0.40 (1)	10.00			
W-X	0	5867	-18.5	-18.5	0.40 (1)	10.00			
X-O	0	5867	-18.5	-18.5	0.40 (1)	10.00			
O-N	0	6328	-18.5	-18.5	0.64 (1)	10.00			
N-Y	0	6328	-18.5	-18.5	0.64 (1)	10.00			
Y-M	0	6328	-18.5	-18.5	0.64 (1)	10.00			
M-L	0	3110	-18.5	-18.5	0.29 (1)	10.00			
L-K	0	0	-18.5	-18.5	0.02 (4)	10.00			

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	14-0-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
N	16-0-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
O	14-0-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
S	10-5-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
T	12-5-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
U	16-0-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
V	8-6-8	-609	-609	---	BACK	VERT	TOTAL	---	C1
W	10-5-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
X	12-5-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
Y	17-11-8	-1109	-1109	---	BACK	VERT	TOTAL	---	C1

TOTAL WEIGHT = 2 X 128 = 256 lb

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")  
ALLOWABLE DEFL.(TL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.41 1.00 (D-F:1), BC=0.64/1.00 (M-O:1), WB=0.50/1.00 (H-M:1), SSI=0.49/1.00 (M-O: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) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.90 (H) (INPUT = 0.90)  
JSI METAL = 0.72 (N) (INPUT = 1.00)



Structural component only  
DWG# T-2022001/1/2

JOB NAME 413359	TRUSS NAME T1Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:37:17 2020 Page 2  
 ID:9CZxzsiaQmYTeepU44DkyWT79-egCfeAMWsPHCSUBhCw4TF?z3?Jst9cU188KqlyTk30

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW+m	MT20	7.0	8.0	Edge	2.50
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW+m	MT20	7.0	8.0	Edge	2.50
I	TMVW-p	MT20	5.0	6.0	1.50	3.00
K	BMV1+p	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMWW-t	MT20	5.0	6.0	2.50	2.75
N	BS-t	MT20	5.0	6.0		
O	BMWWW-t	MT20	5.0	8.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75
Q	BMWW-t	MT20	5.0	6.0		
R	BMV1+p	MT20	3.0	6.0		

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

CONNECTION REQUIREMENTS

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

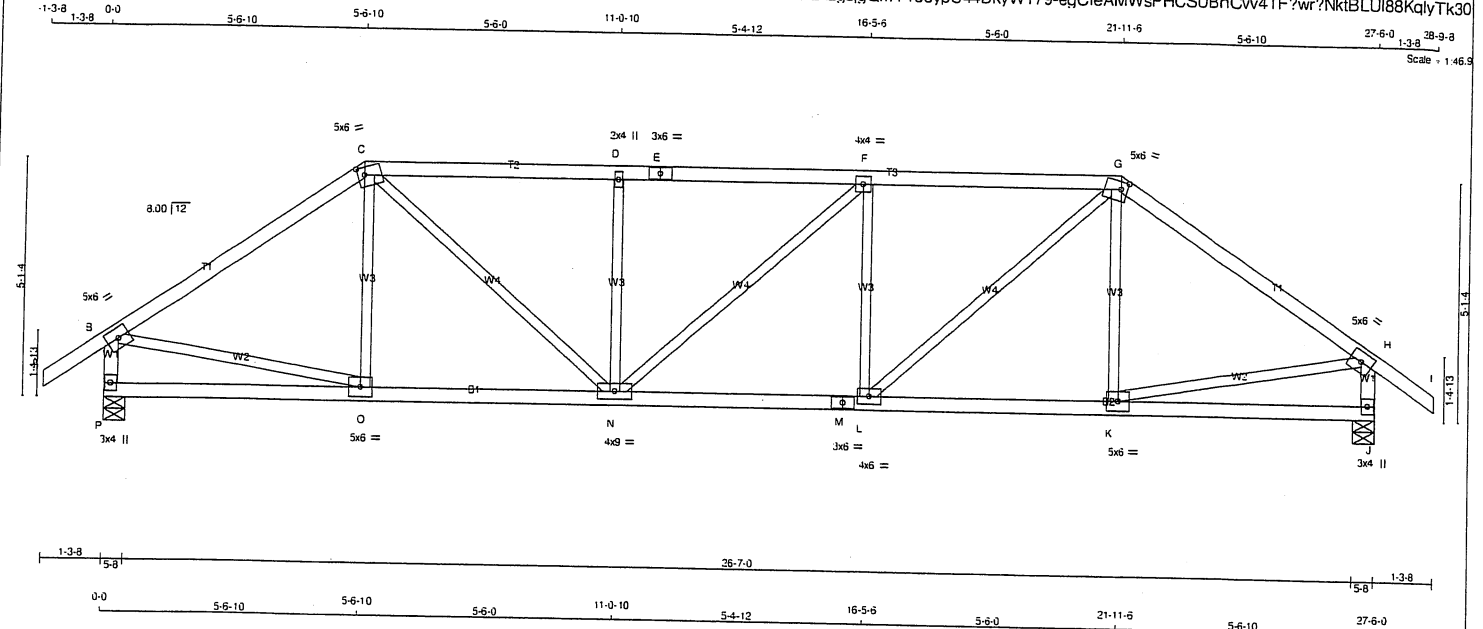


Structural component only  
 DWG# T-2022001 *2/2*

JOB NAME 413359	TRUSS NAME T2	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 2 X 112 = 223 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY No.2	SPF
E - G	2x4	DRY No.2	SPF
G - I	2x4	DRY No.2	SPF
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0		
C	TTWW-m	MT20	5.0	6.0	2.00	1.75
D	TMVW-w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTWW-m	MT20	5.0	6.0	2.00	1.75
H	TMVW-t	MT20	3.0	4.0		
J	BMV1-p	MT20	5.0	6.0		
K	BMVW-t	MT20	5.0	6.0		
L	BMVW-t	MT20	4.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVWV-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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1642	0	1642	0	5-8	5-8
J	1642	0	1642	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1159	774	0	0	0	385	0
J	1159	774	0	0	0	385	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 = 4.15 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.	CHORDS			UNBRAC	MEMB.	WEBS				
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)			MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)			
FR-TO		FROM TO		LENGTH	FR-TO					
A-B	0	35	-91.8	-91.8	0.12 (1)	10.00	O-C	-153	37	0.06 (1)
B-C	-1705	0	-91.8	-91.8	0.62 (1)	4.35	C-N	0	967	0.22 (1)
C-D	-2142	0	-91.8	-91.8	0.47 (1)	4.16	N-D	-540	0	0.21 (1)
D-E	-2142	0	-91.8	-91.8	0.47 (1)	4.15	N-F	-2	0	0.00 (1)
E-F	-2142	0	-91.8	-91.8	0.47 (1)	4.15	L-F	-541	0	0.00 (1)
F-G	-2143	0	-91.8	-91.8	0.48 (1)	4.15	L-G	0	969	0.21 (1)
G-H	-1705	0	-91.8	-91.8	0.62 (1)	4.35	K-G	-154	36	0.22 (1)
H-I	0	35	-91.8	-91.8	0.12 (1)	10.00	B-O	0	1442	0.06 (1)
P-B	-1599	0	0	0	0.16 (1)	6.53	K-H	0	1442	0.32 (1)
J-H	-1599	0	0	0	0.16 (1)	6.53				
P-O	0	0	-18.5	-18.5	0.14 (4)	10.00				
O-N	0	1414	-18.5	-18.5	0.30 (1)	10.00				
N-M	0	2143	-18.5	-18.5	0.39 (1)	10.00				
M-L	0	2143	-18.5	-18.5	0.39 (1)	10.00				
L-K	0	1413	-18.5	-18.5	0.30 (1)	10.00				
K-J	0	0	-18.5	-18.5	0.14 (4)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")  
ALLOWABLE DEFL.(TL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.62/1.00 (B-C:1), BC=0.39/1.00 (L-N:1), WB=0.32/1.00 (B-O:1), SSI=0.23/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

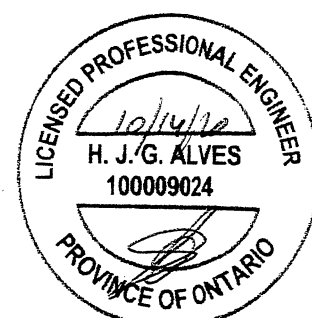
**NAIL VALUES**

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

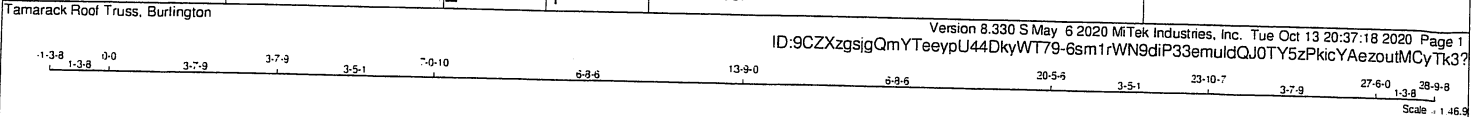
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (G) (INPUT = 0.90)  
JSI METAL= 0.63 (M) (INPUT = 1.00)



Structural component only  
DWG# T-2022002



**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	No.2
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - J	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-t	MT20	5.0	6.0	
D	TTWW-m	MT20	5.0	6.0	2.25 2.00
E	TMV+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	BMWW-t	MT20	5.0	6.0	
K	BMWW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMWWW-t	MT20	4.0	9.0	
N	BMWW-t	MT20	4.0	4.0	
O	BMWW-t	MT20	5.0	6.0	

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1642	0	1642	0	5-8	5-8
J	1642	0	1642	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					SOIL
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	
O	1159	774	0	0	0	385	0
J	1159	774	0	0	0	385	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 = 4.17 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)

FR-TO	CHORDS			WEBS			
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	
A-B	0	35	-91.8	10.00	C-N	0	55
B-C	0	19	-91.8	10.00	N-D	0	133
C-D	-1688	0	-91.8	4.98	D-M	0	658
D-E	-1886	0	-91.8	4.17	M-E	-755	0
E-F	-1886	0	-91.8	10.00	M-F	0	658
F-G	-1688	0	-91.8	4.98	K-F	0	133
G-H	0	19	-91.8	10.00	K-G	0	55
H-I	0	35	-91.8	7.81	O-C	-1914	0
O-B	-254	0	0.0	7.81	G-J	-1914	0
J-H	-254	0	0.0	7.81			
O-N	0	1371	-18.5	10.00			
N-M	0	1388	-18.5	10.00			
M-L	0	1388	-18.5	10.00			
L-K	0	1388	-18.5	10.00			
K-J	0	1371	-18.5	10.00			

TOTAL WEIGHT = 2 X 114 = 229 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

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

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.60/1.00 (D-E:1), BC=0.35/1.00 (K-M:1), WB=0.74/1.00 (G-J:1), SS=0.30/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

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

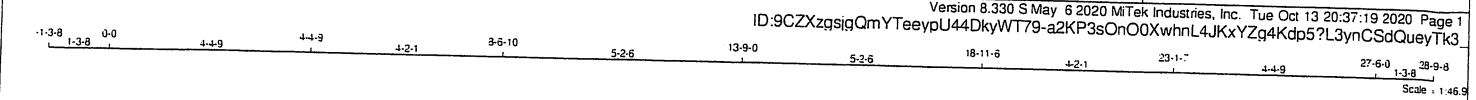
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.82 (D) (INPUT = 0.90)  
 JSI METAL = 0.47 (L) (INPUT = 1.00)



JOB NAME 413359	TRUSS NAME T4	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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 Scale: 1:46.8

**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
Q - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
Q - M	2x4	DRY No.2	SPF
M - 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-t	MT20	5.0	6.0		
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TTVW+m	MT20	5.0	6.0	2.00	1.50
E	TMVW+w	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	6.0	2.00	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	5.0	6.0		
J	BMV1+p	MT20	3.0	4.0		
K	BMVW-t	MT20	5.0	6.0		
L	BMVW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVWV-t	MT20	4.0	9.0		
O	BMVW-t	MT20	4.0	4.0		
P	BMVW-t	MT20	5.0	6.0		
Q	BMV1+p	MT20	3.0	4.0		

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG IN-SX	REQD BRG IN-SX
Q	1642	0	1642	0	0	5-8	5-8
J	1642	0	1642	0	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LC CASE	MAX.	MIN.	COMPONENT REACTIONS
Q	COMBINED	1159	774	0 0 0 0 0 0 385 0 0 0
J	COMBINED	1159	774	0 0 0 0 0 0 385 0 0 0

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN. O.C**

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

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

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

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

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.85 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1		MAX. CSI (LC)	MAX. UNBRAC LENGTH	WEBS	
		FROM	TO			MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
A-B	0 35	-91.8	-91.8	0.12 (1)	10.00	P-C	-277 0 0.08 (1)
B-C	-1716 0	-91.8	-91.8	0.25 (1)	4.85	C-O	-181 0 0.11 (1)
C-D	-1611 0	-91.8	-91.8	0.24 (1)	4.98	O-D	0 214 0.05 (1)
D-E	-1578 0	-91.8	-91.8	0.35 (1)	4.88	D-N	0 425 0.10 (1)
E-F	-1578 0	-91.8	-91.8	0.35 (1)	4.88	N-E	-581 0 0.51 (1)
F-G	-1611 0	-91.8	-91.8	0.24 (1)	4.98	N-F	0 425 0.10 (1)
G-H	-1716 0	-91.8	-91.8	0.25 (1)	4.85	L-F	0 214 0.05 (1)
H-I	0 35	-91.8	-91.8	0.12 (1)	10.00	L-G	-181 0 0.11 (1)
Q-B	-1605 0	0.0	0.0	0.17 (1)	6.52	K-G	-277 0 0.08 (1)
J-H	-1605 0	0.0	0.0	0.17 (1)	6.52	B-P	0 1492 0.34 (1)
Q-P	0 0	-18.5	-18.5	0.07 (4)	10.00	K-H	0 1492 0.34 (1)
P-O	0 1449	-18.5	-18.5	0.28 (1)	10.00		
O-N	0 1320	-18.5	-18.5	0.26 (1)	10.00		
N-M	0 1320	-18.5	-18.5	0.26 (1)	10.00		
M-L	0 1320	-18.5	-18.5	0.26 (1)	10.00		
L-K	0 1449	-18.5	-18.5	0.28 (1)	10.00		
K-J	0 0	-18.5	-18.5	0.07 (4)	10.00		

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L 999 (0.06")  
 ALLOWABLE DEFL.(TL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L 999 (0.11")

CSI: TC=0.35/1.00 (D-E:1), BC=0.28/1.00 (K-L:1).  
 WB=0.51/1.00 (E-N:1), SSI=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches  
 PLATE ROTATION TOL. = 5.0 Deg.

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



Structural component only  
 DWG# T-2022004

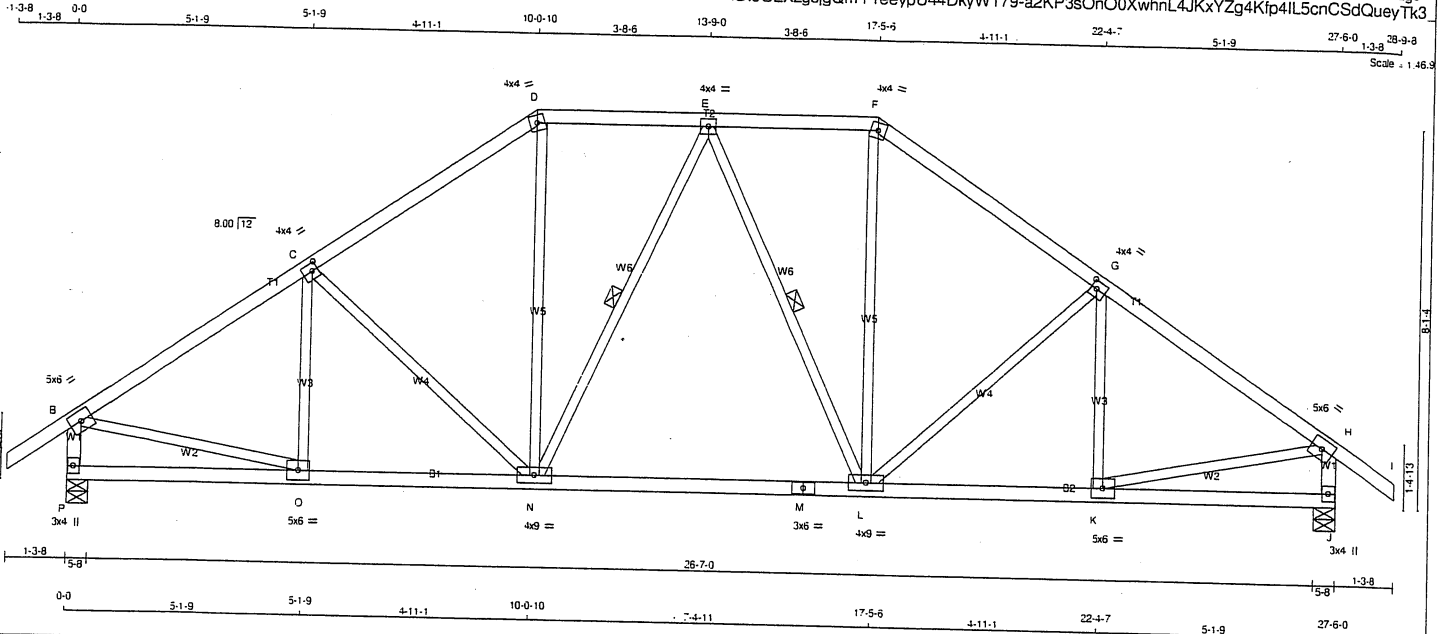


JOB NAME 413359	TRUSS NAME T5	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

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ID:9CZxZgsigQmYTeeypU44DkyWT79-a2KP3sOnO0XwhnL4JKxYZg4Kfp4L5cnCsdQueyTk3



TOTAL WEIGHT = 2 X 125 = 249 lb

**LUMBER**

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMW-1	MT20	5.0	6.0	
C	TMWW-1	MT20	4.0	4.0	2.00 1.50
D	TTW-m	MT20	4.0	4.0	
E	TMWW-1	MT20	4.0	4.0	
F	TTW-m	MT20	4.0	4.0	
G	TMWW-1	MT20	4.0	4.0	2.00 1.50
H	TMVW-1	MT20	5.0	6.0	
J	BMV1-p	MT20	3.0	4.0	
K	BMWV-1	MT20	5.0	6.0	
L	BMVWW-1	MT20	4.0	9.0	
M	BS-1	MT20	3.0	6.0	
N	BMVWW-1	MT20	4.0	9.0	
O	BMWV-1	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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1642	0	1642	0	5-8	5-8
J	1642	0	1642	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	MAX. MIN. COMPONENT REACTIONS						
	1ST CASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1159	774	0	0	0	385	0
J	1159	774	0	0	0	385	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 = 4.71 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)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
A-B	0	35		O-C	-218	3
B-C	-1741	0	-91.8 -91.8 0.12 (1)	C-N	-306	0
C-D	-1529	0	-91.8 -91.8 0.34 (1)	N-D	0	527
D-E	-1252	0	-91.8 -91.8 0.16 (1)	L-F	0	527
E-F	-1252	0	-91.8 -91.8 0.16 (1)	L-G	-306	0
F-G	-1529	0	-91.8 -91.8 0.33 (1)	K-G	-218	3
G-H	-1741	0	-91.8 -91.8 0.34 (1)	B-O	0	1505
H-I	0	35	-91.8 -91.8 0.12 (1)	K-H	0	1505
P-B	-1600	0	0.0 0.0 0.16 (1)	N-E	-223	0
J-H	-1600	0	0.0 0.0 0.16 (1)	E-L	-223	0
P-O	0	0	-18.5 -18.5 0.10 (4)			
O-N	0	1473	-18.5 -18.5 0.32 (1)			
N-M	0	1345	-18.5 -18.5 0.30 (1)			
M-L	0	1345	-18.5 -18.5 0.30 (1)			
L-K	0	1473	-18.5 -18.5 0.32 (1)			
K-J	0	0	-18.5 -18.5 0.10 (4)			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.05")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.34/1.00 (B-C-1), BC=0.32/1.00 (N-O-1), WB=0.34/1.00 (B-O-1), SSI=0.19/1.00 (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

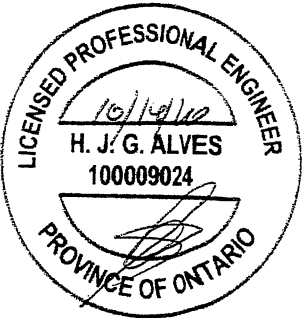
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

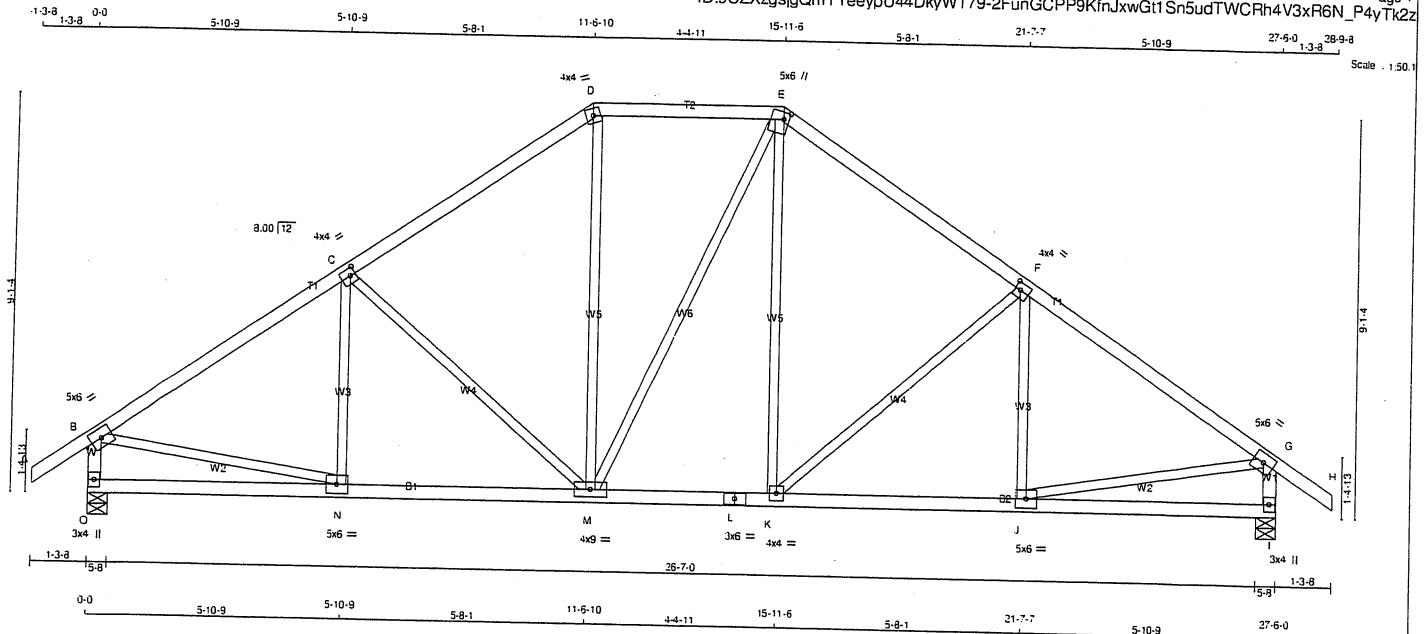
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.77 (B) (INPUT = 0.90)  
 JSI METAL = 0.44 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2022005



**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
O - B	2x4	DRY	No.2
I - G	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - I	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	TMVW-t	MT20	5.0	6.0	
C	TMVW-t	MT20	4.0	4.0	2.00 1.50
D	TTW-m	MT20	4.0	4.0	
E	TTW+m	MT20	5.0	6.0	2.00 1.50
F	TMVW-t	MT20	4.0	4.0	2.00 1.50
G	TMVW-t	MT20	5.0	6.0	
I	BMV1+p	MT20	3.0	4.0	
J	BMVW-t	MT20	5.0	6.0	
K	BMVW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMVWVW-t	MT20	4.0	9.0	
N	BMVW-t	MT20	5.0	6.0	
O	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1642	0	1642	0	5-8	5-8
I	1642	0	1642	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS					DEAD	SOIL
		SNOW	LIVE	PERM. LIVE	WIND			
O	1159	774	0	0	0	0	0	
I	1159	774	0	0	0	0	0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, I  
**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 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)

FR-TO	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. MEMB. UNBRAC LENGTH FR-TO	MAX. FACTORED FORCE (LBS)
A-B	0	35	-91.8	-91.8
B-C	-1751	0	-91.8	-91.8
C-D	-1426	0	-91.8	-91.8
D-E	-1159	0	-91.8	-91.8
E-F	-1425	0	-91.8	-91.8
F-G	-1752	0	-91.8	-91.8
G-H	0	35	-91.8	-91.8
O-B	-1597	0	0	0
I-G	-1597	0	0	0
O-N	0	0	-18.5	-18.5
N-M	0	1486	-18.5	-18.5
M-L	0	1159	-18.5	-18.5
L-K	0	1159	-18.5	-18.5
K-J	0	1486	-18.5	-18.5
J-I	0	0	-18.5	-18.5

**DESIGN CRITERIA**

SPECIFIED LOADS:  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12  
 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.05")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.46/1.00 (F-G:1), BC=0.31/1.00 (J-K:1), WB=0.52/1.00 (F-K:1), SS=0.22/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

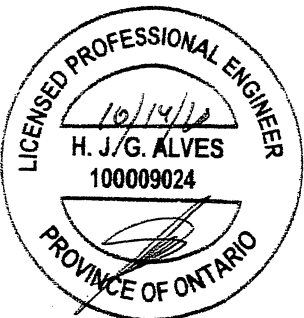
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT

NAIL VALUES  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

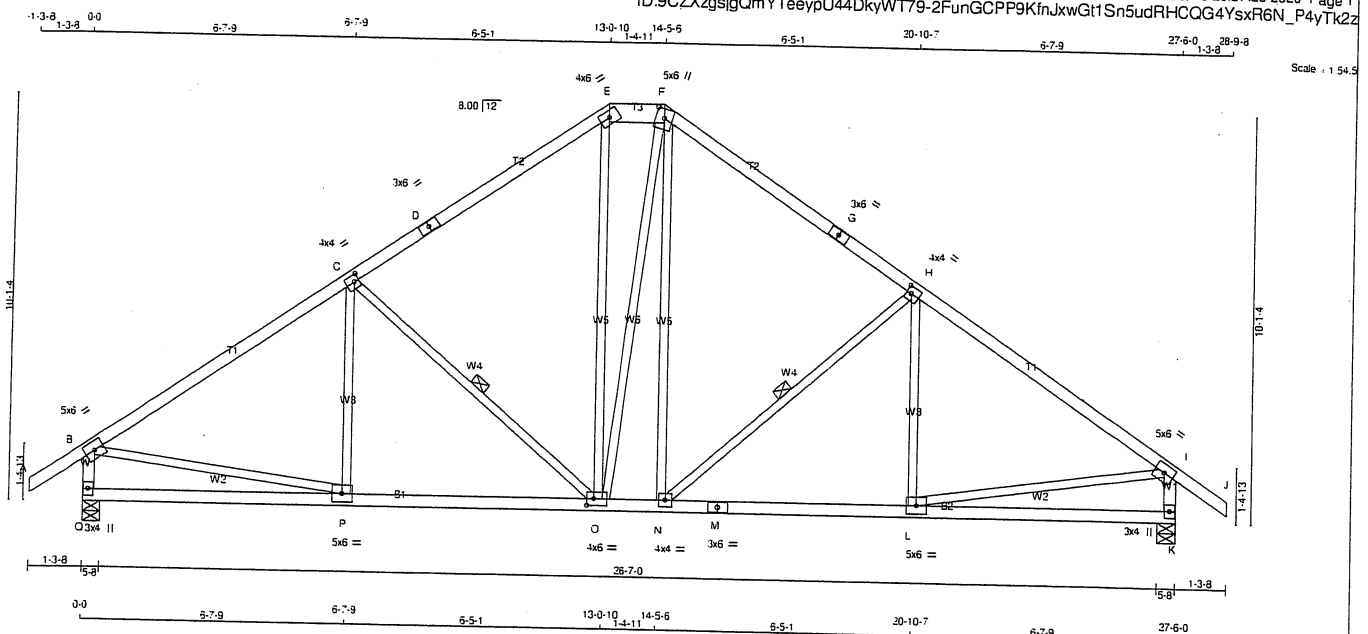
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.77 (G) (INPUT = 0.90)  
 JSI METAL = 0.45 (G) (INPUT = 1.00)



JOB NAME <b>413359</b>	TRUSS NAME <b>T7</b>	QUANTITY <b>2</b>	PLY <b>1</b>	JOB DESC. <b>ROYAL PINE HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZxgsgQmYTeypU44DkyWT79-2FunGCP9KfnJxwGt1Sn5udRHCQG4YsxR6N\_P4yTk2z



TOTAL WEIGHT = 2 X 131 = 262 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - F	2x6	DRY	No.2
F - G	2x4	DRY	No.2
G - J	2x4	DRY	No.2
Q - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - 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	TMVW-t	MT20	5.0	6.0		
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTW-h	MT20	4.0	6.0		
F	TTWW+m	MT20	5.0	6.0	2.75	2.50
G	TS-t	MT20	3.0	6.0		
H	TMVW-t	MT20	4.0	4.0	2.00	1.50
I	TMVW-t	MT20	5.0	6.0		
K	BMV1+p	MT20	3.0	4.0		
L	BMVW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMVW-t	MT20	4.0	6.0	2.00	2.00
P	BMVW-t	MT20	5.0	6.0		
Q	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	REQD BRG
Q	1642 0	1642 0	5-8	5-8
K	1642 0	1642 0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
Q	1159	774	0	0	0	385	0
K	1159	774	0	0	0	385	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 = 4.35 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.  
 1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-O, H-N.

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

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 35	-91.8	-91.8 0.12 (1)	10.00	P-C	-108 73	0.06 (1)
B-C	-1746 0	-91.8	-91.8 0.61 (1)	4.35	C-O	-544 0	0.26 (1)
C-D	-1331 0	-91.8	-91.8 0.55 (1)	4.91	O-E	0 427	0.10 (1)
D-E	-1071 0	-91.8	-91.8 0.55 (1)	4.91	O-F	0 14	0.00 (1)
E-F	-1071 0	-91.8	-91.8 0.02 (1)	6.25	N-F	0 412	0.09 (1)
F-G	-1328 0	-91.8	-91.8 0.55 (1)	4.91	N-H	-548 0	0.26 (1)
G-H	-1328 0	-91.8	-91.8 0.55 (1)	4.91	L-H	-103 75	0.05 (1)
H-I	-1747 0	-91.8	-91.8 0.61 (1)	4.35	B-P	0 1505	0.34 (1)
I-J	0 35	-91.8	-91.8 0.12 (1)	10.00	L-I	0 1506	0.34 (1)
Q-B	-1591 0	0.0	0.0 0.16 (1)	6.55			
K-I	-1592 0	0.0	0.0 0.16 (1)	6.55			
Q-P	0 0	-18.5	-18.5 0.19 (4)	10.00			
P-O	0 1485	-18.5	-18.5 0.33 (1)	10.00			
O-N	0 1068	-18.5	-18.5 0.24 (1)	10.00			
N-M	0 1486	-18.5	-18.5 0.34 (1)	10.00			
M-L	0 1486	-18.5	-18.5 0.34 (1)	10.00			
L-K	0 0	-18.5	-18.5 0.20 (4)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.61:1.00 (H:I), BC=0.34:1.00 (L:N), WB=0.34:1.00 (H:L), SS=0.24:1.00 (H:I)

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 (PL)	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747	788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

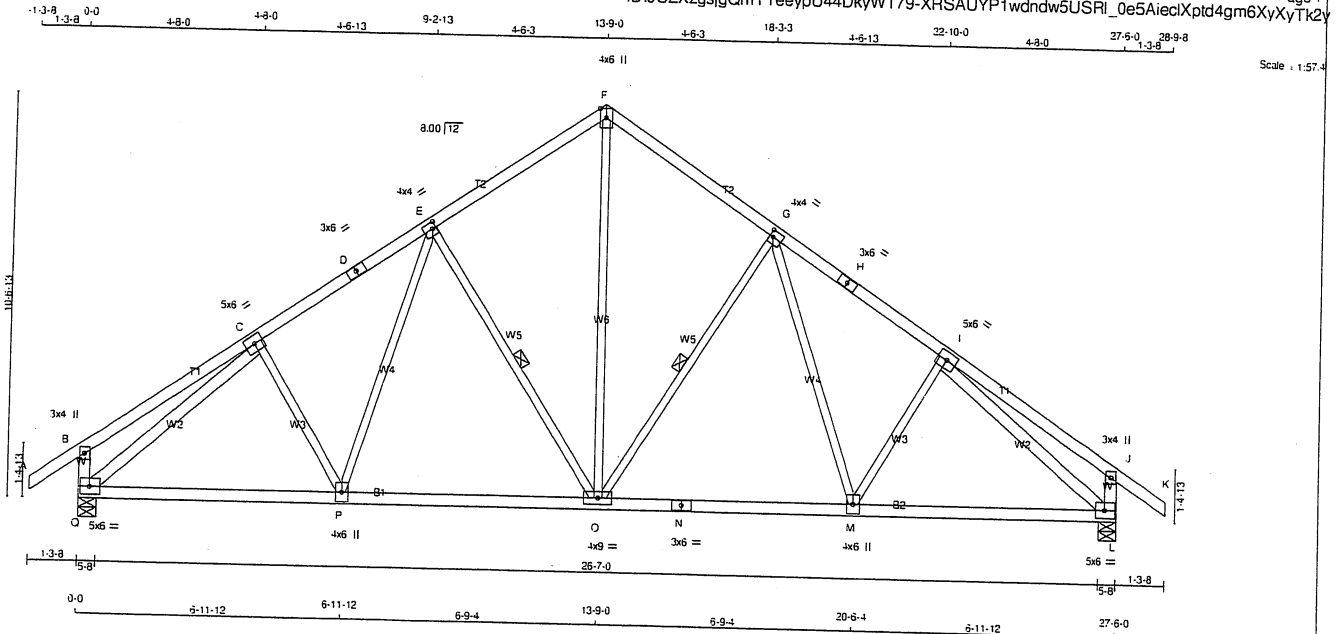
JSI GRIP = 0.76 (I) (INPUT = 0.90)  
 JSI METAL = 0.48 (M) (INPUT = 1.00)



Structural component only  
 DWG# T-2022007

JOB NAME 413359	TRUSS NAME T8	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZxZgsgQmYTeeyU44DkyWT79-XRSAUYP1wdndw5USRI\_0e5AieclXptd4gm6XyXyTk2v



Scale: 1:57.4

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

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
Q - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
Q - N	2x4	DRY No.2	SPF
N - L	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF  
 EXCEPT  
 Q - C 2x4 DRY No.2 SPF  
 I - L 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	5.0	6.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.00
F	TTW+p	MT20	4.0	6.0	Edge	
G	TMWW-t	MT20	4.0	4.0	2.00	1.00
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	5.0	6.0		
J	TMV+p	MT20	3.0	4.0		
L	BMVW-t	MT20	5.0	6.0		
M	BMVW-t	MT20	4.0	6.0		
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	4.0	9.0		
P	BMVW-t	MT20	4.0	6.0		
Q	BMVW-t	MT20	5.0	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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
Q	1642	0	1642	0	5-8	5-8
L	1642	0	1642	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED SNOW		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	VERT	HORZ	LIVE	PERM. LIVE			
Q	1159	774	0	0	0	0	0
L	1159	774	0	0	0	0	0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, L  
 BRACING  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.94 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED  
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

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

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-TO				FR-TO		
A-B	0:35	-91.8	-91.8 0.12 (1)	10.00	O-F	0 1033 0.23 (1)
B-C	0:22	-91.8	-91.8 0.25 (1)	10.00	O-G	-538 0 0.27 (1)
C-D	-1657 0	-91.8	-91.8 0.24 (1)	4.94	G-M	0 239 0.05 (1)
D-E	-1657 0	-91.8	-91.8 0.24 (1)	4.94	M-I	-101 24 0.04 (1)
E-F	-1253 0	-91.8	-91.8 0.23 (1)	5.50	E-O	-538 0 0.27 (1)
F-G	-1253 0	-91.8	-91.8 0.23 (1)	5.50	P-E	0 239 0.05 (1)
G-H	-1657 0	-91.8	-91.8 0.24 (1)	4.94	C-P	-101 24 0.04 (1)
H-I	-1657 0	-91.8	-91.8 0.24 (1)	4.94	Q-C	-1930 0 0.88 (1)
I-J	0:22	-91.8	-91.8 0.25 (1)	10.00	I-L	-1930 0 0.88 (1)
J-K	0:35	-91.8	-91.8 0.12 (1)	10.00		
Q-B	-294 0	0.0	0.0 0.03 (1)	7.81		
L-J	-294 0	0.0	0.0 0.03 (1)	7.81		
Q-P	0:1431	-18.5	-18.5 0.34 (1)	10.00		
P-O	0:1308	-18.5	-18.5 0.32 (4)	10.00		
O-N	0:1308	-18.5	-18.5 0.32 (4)	10.00		
N-M	0:1308	-18.5	-18.5 0.32 (4)	10.00		
M-L	0:1431	-18.5	-18.5 0.34 (1)	10.00		

**DESIGN CRITERIA**

SPECIFIED LOADS:  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
 ALLOWABLE DEFL.(TL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.25/1.00 (B-C:1), BC=0.34/1.00 (L-M:1), WB=0.88/1.00 (C-Q:1), SSI=0.16/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

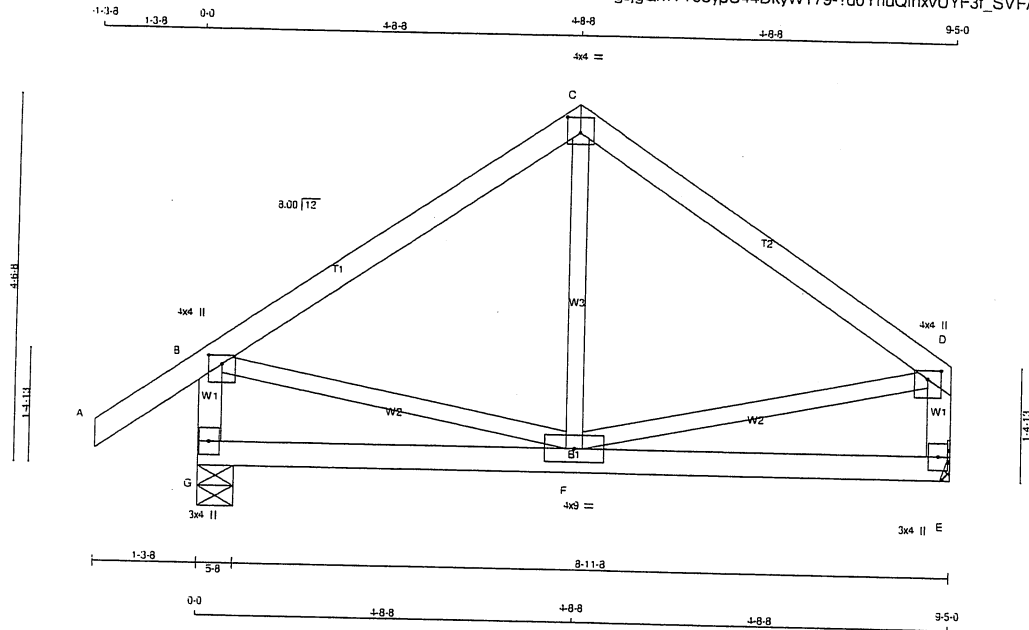
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (O) (INPUT = 0.90)  
 JSI METAL= 0.43 (C) (INPUT = 1.00)



Structural component only  
 DWG# T-2022008

JOB NAME 413359	TRUSS NAME T9	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



TOTAL WEIGHT = 38 lb [M/F]

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4 DRY	No.2	SPF
C - D	2x4 DRY	No.2	SPF
E - B	2x4 DRY	No.2	SPF
E - D	2x4 DRY	No.2	SPF
G - E	2x4 DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 EXCEPT  
SPF  
DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p MT20	4.0	4.0	1.25	2.00
C	TTW-p MT20	4.0	4.0	2.25	2.00
D	TMVW+p MT20	4.0	4.0	1.25	2.00
E	BMV1+p MT20	3.0	4.0		
F	BMVWV-t MT20	4.0	9.0		
G	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 VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG IN-SX	REQRD BRG IN-SX
G	645	0	645	0	5-8	5-8
E	519	0	519	0	0	MECHANICAL

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	454	311	0	0	0	143	0
E	367	241	0	0	0	126	0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS			WEBS		
		VERT. LOAD (PLF)	LC1	MAX	MEMB. UNBRAC LENGTH	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO	CS1 (LC)	UNBRAC LENGTH	FR-TO	
A-B	0 35	-91.8	-91.8	0.12 (1)	10.00	F-C	-31 70 0.02 (4)
B-C	-361 0	-91.8	-91.8	0.26 (1)	6.25	B-F	0 308 0.07 (1)
C-D	-361 0	-91.8	-91.8	0.26 (1)	6.25	F-D	0 308 0.07 (1)
G-B	-611 0	0.0	0.0	0.06 (1)	7.81		
E-D	-485 0	0.0	0.0	0.05 (1)	7.81		
G-F	0 0	-18.5	-18.5	0.12 (4)	10.00		
F-E	0 0	-18.5	-18.5	0.12 (4)	10.00		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.31")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.26/1.00 (B-C:1), BC=0.12/1.00 (F-G:4), WB=0.07/1.00 (D-F:1), SSI=0.14/1.00 (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 SECTION (PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

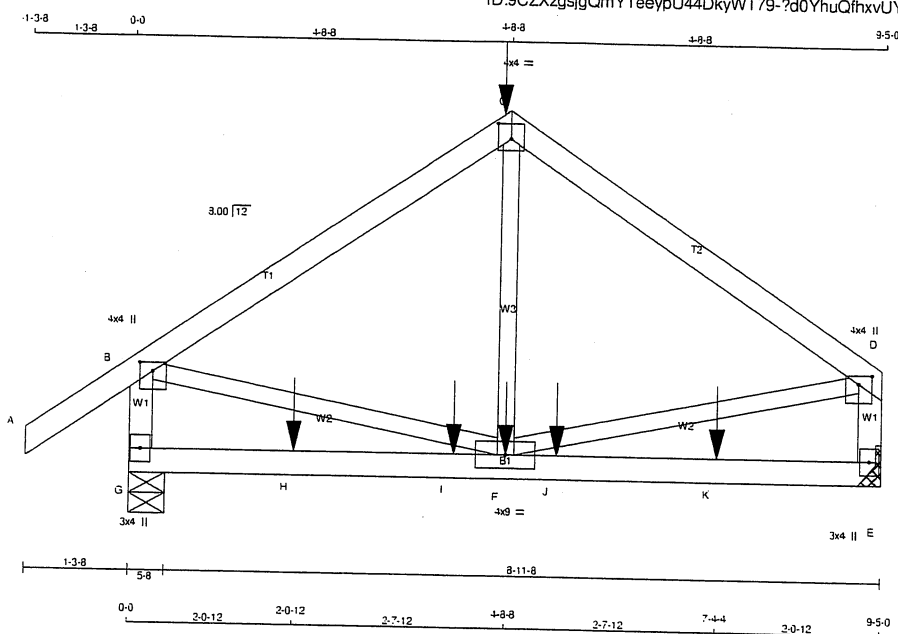
JSI GRIP= 0.42 (B) (INPUT = 0.90)  
JSI METAL= 0.12 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022009

JOB NAME 413359	TRUSS NAME T9Z	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:37:22 2020 Page 1  
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TOTAL WEIGHT = 38 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	No.2
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
G - B	2x4	DRY	No.2
E - D	2x4	DRY	No.2
G - E	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	TMW+p	MT20	4.0	4.0	1.25	2.00
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMW+p	MT20	4.0	4.0	1.25	2.00
E	BMV1+p	MT20	3.0	4.0		
F	BMVWW-t	MT20	4.0	9.0		
G	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 VERT	MAXIMUM FACTORED GROSS REACTION DOWN	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1096	0	0	0
E	970	0	0	MECHANICAL

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	771	526	0	0	0	245	0
E	685	456	0	0	0	229	0

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

**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.74 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO	FROM	TO	CSI (LC)	FR-TO	FR-TO	FR-TO	FR-TO
A-B	0	35	-91.8	-91.8	0.14	(1)	10.00
B-C	-948	0	-91.8	-91.8	0.42	(1)	5.74
C-D	-948	0	-91.8	-91.8	0.42	(1)	5.74
G-B	-1049	0	0.0	0.0	0.12	(1)	7.64
E-D	-923	0	0.0	0.0	0.10	(1)	7.81
G-H	0	0	-18.5	-18.5	0.21	(4)	10.00
H-I	0	0	-18.5	-18.5	0.21	(4)	10.00
I-F	0	0	-18.5	-18.5	0.21	(4)	10.00
F-J	0	0	-18.5	-18.5	0.21	(4)	10.00
J-K	0	0	-18.5	-18.5	0.21	(4)	10.00
K-E	0	0	-18.5	-18.5	0.21	(4)	10.00

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-8-8	-530	-530	---	FRONT	VERT	TOTAL	---	C1
F	4-8-8	-20	-20	---	FRONT	VERT	TOTAL	---	C1
H	2-0-12	-22	-22	---	FRONT	VERT	TOTAL	---	C1
I	4-0-12	-20	-20	---	FRONT	VERT	TOTAL	---	C1
J	5-4-4	-20	-20	---	FRONT	VERT	TOTAL	---	C1
K	7-4-4	-22	-22	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN. O.C**

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")  
 CALCULATED VERT. DEFL.(LL)= L/999 (0.01")  
 ALLOWABLE DEFL.(TL)= L/360 (0.31")  
 CALCULATED VERT. DEFL.(TL)= L/999 (0.03")

CSI: TC=0.42/1.00 (B-C:1), BC=0.21/1.00 (F-G:4),  
 WB=0.20/1.00 (D-F:1), SSI=0.15/1.00 (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

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 650 371 1747 788 1987 1873

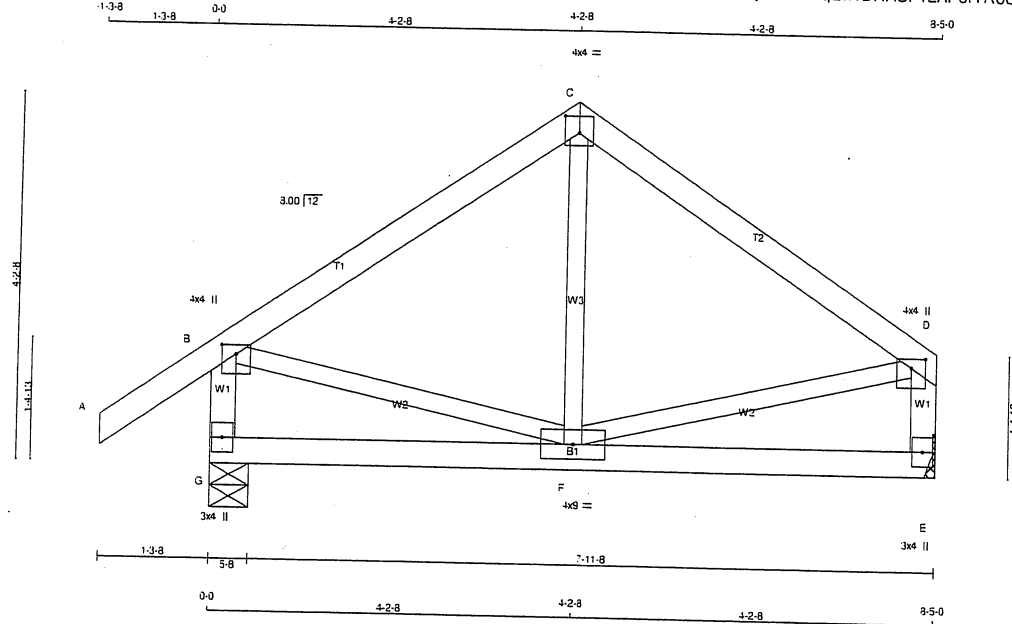
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (D) (INPUT = 0.90 )  
 JSI METAL= 0.25 (B) (INPUT = 1.00 )



Structural component only  
 DWG# T-2022010



TOTAL WEIGHT = 35 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
E - D	2x4	DRY	No.2
G - E	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	TMW+p MT20	4.0	4.0	1.25	2.00
C	TTW-p MT20	4.0	4.0	2.25	2.00
D	TMW+p MT20	4.0	4.0	1.25	2.00
E	BMW1+p MT20	3.0	4.0		
F	BMWVW-t MT20	4.0	9.0		
G	BMW1+p MT20	3.0	4.0		

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

**BEARINGS**

JT	FACTORED GROSS REACTION VERT	MAXIMUM FACTORED GROSS REACTION DOWN	INPUT BRG IN-SX	REQRD BRG IN-SX
G	590	0	5-8	5-8
E	464	0	0	MECHANICAL

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	415	286	0	0	0	129	0
E	328	215	0	0	0	113	0

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

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

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

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

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	LC1 MAX	LC2 MAX
FR-TO		FROM TO			FR-TO			
A-B	0 35	-91.8 -91.8	0.12 (1)	10.00	F-C	-39 58	0.02 (4)	
B-C	-313 0	-91.8 -91.8	0.21 (1)	6.25	B-F	0 269	0.06 (1)	
C-D	-313 0	-91.8 -91.8	0.21 (1)	6.25	F-D	0 269	0.06 (1)	
G-B	-560 0	0.0 0.0	0.06 (1)	7.81				
E-D	-434 0	0.0 0.0	0.04 (1)	7.81				
G-F	0 0	-18.5 -18.5	0.09 (4)	10.00				
F-E	0 0	-18.5 -18.5	0.09 (4)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.28")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.21/1.00 (B-C:1), BC=0.09/1.00 (F-G:4), WB=0.06/1.00 (D-F:1), SSI=0.13/1.00 (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

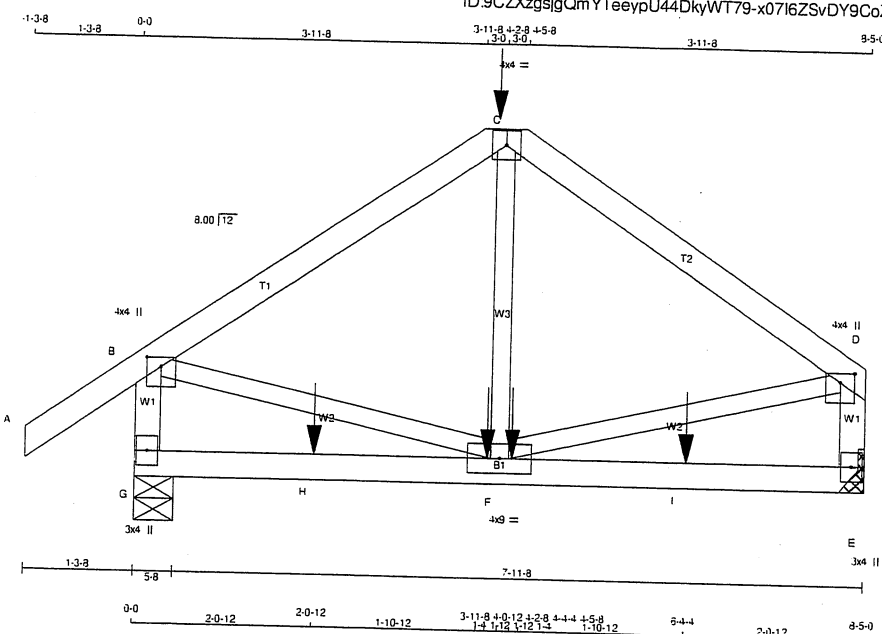
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches  
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.38 (D) (INPUT = 0.90)  
JSI METAL = 0.11 (B) (INPUT = 1.00)





**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
G - B	2x4	DRY	No.2
E - D	2x4	DRY	No.2
G - E	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	TMW+p	MT20	4.0	4.0	1.25 2.00
C	TTW-p	MT20	4.0	4.0	
D	TMW+p	MT20	4.0	4.0	1.25 2.00
E	BMW1+p	MT20	3.0	4.0	
F	BMW1+p	MT20	4.0	9.0	
G	BMW1+p	MT20	3.0	4.0	

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

**BEARINGS**

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION UP	INPUT BRG IN-SX	REQD BRG IN-SX
G	886	0	886	0	5-8	5-8
E	760	0	760	0	MECHANICAL	MECHANICAL

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	624	422 0	0 0	0 0	0 0	202 0	0 0
E	538	352 0	0 0	0 0	0 0	186 0	0 0

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

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

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

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

FR-TO	CHORDS		WEBS	
	MEMB. FORCE (LBS)	FACTORED VERT LOAD (PLF)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
A-B	0 35	-91.8	0 592	0 592
B-C	-689 0	-91.8	0 592	0 592
C-D	-689 0	-91.8	-141 72	0 592
G-B	848 0	0 0		
E-D	-722 0	0 0		
G-H	0 0	-18.5		
H-F	0 0	-18.5		
F-I	0 0	-18.5		
I-E	0 0	-18.5		

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-2-8	-361	-361	---	BACK	VERT	TOTAL	---	C1
F	4-0-12	-14	-14	---	BACK	VERT	TOTAL	---	C1
F	4-4-4	-14	-14	---	BACK	VERT	TOTAL	---	C1
H	2-0-12	-14	-14	---	BACK	VERT	TOTAL	---	C1
I	6-4-4	-14	-14	---	BACK	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

TOTAL WEIGHT = 35 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.28")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")  
ALLOWABLE DEFL.(TL) = L/360 (0.28")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.32/1.00 (C-D:1), BC=0.13/1.00 (E-F:4)  
WB=0.15/1.00 (B-F:1), SSI=0.14/1.00 (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

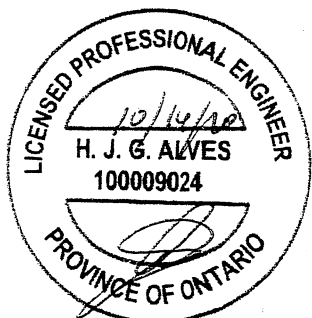
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

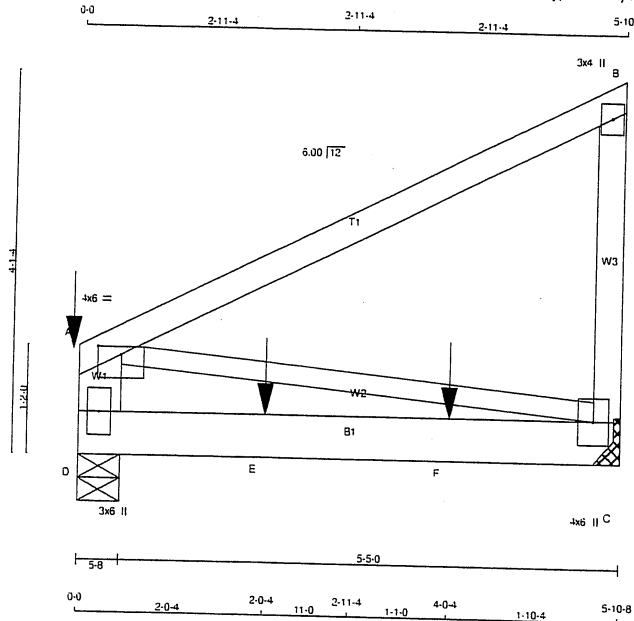
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (B) (INPUT = 0.90)  
JSI METAL= 0.19 (B) (INPUT = 1.00)





JOB NAME 413359	TRUSS NAME T11	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:37:24 2020 Page 1 ID:9CZXzgsigQmYTeeyU44DkyWT79-x0716ZsvDY9CoZD16tXjGkoB8qr0R8WMkLBYryTK2v	



Scale - 1:23.5

TOTAL WEIGHT = 2 X 27 = 55 lb

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

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4 DRY	No.2	SPF
C - B	2x4 DRY	No.2	SPF
D - A	2x6 DRY	No.2	SPF
D - C	2x6 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-B 1	12	TOP
B-C 1	12	TOP
D-A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
D-C 2	12	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.  
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLYS 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
A	MT20	4.0	6.0	1.00	3.00
B	TMV-p	3.0	4.0		
C	BMVW1+p	4.0	6.0		

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG IN-SX	REQRD BRG IN-SX
C	884	0	884	0	0	MECHANICAL	5-8
D	1187	0	1187	0	0		

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

**UNFACTORED REACTIONS**

JT	1ST LC CASE	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	623	419	0	0	0	205	0
D	835	570	0	0	0	265	0

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

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

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

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

MEMB.	CHORDS				WEBS					
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. CSI (LC)	MEMB. MAX. FORCE (LBS)	FACTORED MAX. CSI (LC)	UNBRAC LENGTH	FR-TO		
A-B	0	0	-91.8	-91.8	0.30 (1)	10.00	A-C	0	0	0.00 (1)
C-B	-270	0	0.0	0.0	0.03 (1)	7.81				
D-A	-505	0	0.0	0.0	0.02 (1)	7.81				
D-E	0	0	-18.5	-18.5	0.49 (1)	10.00				
E-F	0	0	-18.5	-18.5	0.49 (1)	10.00				
F-C	0	0	-18.5	-18.5	0.49 (1)	10.00				

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
A	0-0	-164	-164	---	TOP	VERT	TOTAL	---	C1
E	2-0-4	-523	-523	---	FRONT	VERT	TOTAL	---	C1
F	4-0-4	-313	-313	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN./C**

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/597 (0.12")

CSI: TC=0.30(1.00 (A-B:1), BC=0.49(1.00 (C-D:1), WB=0.00(1.00 (A-C:1), SSI=0.23(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 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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.12 (A) (INPUT = 0.90)  
JSI METAL = 0.04 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022013 3/2

JOB NAME 413359	TRUSS NAME T11	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZXzgsiqQmYTeepU44DkyWT79-x0716ZSvDY9CoZD16tXjGkoB8dlr0R8WMkLBYryTk2v

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
D	BMV1+p	MT20	3.0	6.0		



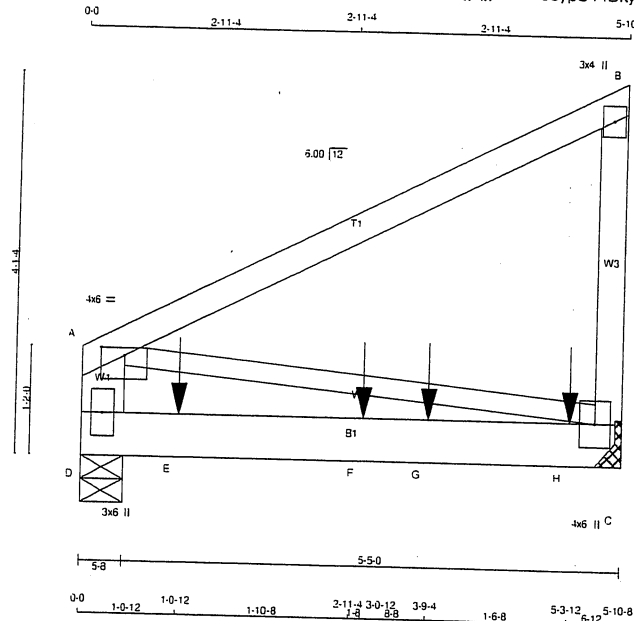
Structural component only  
 DWG# T-2022013 *me*

JOB NAME 413359	TRUSS NAME T11Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale = 1/23.5



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

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
C - B	2x4	DRY No.2	SPF
D - A	2x6	DRY No.2	SPF
D - C	2x6	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-B 1 12		TOP
B-C 1 12		TOP
D-A 2 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
D-C 2 12		SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.  
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLYS 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
A	TMVW-p	4.0	6.0	1.00	3.00
B	TMV+p	3.0	4.0		
C	BMVW1+p	4.0	6.0		

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQRD
C	1599	0	1599	0	0	MECHANICAL	
D	1074	0	1074	0	0	5-8	5-8

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

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX.	MIN.	COMPONENT REACTIONS
JT	COMBINED			
C	1124	776	0	0 0 0 0 0 0 0 0
D	752	536	0	0 0 0 0 0 0 0 0

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

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

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

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

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. LC2 (LC)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	MAX. LC2 (LC)
FR-TO		FROM TO			FR-TO			
A-B	0 0	-91.8	-91.8	0.30 (1)	10.00	A-C	0 0	0.00 (1)
C-B	-270 0	0.0	0.0	0.03 (1)	7.81			
D-A	-270 0	0.0	0.0	0.01 (1)	7.81			
D-E	0 0	-18.5	-18.5	0.73 (1)	10.00			
E-F	0 0	-18.5	-18.5	0.73 (1)	10.00			
F-G	0 0	-18.5	-18.5	0.73 (1)	10.00			
G-H	0 0	-18.5	-18.5	0.73 (1)	10.00			
H-C	0 0	-18.5	-18.5	0.73 (1)	10.00			

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	1-0-12	-180	-180	---	TOP	VERT	TOTAL	---	C1
F	3-0-12	-212	-212	---	TOP	VERT	TOTAL	---	C1
G	3-9-4	-670	-670	---	BACK	VERT	TOTAL	---	C1
H	5-3-12	-356	-356	---	BACK	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

TOTAL WEIGHT = 2 X 27 = 55 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/768 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/426 (0.17")

CSI: TC=0.30/1.00 (A-B:1), BC=0.73/1.00 (C-D:1), WB=0.00/1.00 (A-C:1), SSI=0.44/1.00 (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 RIGHT HEEL ONLY

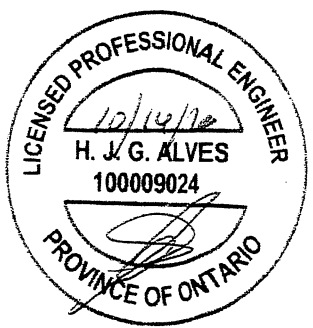
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.06 (A) (INPUT = 0.90)  
JSI METAL = 0.04 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022014

JOB NAME 413359	TRUSS NAME T11Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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 ID:9CZXzgsigQmYTeepU44DkyWT79-PChqKvSY sH3PioEgb2yoxKMitD1PitOgaO4i5lvTk2u

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
D	BMV1+p	MT20	3.0	6.0		

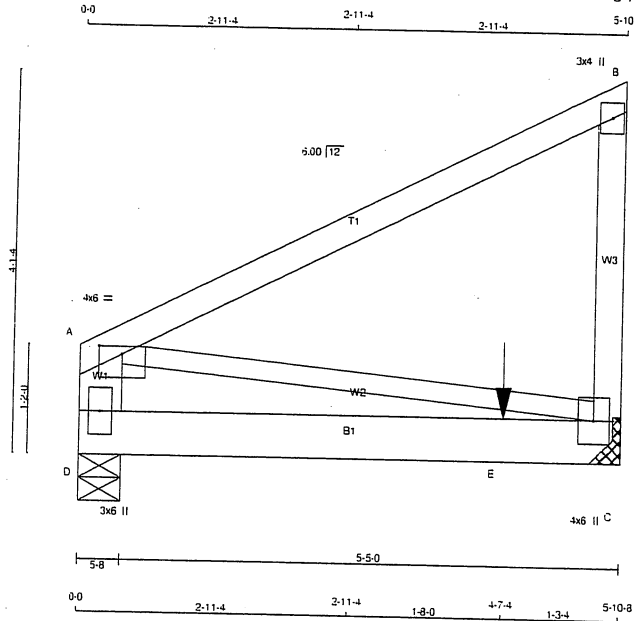


Structural component only  
 DWG# T-2022014 2/2

JOB NAME 413367	TRUSS NAME T11Z2	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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ID:GEx84EwdU5MwSNGdCTglyWSIM-xuv9mP5fXp1\_ZZq7\_ustBmGg5dP4seteWfuy5yTjyV



TOTAL WEIGHT = 2 X 27 = 55 lb

**LUMBER**

N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2 SPF
C - B	2x4	DRY	No.2 SPF
D - A	2x6	DRY	No.2 SPF
D - C	2x6	DRY	No.2 SPF
ALL WEBS EXCEPT	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-B	12	TOP
B-C	12	TOP
D-A	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
D-C	12	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	6.0	1.00 3.00
B	TMV+p	MT20	3.0	4.0	
C	BMVW1+p	MT20	4.0	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	REQRD BRG
JT	VERT	DOWN	DOWN	IN-SX	IN-SX
C	1795	0	1795	0	MECHANICAL
D	730	0	730	0	5-8

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

**UNFACTORED REACTIONS**

JT	1ST CASE	MAX.	MIN.	COMPONENT REACTIONS
C	1266	851	0	0 0 0 0 0 0 0 0
D	515	344	0	0 0 0 0 0 0 0 0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

CHORDS		MEMB.		FACTORED		WEBS		MEMB.		FACTORED	
FR-TO	MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	UNBRAC LENGTH	FR-TO	MEMB.	MAX. FORCE (LBS)	MAX	CSI (LC)
A-B	0 0	-91.8	-91.8	0.30 (1)	10.00	A-C	0 0	0.00 (1)			
C-B	-270 0	0.0	0.0	0.03 (1)	7.81						
D-A	-270 0	0.0	0.0	0.01 (1)	7.81						
D-E	0 0	-18.5	-18.5	0.71 (1)	10.00						
E-C	0 0	-18.5	-18.5	0.71 (1)	10.00						

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	4-7-4	-1323	-1323		FRONT	VERT	TOTAL		C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/523 (0.13")

CSI: TC=0.30/1.00 (A-B:1) , BC=0.71/1.00 (C-D:1) .  
WB=0.00/1.00 (A-C:1) . SSI=0.51/1.00 (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 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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.06 (A) (INPUT = 0.90)  
JSI METAL = 0.04 (B) (INPUT = 1.00)

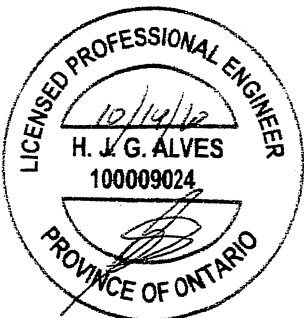


Structural component only  
DWG# T-2022018 1/2

JOB NAME 413367	TRUSS NAME T11Z2	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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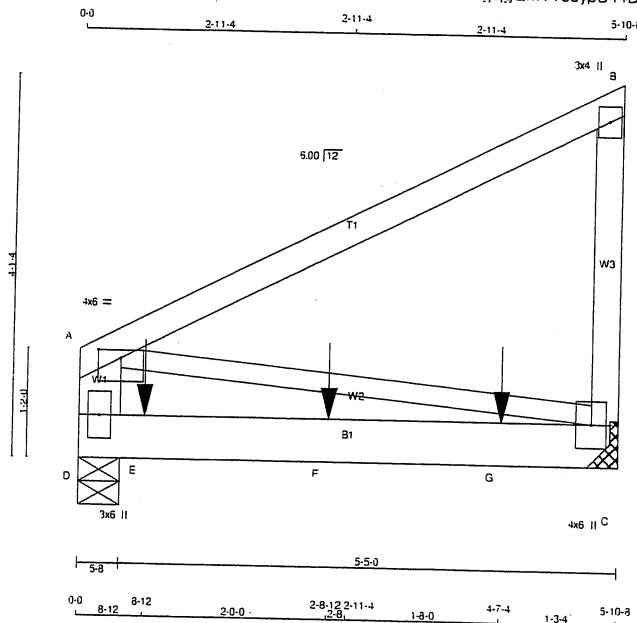
PLATES (table is in inches)  
 JT TYPE PLATES W LEN Y X  
 D BMV1+p MT20 3.0 6.0



Structural component only  
 DWG# T-2022018 *2/1*

JOB NAME 413376	TRUSS NAME T11Z3	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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Scale 1/23.5

TOTAL WEIGHT = 2 X 27 = 55 lb

**LUMBER**  
 N. L. G. A. RULES  
 CHORDS SIZE LUMBER DESCR.  
 A - B 2x4 DRY No.2 SPF  
 C - B 2x4 DRY No.2 SPF  
 D - A 2x6 DRY No.2 SPF  
 D - C 2x6 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-B 1 12 TOP  
 B-C 1 12 TOP  
 D-A 2 12 TOP  
 BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS  
 D-C 2 12 SIDE(0.0)  
 WEBS : (0.122"x3") SPIRAL NAILS  
 2x3 1 6  
 NAILS TO BE DRIVEN FROM ONE SIDE ONLY.  
 GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.  
 TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLYS FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.  
 SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.  
**PLATES (table is in inches)**  
 JT TYPE PLATES W LEN Y X  
 A TMVW-p MT20 4.0 6.0 1.00 3.00  
 B TMV+p MT20 3.0 4.0  
 C BMVW1+p MT20 4.0 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	REQRD BRG
JT VERT	1945	1945	0	0
C	1945	1945	0	0
D	1119	1119	0	0

 A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 4'-0".  
**UNFACTORED REACTIONS**  

JT	1ST LCASE		MAX..MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	1370	927	0	0	0	443	0
D	784	556	0	0	0	228	0

 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D  
**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.  
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.  
**LOADING**  
 TOTAL LOAD CASES: (4)  

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD			MAX. UNBRAC LENGTH	WEBS MEMB. MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
		LC1	MAX	LC1			
FR-TO		FROM	TO		FR-TO		
A-B	0	-91.8	-91.8	0.30 (1)	10.00	A-C	0
C-B	-270	0	0	0.03 (1)	7.81		0.00 (1)
D-A	-270	0	0	0.01 (1)	7.81		
D-E	0	-18.5	-18.5	0.78 (1)	10.00		
E-F	0	-18.5	-18.5	0.78 (1)	10.00		
F-G	0	-18.5	-18.5	0.78 (1)	10.00		
G-C	0	-18.5	-18.5	0.78 (1)	10.00		

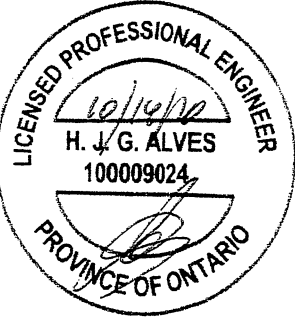
**SPECIFIED CONCENTRATED LOADS (LBS)**  

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	8-12	-182	-182	---	TOP	VERT	TOTAL	---	C1
F	2-8-12	-212	-212	---	TOP	VERT	TOTAL	---	C1
G	4-7-4	-1302	-1302	---	FRONT	VERT	TOTAL	---	C1

**DESIGN CRITERIA**  
 SPECIFIED LOADS:  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF  
**SPACING = 24.0 IN./C**  
 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015  
 THIS DESIGN COMPLIES WITH:  
 - PART 9 OF BCBC 2018, ABC 2019  
 - PART 9 OF OBC 2012 (2019 AMENDMENT)  
 - CSA 086-14  
 - TPIC 2014  
 155% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD  
 ALLOWABLE DEFL.(LL)= L/360 (0.20")  
 CALCULATED VERT. DEFL.(LL) = L/734 (0.10")  
 ALLOWABLE DEFL.(TL)= L/360 (0.20")  
 CALCULATED VERT. DEFL.(TL) = L/400 (0.18")  
 CSI: TC=0.30/1.00 (A-B:1), BC=0.78/1.00 (C-D:1), WB=0.00/1.00 (A-C:1), SSI=0.56/1.00 (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 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	650	371	1747
			788
			1987
			1873

 PLATE PLACEMENT TOL. = 0.250 inches  
 PLATE ROTATION TOL. = 5.0 Deg.  
 JSI GRIP = 0.06 (A) (INPUT = 0.90)  
 JSI METAL = 0.04 (B) (INPUT = 1.00)

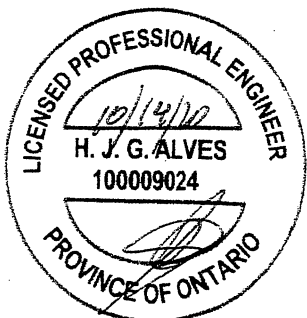


Structural component only  
 DWG# T-2022036

JOB NAME 413376	TRUSS NAME T11Z3	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZXzqsigQmYTeypU44DkyWT79-CDvyif00U5MikML6aaEly16BSDJ1vePk9trfPoyTitr

PLATES (table is in inches)  
 JT TYPE PLATES W LEN Y X  
 D BMV1+p MT20 3.0 6.0



Structural component only  
 DWG# T-2022036



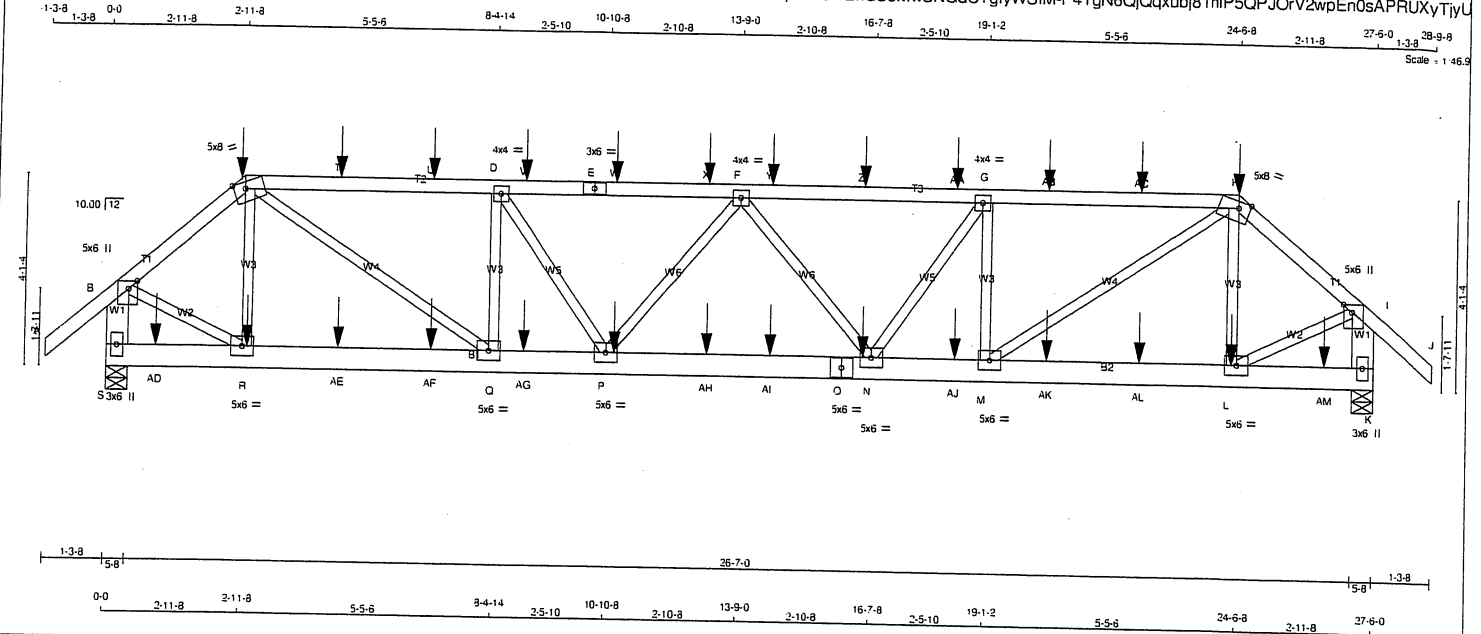
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413367	T21	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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Scale = 1/4" = 1'-0"



TOTAL WEIGHT = 2 X 131 = 261 lb

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

CHORDS	SIZE	DRY	No.2	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
S - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
S - O	2x6	DRY	No.2	SPF
O - K	2x6	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(P/LF)
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)	
S-B 2 12	TOP	
K-I 2 12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
S-O 2 12	SIDE(183.1)	
O-K 2 12	SIDE(183.1)	
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.  
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
S	2753	0	2753	0	5-8	5-8
K	2726	0	2726	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST CASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
S	1944	1289	0	0	0	655	0
K	1926	1271	0	0	0	655	0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.06 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. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO					FR-TO		
A-B	0 41	-91.8 -91.8	0.07 (1)	10.00	R-C	-593 0	0.08 (1)
B-C	-2613 0	-91.8 -91.8	0.10 (1)	5.53	L-H	-584 0	0.07 (1)
C-T	-4157 0	-91.8 -91.8	0.45 (1)	4.22	B-R	0 2154	0.27 (1)
T-U	-4157 0	-91.8 -91.8	0.45 (1)	4.22	L-I	0 2131	0.26 (1)
U-D	-4157 0	-91.8 -91.8	0.45 (1)	4.22	C-Q	0 2629	0.33 (1)
D-V	-4513 0	-91.8 -91.8	0.46 (1)	4.06	Q-D	-1411 0	0.18 (1)
V-E	-4513 0	-91.8 -91.8	0.46 (1)	4.06	M-H	0 2642	0.33 (1)
E-W	-4513 0	-91.8 -91.8	0.46 (1)	4.06	M-G	-1418 0	0.18 (1)
W-X	-4513 0	-91.8 -91.8	0.46 (1)	4.06	D-P	0 844	0.08 (1)
X-F	-4513 0	-91.8 -91.8	0.46 (1)	4.06	P-F	-482 0	0.09 (1)
F-Y	-4507 0	-91.8 -91.8	0.46 (1)	4.06	F-N	-491 0	0.09 (1)
Y-Z	-4507 0	-91.8 -91.8	0.46 (1)	4.06	N-G	0 653	0.08 (1)
Z-AA	-4507 0	-91.8 -91.8	0.46 (1)	4.06			
AA-G	-4507 0	-91.8 -91.8	0.46 (1)	4.06			
G-AB	-4147 0	-91.8 -91.8	0.44 (1)	4.22			
AB-AC	-4147 0	-91.8 -91.8	0.44 (1)	4.22			
AC-H	-4147 0	-91.8 -91.8	0.44 (1)	4.22			
H-I	-2585 0	-91.8 -91.8	0.10 (1)	5.55			
I-J	0 41	-91.8 -91.8	0.07 (1)	10.00			
S-B	-2743 0	0.0 0.0	0.10 (1)	7.81			
K-I	-2716 0	0.0 0.0	0.10 (1)	7.81			

**DESIGN CRITERIA**

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

**SPECIFIED LOADS:**

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

**SPACING = 24.0 IN./C**

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")  
ALLOWABLE DEFL.(TL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.46/1.00 (D/F:1), BC=0.37/1.00 (N-P:1).  
WB=0.33/1.00 (H-M:1), SSI=0.19/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

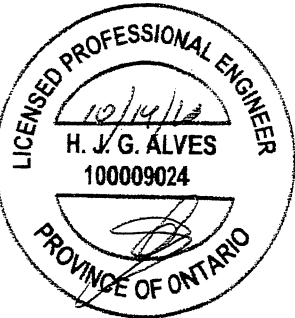
AUTOSOLVE HEELS OFF  
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches  
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (C) INPUT = 0.90  
JSI METAL= 0.44 (O) INPUT = 1.00



Structural component only  
DWG# T-2022019 / L

JOB NAME 413367	TRUSS NAME T21	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.25
C	TTWW-m	MT20	5.0	8.0	Edge	3.00
D	TMVW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
H	TTWW-m	MT20	5.0	8.0	Edge	3.00
I	TMVW+p	MT20	5.0	6.0	2.00	2.25
K	BMV1+p	MT20	3.0	6.0		
L, M, N, P, Q, R						
L	BMVW-t	MT20	5.0	6.0		
O	BS-t	MT20	5.0	6.0		
S	BMV1+p	MT20	3.0	6.0		

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

**SPECIFIED CONCENTRATED LOADS (LBS)**

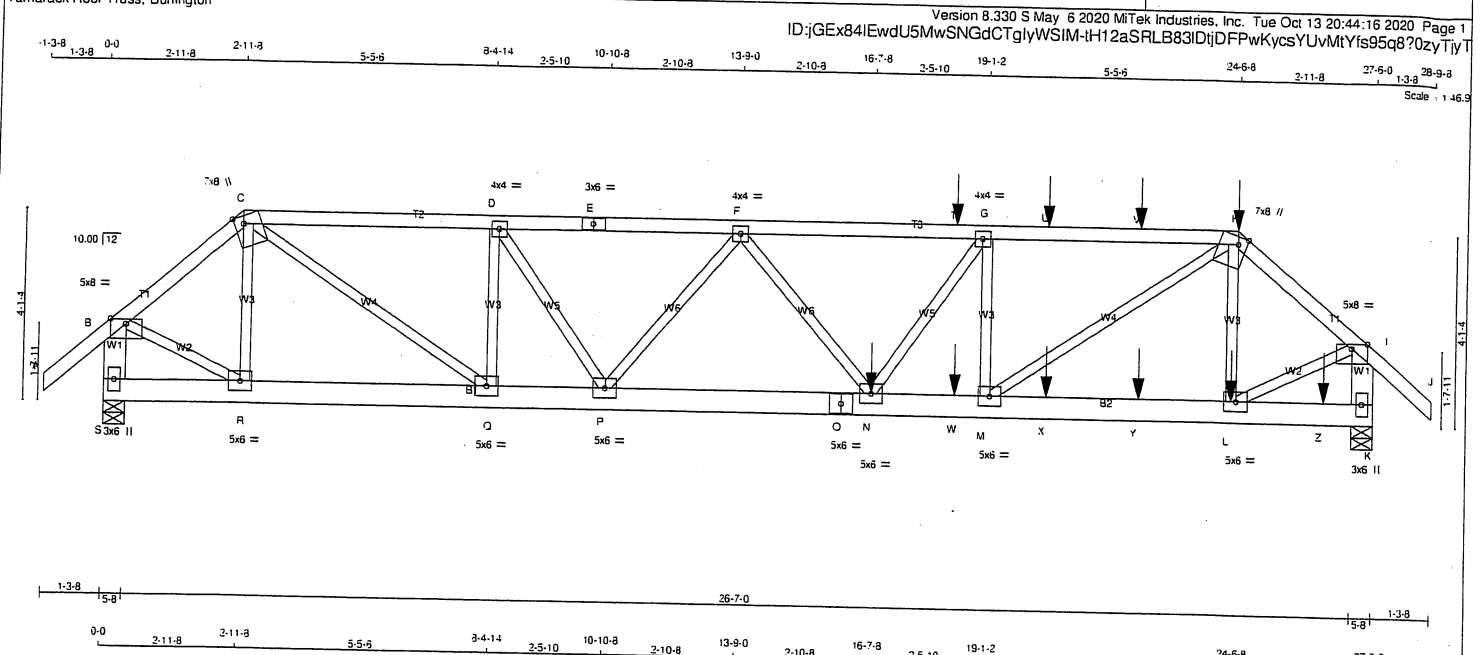
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-11-8	-30	-30	---	FRONT	VERT	DEAD	---	C1
C	2-11-8	-104	-104	---	FRONT	VERT	TOTAL	---	C1
C	2-11-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
H	24-6-8	-30	-30	---	FRONT	VERT	DEAD	---	C1
H	24-6-8	-81	-81	---	FRONT	VERT	TOTAL	---	C1
H	24-6-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
L	24-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
N	16-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
P	11-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
R	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
T	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
U	7-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
V	9-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
W	11-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
X	13-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Y	14-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Z	16-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AA	18-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AB	20-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AC	22-5-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AD	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AE	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AF	7-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AG	9-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AH	13-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AI	14-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AJ	18-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AK	20-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AL	22-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AM	26-5-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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



Structural component only  
DWG# T-2022019 *2/2*



**LUMBER**  
 N. L. G. A. RULES  
 CHORDS SIZE LUMBER DESCR. SPF

A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
S - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
S - O	2x6	DRY	No.2	SPF
O - K	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	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(P/LF)

TOP CHORDS : (0.122"x3") SPIRAL NAILS

A-C	1	12	TOP
C-E	1	12	TOP
E-H	1	12	SIDE(61.0)
H-J	1	12	SIDE(61.0)
S-B	2	12	TOP
K-I	2	12	TOP

BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS

S-O	2	12	TOP
O-K	2	12	SIDE(183.1)

WEBS : (0.122"x3") SPIRAL NAILS

2x3	1	6	
-----	---	---	--

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
S	2492	0	2492	0	5-8	5-8
K	3376	0	3376	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1758	1178	0	0	0	579	0
K	2383	1593	0	0	0	790	0

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

**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.45 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX UNBRACED LENGTH	FR-TO	WEBS		
						MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
A-B	0	-91.8	-91.8	0.07 (1)	10.00	R-C	-572	
B-C	-2355	0	-91.8	0.10 (1)	5.78	L-H	-783	
C-D	-4331	0	-91.8	0.31 (1)	4.33	B-R	0	
D-E	-5110	0	-91.8	0.35 (1)	4.00	L-I	1941	
E-F	-5110	0	-91.8	0.35 (1)	4.00	C-O	2701	
F-T	-6389	0	-91.8	0.53 (1)	3.45	Q-D	3078	
T-G	-6389	0	-91.8	0.53 (1)	3.45	M-H	-1721	
G-U	-5595	0	-91.8	0.49 (1)	3.70	P-F	3759	
U-V	-5595	0	-91.8	0.49 (1)	3.70	M-G	-2004	
V-H	-5595	0	-91.8	0.49 (1)	3.70	D-P	0	
H-I	-3277	0	-91.8	0.12 (1)	5.05	F-N	1410	
I-J	0	41	-91.8	0.07 (1)	10.00	N-G	-1327	
S-B	-2498	0	0	0.09 (1)	7.81		0	
K-I	-3373	0	0	0.12 (1)	7.58		0	
S-R	0	0	-18.5	-18.5	0.04 (1)	10.00		
R-O	0	1786	-18.5	-18.5	0.15 (1)	10.00		
Q-P	0	4331	-18.5	-18.5	0.31 (1)	10.00		
P-O	0	5920	-18.5	-18.5	0.45 (1)	10.00		
O-N	0	5920	-18.5	-18.5	0.45 (1)	10.00		
N-W	0	5595	-18.5	-18.5	0.42 (1)	10.00		
W-M	0	5595	-18.5	-18.5	0.42 (1)	10.00		
M-X	0	2487	-18.5	-18.5	0.21 (1)	10.00		
X-Y	0	2487	-18.5	-18.5	0.21 (1)	10.00		
Y-L	0	2487	-18.5	-18.5	0.21 (1)	10.00		
L-Z	0	0	-18.5	-18.5	0.05 (4)	10.00		
Z-K	0	0	-18.5	-18.5	0.05 (4)	10.00		

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	24-6-8	-30	-30	---	FRONT	VERT	DEAD	---	C1
H	24-6-8	-81	-81	---	BACK	VERT	TOTAL	---	C1
H	24-6-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
L	24-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
N	16-7-8	-1251	-1251	---	BACK	VERT	TOTAL	---	C1
T	18-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
U	20-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
V	22-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
W	18-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
X	20-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Y	22-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Z	26-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

**DESIGN CRITERIA**

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

SPECIAL LOADS:  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C/C

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

\*\*\* NON STANDARD GIRDER \*\*\*  
 ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL)= L/999 (0.13")  
 ALLOWABLE DEFL.(TL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL)= L/999 (0.24")

CSI: TC=0.53/1.00 (F-G-1), BC=0.45/1.00 (N-P-1), WB=0.47/1.00 (H-M-1), SSI=0.19/1.00 (G-H-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN	MAX MIN	MAX MIN
650 371	1747 788	1987 1873

MT20

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (O) (INPUT = 0.90)  
 JSI METAL= 0.58 (O) (INPUT = 1.00)



JOB NAME 413367	TRUSS NAME T21Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:44:16 2020 Page 2  
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**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge
C	TTWW+m	MT20	7.0	8.0	Edge 2.25
D, F, G					
D	TMVW-t	MT20	4.0	4.0	
E	TS-t	MT20	3.0	6.0	
H	TTWW+m	MT20	7.0	8.0	Edge 2.25
I	TMVW-p	MT20	5.0	8.0	Edge
K	BMV1+p	MT20	3.0	6.0	
L, M, N, P, Q, R					
L	BMVW-t	MT20	5.0	6.0	
O	BS-t	MT20	5.0	6.0	
S	BMV1+p	MT20	3.0	6.0	

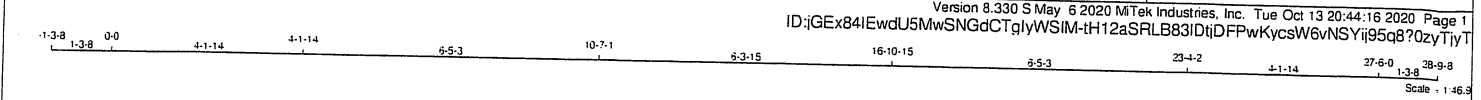
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**CONNECTION REQUIREMENTS**

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



Structural component only  
 DWG# T-2022020 *ju*



**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY No.2	SPF
E - G	2x4	DRY No.2	SPF
G - I	2x4	DRY No.2	SPF
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TTWW-m	MT20	5.0	8.0	Edge	3.00
D	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTWW-m	MT20	5.0	8.0	Edge	3.00
H	TMVW+p	MT20	5.0	6.0	Edge	
J	BMV1+p	MT20	3.0	4.0		
K, L, O						
K	BMVW-t	MT20	4.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	9.0		
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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
P	1643	0	1643	0	5-8	5-8
J	1643	0	1643	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS						
		SNOW	LIVE	PERM.LIVE	WIND	DEAD		
P	1180	774	0	0	0	385	0	0
J	1180	774	0	0	0	385	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 = 3.89 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	MAX. UNBRAC LENGTH	WEBS		
						MEMB. FORCE (LBS)	MAX CSI (LC)	
FR-TO								
A-B	0	41		-91.8	-91.8	0.13	(1)	10.00
B-C	-1480	0		-91.8	-91.8	0.33	(1)	5.02
C-D	-2136	0		-91.8	-91.8	0.68	(1)	3.91
D-E	-2136	0		-91.8	-91.8	0.68	(1)	3.90
E-F	-2136	0		-91.8	-91.8	0.68	(1)	3.90
F-G	-2137	0		-91.8	-91.8	0.68	(1)	3.89
G-H	-1480	0		-91.8	-91.8	0.33	(1)	5.02
H-I	0	41		-91.8	-91.8	0.13	(1)	10.00
P-B	-1616	0		0.0	0.0	0.17	(1)	6.50
J-H	-1616	0		0.0	0.0	0.17	(1)	6.50
P-O	0	0		-18.5	-18.5	0.12	(4)	10.00
O-N	0	1129		-18.5	-18.5	0.26	(1)	10.00
N-M	0	2137		-18.5	-18.5	0.41	(1)	10.00
M-L	0	2137		-18.5	-18.5	0.41	(1)	10.00
L-K	0	1129		-18.5	-18.5	0.25	(1)	10.00
K-J	0	0		-18.5	-18.5	0.12	(4)	10.00

TOTAL WEIGHT = 2 X 113 = 225 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.09")  
 ALLOWABLE DEFL.(TL)= L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.68/1.00 (F-G:1), BC=0.41/1.00 (L-N:1), WB=0.28/1.00 (G-L:1), SSI=0.27/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1 10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

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

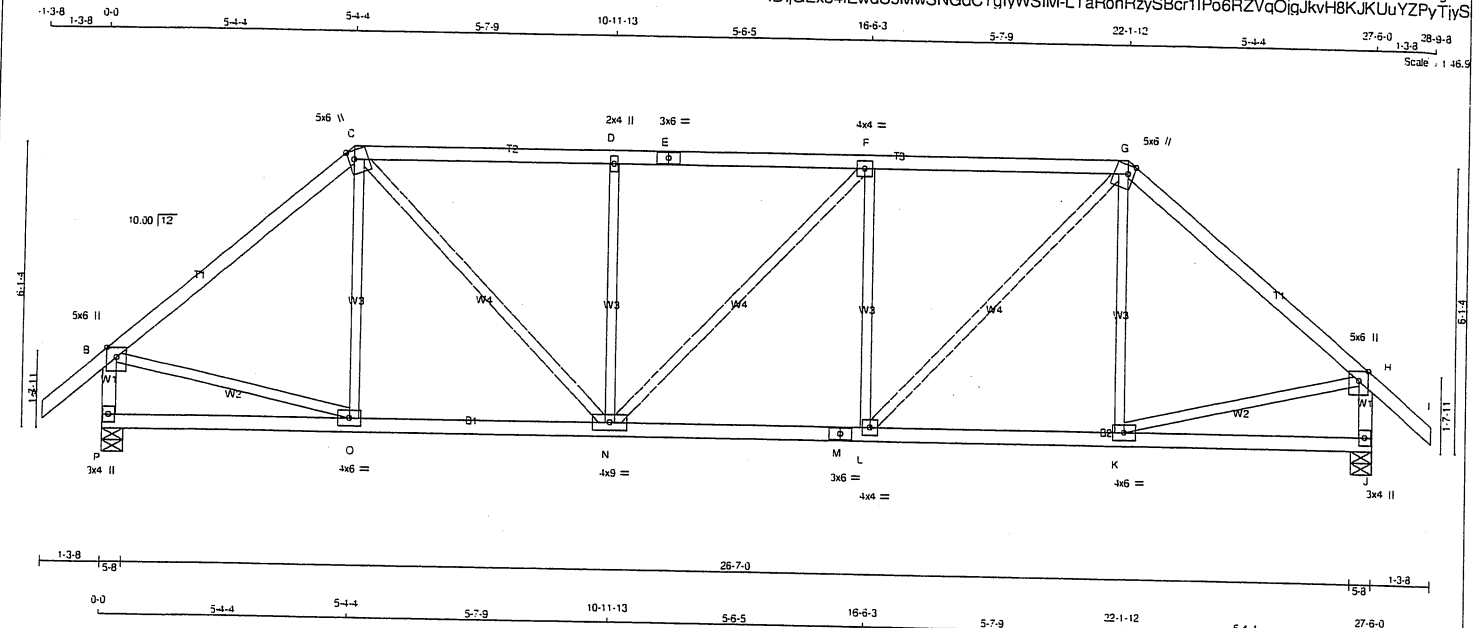
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (G) (INPUT = 0.90)  
 JSI METAL= 0.61 (M) (INPUT = 1.00)



Tamarack Roof Truss, Burlington



TOTAL WEIGHT = 2 X 119 = 238 lb

**LUMBER**

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TTWW+m	MT20	5.0	6.0	2.25	1.50
H	TMVW+p	MT20	5.0	6.0	Edge	
J	BMV1+p	MT20	3.0	4.0		
K	BMW-t	MT20	4.0	6.0		
L	BMWW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	4.0	9.0		
O	BMW-t	MT20	4.0	6.0		
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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQ'D BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
P	1643	0	1643	0	5-8	5-8		
J	1643	0	1643	0	5-8	5-8		

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS									
		COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL			
P		1160	774	0	0	0	0	385	0	0	0
J		1160	774	0	0	0	0	385	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 = 4.47 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

MEMB.	FORCE (LBS)	CHORDS			WEBS							
		MAX. FACTORED	FACTORED	VERT. LOAD	MAX. UNBRACED	MEMB. FORCE	MAX. FACTORED					
FR-TO		FROM TO	PLF	LC1	MAX. LENGTH	FR-TO	CS (LC)					
A-B	0	91.8	-91.8	0.13	(1)	10.00	O-C	-157	34	0.09	(1)	
B-C	-1491	0	-91.8	-91.8	0.57	(1)	4.69	C-N	0	909	0.20	(1)
C-D	-1773	0	-91.8	-91.8	0.47	(1)	4.49	N-D	-553	0	0.32	(1)
D-E	-1774	0	-91.8	-91.8	0.47	(1)	4.48	N-F	-2	0	0.00	(1)
E-F	-1774	0	-91.8	-91.8	0.47	(1)	4.48	L-F	-553	0	0.32	(1)
F-G	-1775	0	-91.8	-91.8	0.47	(1)	4.47	L-G	0	911	0.21	(1)
G-H	-1490	0	-91.8	-91.8	0.57	(1)	4.69	K-G	-158	34	0.09	(1)
H-I	0	41	-91.8	-91.8	0.13	(1)	10.00	B-O	0	1175	0.26	(1)
P-B	-1603	0	0.0	0.0	0.17	(1)	6.53	K-H	0	1175	0.26	(1)
J-H	-1603	0	0.0	0.0	0.17	(1)	6.53					
P-O	0	0	-18.5	-18.5	0.13	(4)	10.00					
O-N	0	1140	-18.5	-18.5	0.26	(1)	10.00					
N-M	0	1775	-18.5	-18.5	0.34	(1)	10.00					
M-L	0	1775	-18.5	-18.5	0.34	(1)	10.00					
L-K	0	1140	-18.5	-18.5	0.26	(1)	10.00					
K-J	0	0	-18.5	-18.5	0.13	(4)	10.00					

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.57/1.00 (B-C:1), BC=0.34/1.00 (L-N:1), WB=0.32/1.00 (F-L:1), SSI=0.24/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

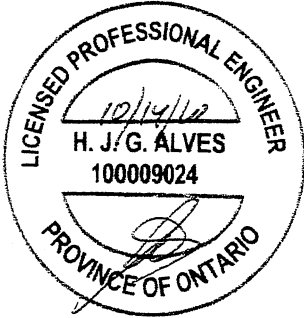
**NAIL VALUES**

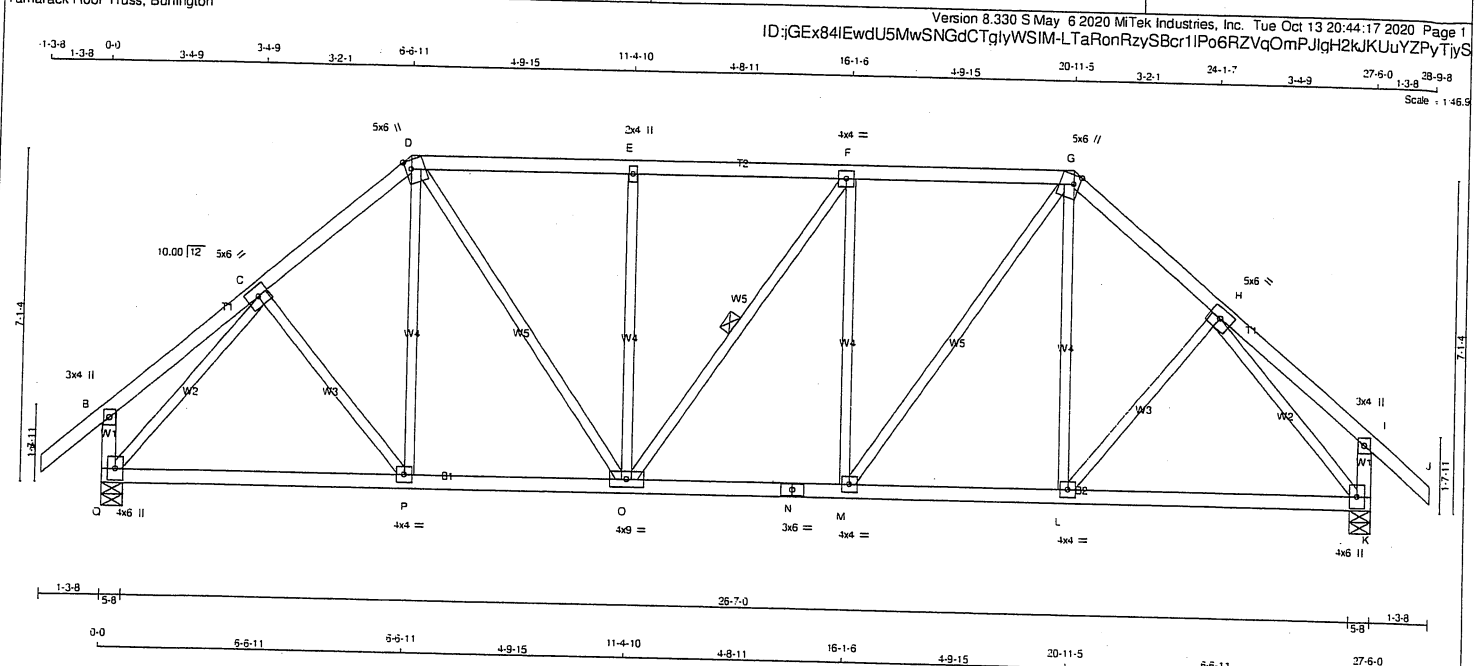
PLATE GRIP(DRY)	SHEAR SECTION		
	(FSI)	(PLI)	(PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (L) (INPUT = 0.90)  
JSI METAL = 0.58 (B) (INPUT = 1.00)





Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:44:17 2020 Page 1  
 ID:GEX841EwdU5MwSNGdCTglyWSIM-LTaRonRzySBcr1IPo6RZVqOmPJlgH2kJKUuYZPyTjyS  
 Scale: 1/4" = 1'-0"

**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 EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMVW-t	MT20	5.0	6.0		
D	TTWV+m	MT20	5.0	6.0	2.25	1.50
E	TMV+w	MT20	2.0	4.0		
F	TTWV-t	MT20	4.0	4.0		
G	TTWV+m	MT20	5.0	6.0	2.25	1.50
H	TMVW-t	MT20	5.0	6.0		
I	TMV+p	MT20	3.0	4.0		
K	BMVW1+p	MT20	4.0	6.0		
L, M, P	BMVW-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMVWV-t	MT20	4.0	9.0		
Q	BMVW1+p	MT20	4.0	6.0		

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ UPLIFT		
Q	1643	0	1643	0	5-8	5-8
K	1643	0	1643	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LC CASE	MAX./MIN. COMPONENT REACTIONS									
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
Q		1160	774	0	0	0	0	385	0	0	0
K		1160	774	0	0	0	0	385	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 = 4.96 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-O.

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)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	MEMB.	WEBS		MAX. FACTORED
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	CSI (LC)			MAX. FORCE (LBS)	MAX. CSI (LC)	
FR-TO						FR-TO			
A-B	0.41	-91.8	-91.8	0.13 (1)	10.00	C-P	0.57	0.02 (4)	
B-C	0.20	-91.8	-91.8	0.14 (1)	10.00	P-D	0.98	0.03 (4)	
C-D	-1489.0	-91.8	-91.8	0.18 (1)	5.19	L-G	0.98	0.03 (4)	
D-E	-1516.0	-91.8	-91.8	0.32 (1)	4.97	L-H	0.57	0.02 (4)	
E-F	-1516.0	-91.8	-91.8	0.33 (1)	4.96	Q-C	-1734.0	0.75 (1)	
F-G	-1518.0	-91.8	-91.8	0.33 (1)	4.96	H-K	-1734.0	0.75 (1)	
G-H	-1489.0	-91.8	-91.8	0.18 (1)	5.19	M-G	0.676	0.15 (1)	
H-I	0.20	-91.8	-91.8	0.14 (1)	10.00	D-O	0.673	0.15 (1)	
I-J	0.41	-91.8	-91.8	0.13 (1)	10.00	M-F	-472.0	0.41 (1)	
Q-B	-244.0	0.0	0.0	0.03 (1)	7.81	O-E	-471.0	0.41 (1)	
K-I	-244.0	0.0	0.0	0.03 (1)	7.81	O-F	-3.0	0.00 (1)	
Q-P	0.1091	-18.5	-18.5	0.27 (1)	10.00				
P-O	0.1126	-18.5	-18.5	0.28 (1)	10.00				
O-N	0.1518	-18.5	-18.5	0.29 (1)	10.00				
N-M	0.1518	-18.5	-18.5	0.29 (1)	10.00				
M-L	0.1126	-18.5	-18.5	0.28 (1)	10.00				
L-K	0.1091	-18.5	-18.5	0.27 (1)	10.00				

**DESIGN CRITERIA**

SPECIFIED LOADS:  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.33/1.00 (F-G:1), BC=0.29/1.00 (M-O:1), WB=0.75/1.00 (C-Q:1), SSI=0.21/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

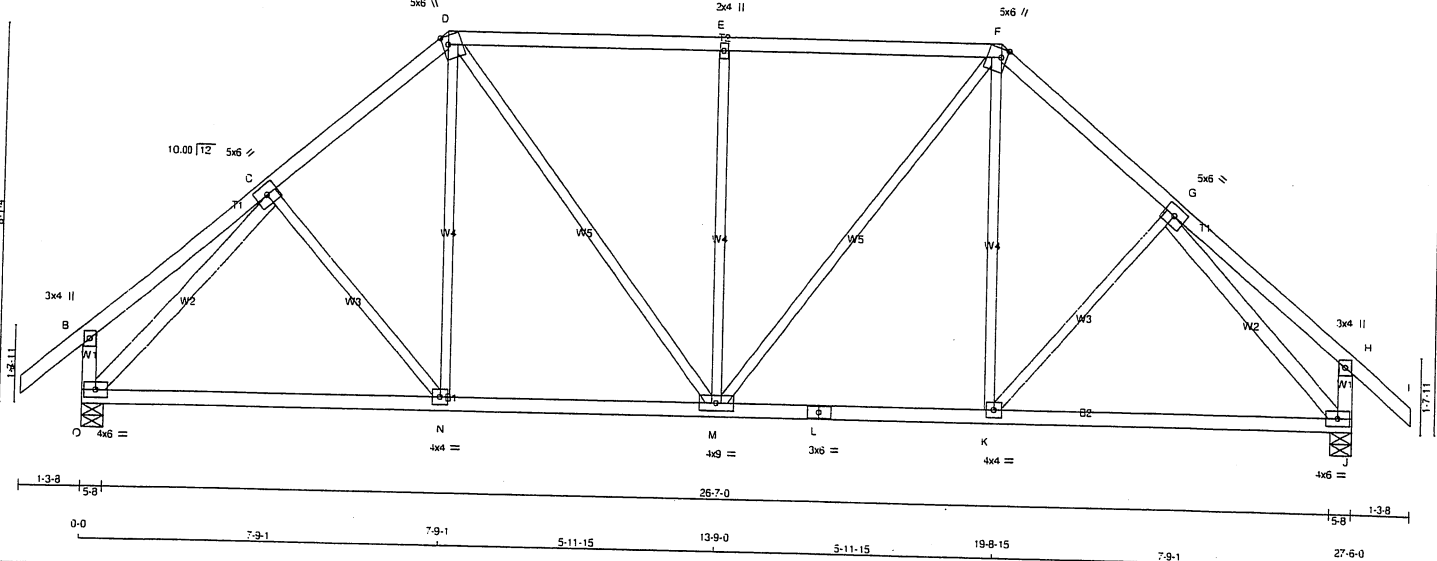
PLATE GRIP (DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (Q) (INPUT = 0.90)  
 JSI METAL = 0.49 (Q) (INPUT = 1.00)





**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
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 EXCEPT O - C G - J

WEBS	SIZE	LUMBER	DESCR.
O - C	2x3	DRY No.2	SPF
G - J	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0	
C	TMWW-t	MT20	5.0	6.0	
D	TTWW+m	MT20	5.0	6.0	2.25 1.50
E	TMW+w	MT20	2.0	4.0	
F	TTWW+m	MT20	5.0	6.0	2.25 1.50
G	TMWW-t	MT20	5.0	6.0	
H	TMV+p	MT20	3.0	4.0	
J	BMWW-t	MT20	4.0	6.0	
K	BMWW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMWWW-t	MT20	4.0	9.0	
N	BMWW-t	MT20	4.0	4.0	
O	BMWW-t	MT20	4.0	6.0	

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1643	0	1643	0	5-8	5-8
J	1643	0	1643	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS			
	SNOW	LIVE	PERM.	LIVE	WIND	DEAD
O	1160	774.0	0.0	0.0	0.0	385.0
J	1160	774.0	0.0	0.0	0.0	385.0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 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.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	FR-TO	WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (LBS)	LC1	MAX			MEMB. FORCE (LBS)	MAX		
A-B	0.41	-91.8	-91.8	0.13 (1)	10.00	C-N	-47	32	0.03 (1)	
B-C	0.26	-91.8	-91.8	0.22 (1)	10.00	N-D	0.190	0.05 (4)		
C-D	-1456.0	-91.8	-91.8	0.19 (1)	5.24	D-M	0.475	0.11 (1)		
D-E	-1387.0	-91.8	-91.8	0.45 (1)	4.97	M-E	673.0	0.85 (1)		
E-F	-1387.0	-91.8	-91.8	0.45 (1)	4.97	M-F	0.475	0.11 (1)		
F-G	-1456.0	-91.8	-91.8	0.19 (1)	5.24	K-F	0.190	0.05 (4)		
G-H	0.26	-91.8	-91.8	0.22 (1)	10.00	K-G	-47	32	0.03 (1)	
H-I	0.41	-91.8	-91.8	0.13 (1)	10.00	O-C	-1736	0	0.74 (1)	
O-B	-263.0	0.0	0.0	0.03 (1)	7.81	G-J	-1736	0	0.74 (1)	
J-H	-263.0	0.0	0.0	0.03 (1)	7.81					
O-N	0.1127	-18.5	-18.5	0.34 (4)	10.00					
N-M	0.1098	-18.5	-18.5	0.35 (4)	10.00					
M-L	0.1098	-18.5	-18.5	0.35 (4)	10.00					
L-K	0.1098	-18.5	-18.5	0.35 (4)	10.00					
K-J	0.1127	-18.5	-18.5	0.34 (4)	10.00					

**DESIGN CRITERIA**

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF

BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.05")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.45/1.00 (D-E:1), BC=0.35/1.00 (M-N:4), WB=0.85/1.00 (E-M:1), SSI=0.27/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

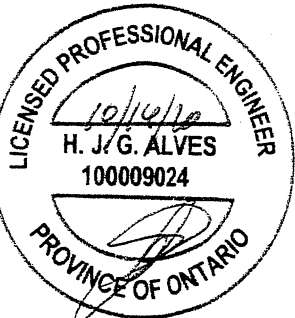
**NAIL VALUES**

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

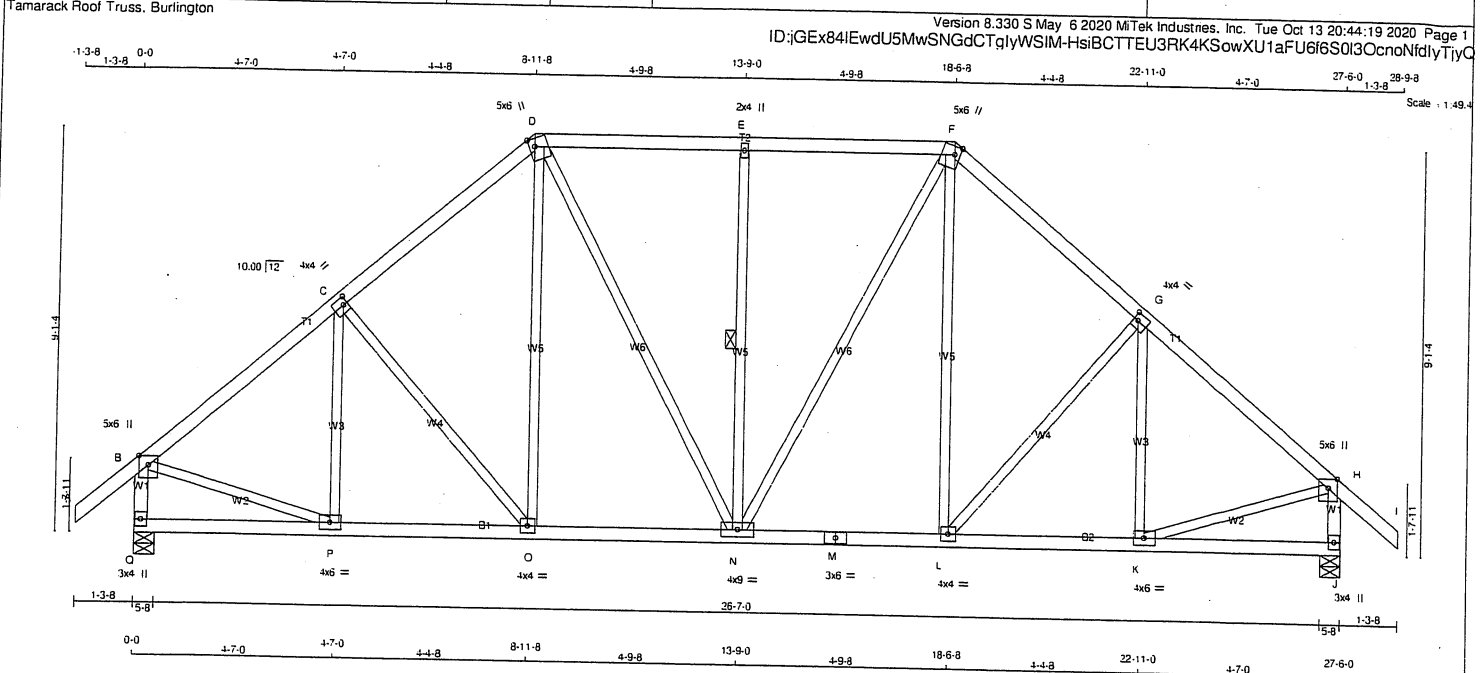
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.80 (J) (INPUT = 0.90)  
 JSI METAL = 0.39 (C) (INPUT = 1.00)







**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	No.2
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
Q - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
Q - M	2x4	DRY	No.2
M - J	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	TMVW+p	MT20	5.0	6.0	Edge
C	TMVW-t	MT20	4.0	4.0	2.00 1.25
D	TTWV+m	MT20	5.0	6.0	2.25 1.50
E	TMVW+w	MT20	2.0	4.0	
F	TTWV+m	MT20	5.0	6.0	2.25 1.50
G	TMVW-t	MT20	4.0	4.0	2.00 1.25
H	TMVW+p	MT20	5.0	6.0	Edge
J	BMV1+p	MT20	3.0	4.0	
K	BMVW-t	MT20	4.0	6.0	
L	BMVW-t	MT20	4.0	4.0	
M	BS-t	MT20	3.0	6.0	
N	BMVWV-t	MT20	4.0	9.0	
O	BMVW-t	MT20	4.0	4.0	
P	BMVW-t	MT20	4.0	6.0	
Q	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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
Q	1643	0	1643	0	5-8	5-8
J	1643	0	1643	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS								
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL			
Q	1160	774	0	0.0	0.0	0.0	385	0	0	0
J	1160	774	0	0.0	0.0	0.0	385	0	0	0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.09 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N.

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

**LOADING**

TOTAL LOAD CASES: (4)

FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	VERT LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)		
									FR-TO	FR-TO
A-B	0	41	-91.8	-91.8	0.13 (1)	10.00	P-C	-246	0	0.11 (1)
B-C	-1503	0	-91.8	-91.8	0.27 (1)	5.09	C-O	-206	0	0.18 (1)
C-D	-1393	0	-91.8	-91.8	0.26 (1)	5.24	O-D	0	241	0.05 (1)
D-E	-1214	0	-91.8	-91.8	0.28 (1)	5.49	D-N	0	353	0.08 (1)
E-F	-1214	0	-91.8	-91.8	0.28 (1)	5.49	N-E	-533	0	0.29 (1)
F-G	-1393	0	-91.8	-91.8	0.26 (1)	5.24	N-F	0	353	0.08 (1)
G-H	-1503	0	-91.8	-91.8	0.27 (1)	5.09	L-F	0	241	0.05 (1)
H-I	0	41	-91.8	-91.8	0.13 (1)	10.00	L-G	-206	0	0.18 (1)
Q-B	-1607	0	0.0	0.0	0.17 (1)	6.52	K-G	-246	0	0.11 (1)
J-H	-1607	0	0.0	0.0	0.17 (1)	6.52	B-P	0	1225	0.28 (1)
Q-P	0	0	-18.5	-18.5	0.08 (4)	10.00	K-H	0	1225	0.28 (1)
P-O	0	1178	-18.5	-18.5	0.23 (1)	10.00				
O-N	0	1046	-18.5	-18.5	0.21 (1)	10.00				
N-M	0	1046	-18.5	-18.5	0.21 (1)	10.00				
M-L	0	1046	-18.5	-18.5	0.21 (1)	10.00				
L-K	0	1178	-18.5	-18.5	0.23 (1)	10.00				
K-J	0	0	-18.5	-18.5	0.08 (4)	10.00				

TOTAL WEIGHT = 4 X 138 = 553 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.28:1.00 (D-E:1) , BC=0.23:1.00 (K-L:1) , WB=0.29:1.00 (E-N:1) , SSI=0.21:1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

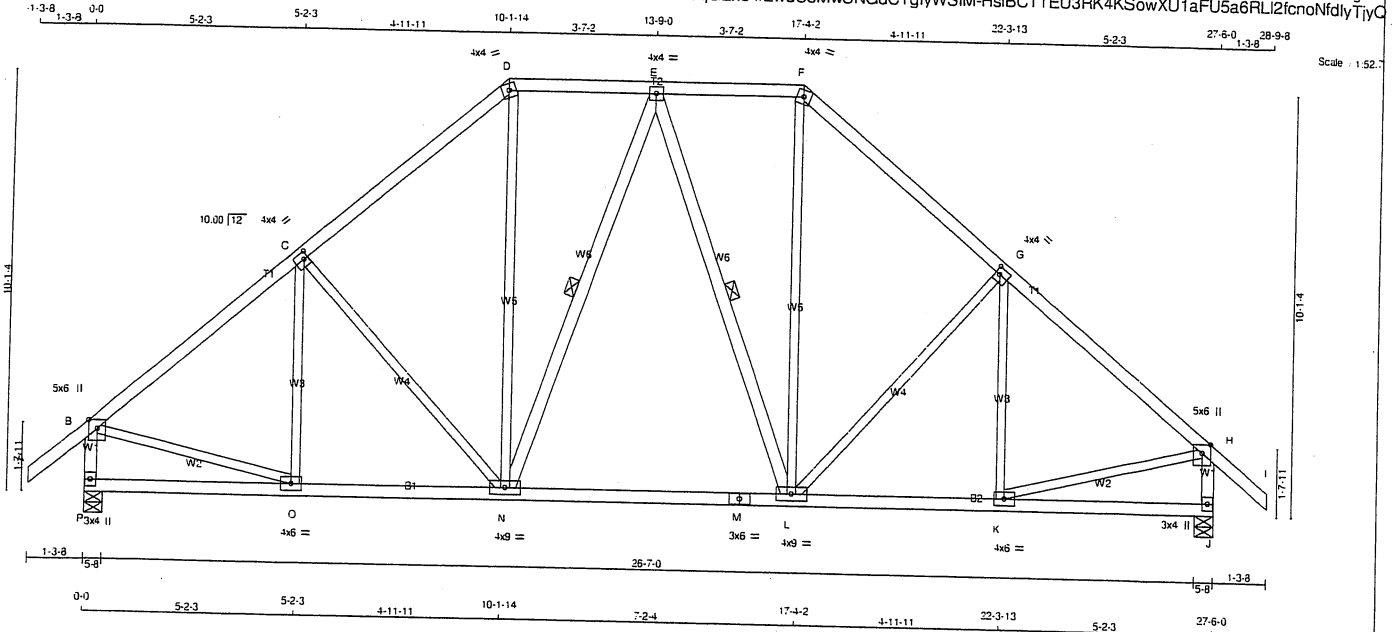
**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.78 (H) (INPUT = 0.90)  
JSI METAL = 0.57 (B) (INPUT = 1.00)





TOTAL WEIGHT = 2 X 144 = 288 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
P - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2
ALL WEBS EXCEPT N - E, E - L	2x3	DRY	No.2

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1643	0	1643	0	5-8	5-8
J	1643	0	1643	0	5-8	5-8

**UNFACTORED REACTIONS**

JT	1ST LCASE MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1160	774.0	0.0	0.0	0.0	385.0	0.0
J	1160	774.0	0.0	0.0	0.0	385.0	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 = 4.97 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)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRAC LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH (LC)
FR-TO				FR-TO		
A-B	0.41	-91.8	-91.8 0.13 (1)	0-C	-204.9	0.11 (1)
B-C	-1514.0	-91.8	-91.8 0.35 (1)	C-N	-291.0	0.33 (1)
C-D	-1335.0	-91.8	-91.8 0.33 (1)	N-D	0.528	0.12 (1)
D-E	-1001.0	-91.8	-91.8 0.15 (1)	L-F	0.528	0.12 (1)
E-F	-1001.0	-91.8	-91.8 0.15 (1)	L-G	-291.0	0.33 (1)
F-G	-1335.0	-91.8	-91.8 0.33 (1)	K-G	-204.9	0.11 (1)
G-H	-1514.0	-91.8	-91.8 0.35 (1)	B-O	0.1227	0.28 (1)
H-I	0.41	-91.8	-91.8 0.13 (1)	K-H	0.1227	0.28 (1)
P-B	-1602.0	0.0	0.0 0.17 (1)	N-E	-207.0	0.12 (1)
J-H	-1602.0	0.0	0.0 0.17 (1)	E-L	-207.0	0.12 (1)
P-O	0.0	-18.5	-18.5 0.10 (4)			
O-N	0.1190	-18.5	-18.5 0.27 (1)			
N-M	0.1070	-18.5	-18.5 0.26 (1)			
M-L	0.1070	-18.5	-18.5 0.26 (1)			
L-K	0.1190	-18.5	-18.5 0.27 (1)			
K-J	0.0	-18.5	-18.5 0.10 (4)			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")  
ALLOWABLE DEFL.(TL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")

CSI: TC=0.35/1.00 (B-C:1), BC=0.27/1.00 (K-L:1), WB=0.33/1.00 (C-N:1), SSI=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

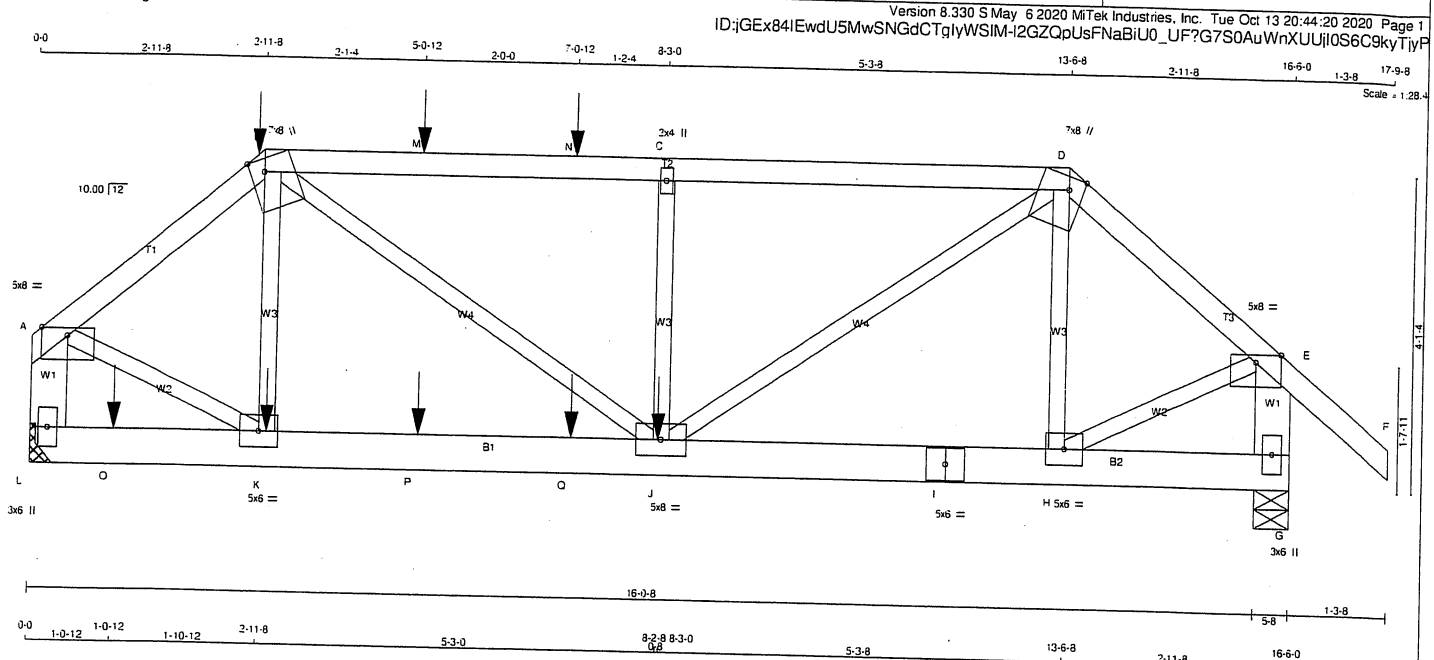
**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (K) (INPUT = 0.90)  
JSI METAL = 0.58 (B) (INPUT = 1.00)





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

CHORDS	SIZE	LUMBER
A - B	2x4	DRY No.2
B - D	2x4	DRY No.2
D - F	2x4	DRY No.2
L - A	2x6	DRY No.2
G - E	2x6	DRY No.2
L - I	2x6	DRY No.2
I - G	2x6	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
A	TMW-p	MT20	5.0	8.0	Edge	
B	TTW+m	MT20	7.0	8.0	Edge 2.25	
C	TMW+w	MT20	2.0	4.0		
D	TTW+m	MT20	7.0	8.0	Edge 2.25	
E	TMW-p	MT20	5.0	8.0	Edge	
G	BMV1+p	MT20	3.0	6.0		
H	BMW-t	MT20	5.0	6.0		
I	BS-t	MT20	5.0	6.0		
J	BMW-t	MT20	5.0	8.0		
K	BMW-t	MT20	5.0	6.0		
L	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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
L	1896	0	1896	0	MECHANICAL	
G	1669	0	1669	0	5-8	5-8

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					SOIL
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	
L	1338	894 / 0	0 / 0	0 / 0	0 / 0	444	0 / 0
G	1176	798 / 0	0 / 0	0 / 0	0 / 0	378	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.36 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)

FR-TO	CHORDS				WEBS					
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	CONN.		
A-B	-1839	0	-91.8	-91.8	0.21 (1)	4.72	K-B	-362	0	0.09 (1)
B-M	-2483	0	-91.8	-91.8	0.76 (1)	3.36	B-J	0	1326	0.33 (1)
M-N	-2483	0	-91.8	-91.8	0.76 (1)	3.36	J-C	-739	0	0.19 (1)
N-C	-2483	0	-91.8	-91.8	0.76 (1)	3.36	J-D	0	1659	0.41 (1)
C-D	-2483	0	-91.8	-91.8	0.76 (1)	3.36	H-D	-315	0	0.08 (1)
D-E	-1481	0	-91.8	-91.8	0.19 (1)	5.16	A-K	0	1516	0.38 (1)
E-F	0	41	-91.8	-91.8	0.14 (1)	10.00	H-E	0	1221	0.30 (1)
L-A	-1881	0	0.0	0.0	0.14 (1)	7.28				
G-E	-1668	0	0.0	0.0	0.12 (1)	7.61				
L-O	0	0	-18.5	-18.5	0.08 (4)	10.00				
O-K	0	0	-18.5	-18.5	0.08 (4)	10.00				
K-P	0	1397	-18.5	-18.5	0.28 (1)	10.00				
P-Q	0	1397	-18.5	-18.5	0.28 (1)	10.00				
Q-J	0	1397	-18.5	-18.5	0.28 (1)	10.00				
J-I	0	1125	-18.5	-18.5	0.22 (1)	10.00				
I-H	0	1125	-18.5	-18.5	0.22 (1)	10.00				
H-G	0	0	-18.5	-18.5	0.06 (1)	10.00				

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	2-11-8	-30	-30	---	FRONT	VERT	DEAD	---	C1
B	2-11-8	-104	-104	---	FRONT	VERT	TOTAL	---	C1
B	2-11-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
J	8-2-8	-644	-644	---	FRONT	VERT	TOTAL	---	C1
K	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
M	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
N	7-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
O	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
P	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
Q	7-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

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

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.55")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
ALLOWABLE DEFL.(TL) = L/360 (0.55")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.76/1.00 (C-D-1), BC=0.28/1.00 (J-K-1), WB=0.41/1.00 (D-J-1), SSI=0.38/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

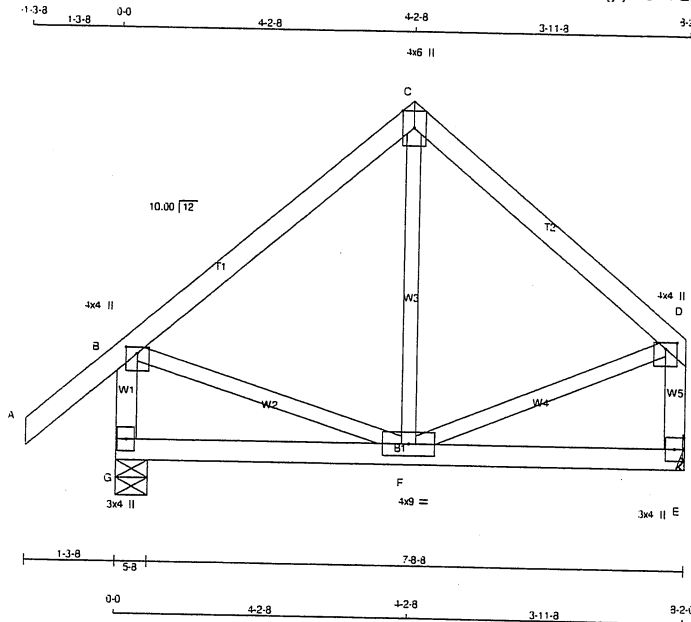
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (J) (INPUT = 0.90)  
JSI METAL= 0.34 (J) (INPUT = 1.00)



JOB NAME 413367	TRUSS NAME T29	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:GEx84EwdU5MwSNGdCTglyWSIM-EEqxd9VU0gi1JebB1yWVfgZTGw9ID1evF6smiByTiyO



Scale 1:31.1

TOTAL WEIGHT = 2 X 37 = 74 lb

**LUMBER**

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TTW+p	MT20	4.0	6.0	Edge	
D	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMV1+p	MT20	3.0	4.0		
F	BMVWW-t	MT20	4.0	9.0		
G	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**

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	HORZ	UPLIFT
G	577	0	577	0
E	450	0	450	0

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

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
G	406	280 0	0 0	0 0	126 0	0 0
E	318	209 0	0 0	0 0	109 0	0 0

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

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

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

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

FR-TO	CHORDS			WEBS		
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
A-B	0	41	-91.8	-91.8	0.13 (1)	10.00
B-C	-258	0	-91.8	-91.8	0.21 (1)	6.25
C-D	-258	0	-91.8	-91.8	0.18 (1)	6.25
G-B	-547	0	0.0	0.0	0.06 (1)	7.81
E-D	-422	0	0.0	0.0	0.05 (1)	7.81
G-F	0	0	-18.5	-18.5	0.09 (4)	10.00
F-E	0	0	-18.5	-18.5	0.09 (4)	10.00

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

155% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.27")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL)= L/360 (0.27")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.21/1.00 (B-C:1), BC=0.09/1.00 (E-F:4), WB=0.05/1.00 (D-F:1), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PS) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches  
 PLATE ROTATION TOL. = 5.0 Deg.

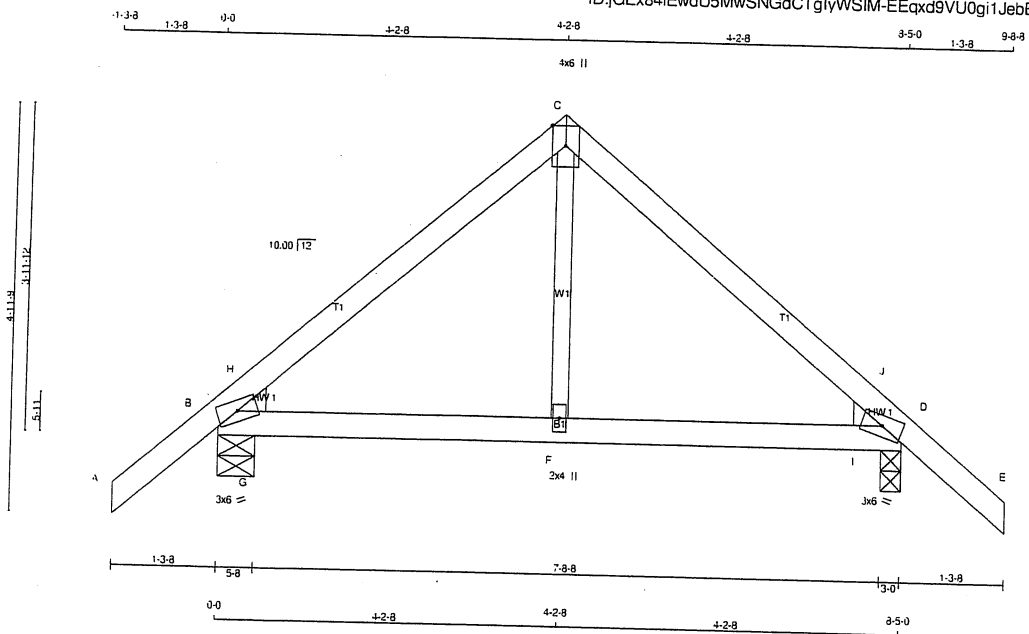
JSI GRIP= 0.43 (B) (INPUT = 0.90)  
 JSI METAL= 0.12 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2022028

JOB NAME <b>413367</b>	TRUSS NAME <b>T30</b>	QUANTITY <b>1</b>	PLY <b>1</b>	JOB DESC. <b>ROYAL PINE HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:GEx84EwdU5MwSNGdCTglyWSIM-EEqxd9VU0gi1JebB1yWVfgZUqw7\_D1lvF6smiByTjyO



TOTAL WEIGHT = 30 lb (M/F)

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF  
 DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m MT20	3.0	6.0		
C	TTW+p MT20	4.0	6.0	Edge	
D	TMBH1-m MT20	3.0	6.0		
F	BMW+w MT20	2.0	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**

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	591	0	591	0	5-8	5-8	2x4 L
D	591	0	591	0	3-0	3-0	2x4 R

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	416	286	0	0	0	129	0
D	416	286	0	0	0	129	0

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

**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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD			MAX. UNBRAC LENGTH	WEBS MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
		FROM	TO	CSI (LC)			
A-B	0	-91.8	-91.8	0.13 (1)	10.00	F-C	0
B-H	-333	-91.8	-91.8	0.07 (1)	6.25	G-H	-271
H-C	-395	-91.8	-91.8	0.17 (1)	6.25	I-J	0
C-J	-395	-91.8	-91.8	0.17 (1)	6.25		
J-D	-333	-91.8	-91.8	0.07 (1)	6.25		
D-E	0	-91.8	-91.8	0.13 (1)	10.00		
B-G	0	-18.5	-18.5	0.20 (1)	10.00		
G-F	0	-18.5	-18.5	0.20 (1)	10.00		
F-I	0	-18.5	-18.5	0.20 (1)	10.00		
I-D	0	-18.5	-18.5	0.20 (1)	10.00		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL DL = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.01")  
 ALLOWABLE DEFL.(TL)= L/360 (0.28")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.17/1.00 (C-H:1), BC=0.20/1.00 (B-G:1), WB=0.04/1.00 (C-F:1), SS=0.20/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
 COMP=1.10 SHEAR=1.10 TENS=1.10  
 COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

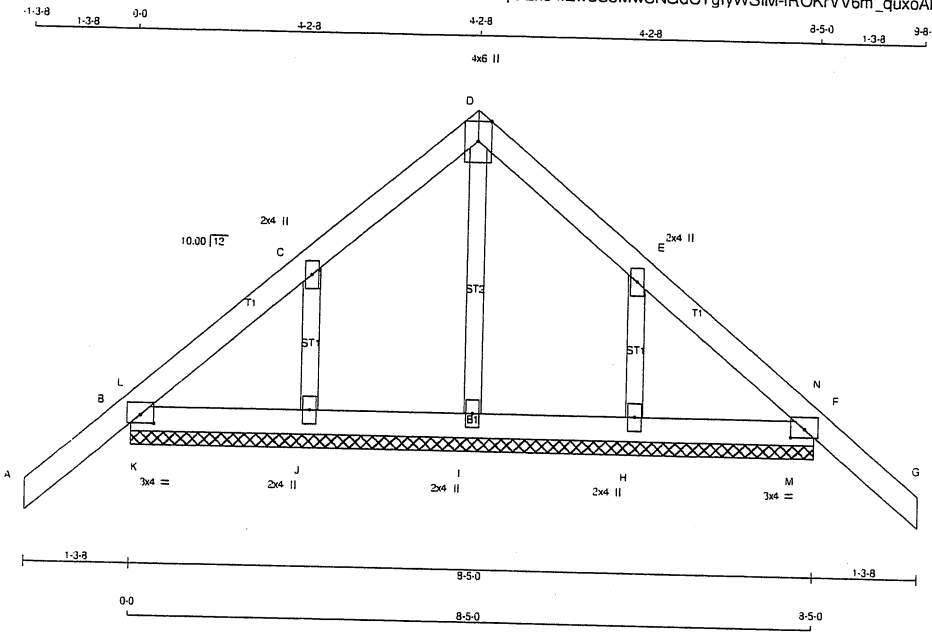
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (iD) (INPUT = 0.90 )  
 JSI METAL= 0.12 (iB) (INPUT = 1.00 )



Structural component only  
 DWG# T-2022029

JOB NAME 413367	TRUSS NAME T30G	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



Scale 1/26.7

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	No.2	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF  
 ALL GABLE WEBS 2x3 DRY No.2 SPF  
 DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 24-0 OC.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.25	2.00
C	TMW+w	MT20	2.0	4.0		
D	TTW+p	MT20	4.0	6.0	Edge	
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0	1.25	2.00
H, I, J						
H	BMW1+w	MT20	2.0	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**  
 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)

MEMB.	FR-TO	CHORDS		WEBS					
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
A-B	0:38	-91.8	-91.8	0.13 (1)	10.00	I-D	-86	0	0.02 (1)
B-L	-61:0	-91.8	-91.8	0.01 (1)	6.25	J-C	-217	0	0.03 (1)
L-C	-51:0	-91.8	-91.8	0.06 (1)	6.25	H-E	-217	0	0.03 (1)
C-D	-63:0	-91.8	-91.8	0.06 (1)	6.25	K-L	-76	6	0.00 (1)
D-E	-63:0	-91.8	-91.8	0.06 (1)	6.25	M-N	-76	6	0.00 (1)
E-N	-51:0	-91.8	-91.8	0.06 (1)	6.25				
N-F	-61:0	-91.8	-91.8	0.01 (1)	6.25				
F-G	0:38	-91.8	-91.8	0.13 (1)	10.00				
B-K	0:49	-18.5	-18.5	0.03 (1)	10.00				
K-J	0:49	-18.5	-18.5	0.03 (1)	10.00				
J-I	0:38	-18.5	-18.5	0.02 (1)	10.00				
I-H	0:38	-18.5	-18.5	0.02 (1)	10.00				
H-M	0:49	-18.5	-18.5	0.03 (1)	10.00				
M-F	0:49	-18.5	-18.5	0.03 (1)	10.00				

TOTAL WEIGHT = 32 lb (M)

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

CSI: TC=0.13/1.00 (A-B:1), BC=0.03/1.00 (J-K:1), WB=0.03/1.00 (C-J:1), SS=0.08/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10  
 COMPANION LIVE LOAD FACTOR = 1.00

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

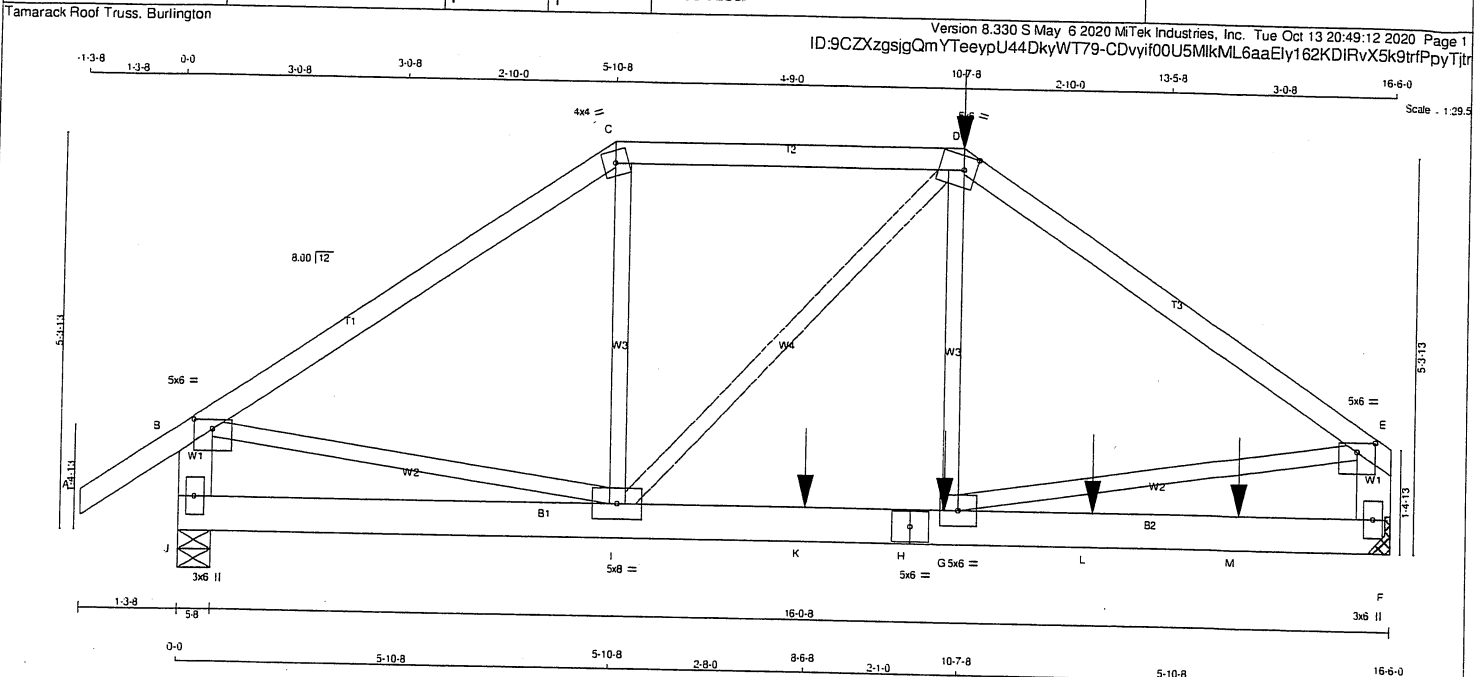
**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches  
 PLATE ROTATION TOL. = 5.0 Deg.  
 JSI GRIP= 0.16 (B) (INPUT = 0.90)  
 JSI METAL= 0.12 (C) (INPUT = 1.00)



JOB NAME 413376	TRUSS NAME T41	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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**LUMBER**

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

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
J - B	2x6	DRY	No.2
F - E	2x6	DRY	No.2
J - H	2x6	DRY	No.2
H - F	2x6	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	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTW-m	MT20	4.0	4.0		
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMVW-p	MT20	5.0	6.0	1.50	3.00
F	BMV1+P	MT20	3.0	6.0		
G	BMVW-t	MT20	5.0	6.0		
H	BS-t	MT20	5.0	6.0		
I	BMVWW-t	MT20	5.0	8.0		
J	BMV1+P	MT20	3.0	6.0		

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
J	1746	0	1746	0	5-8	5-8
F	1863	0	1863	0	MECHANICAL	

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

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1230	837 / 0	0 / 0	0 / 0	0 / 0	393 / 0	0 / 0
F	1317	867 / 0	0 / 0	0 / 0	0 / 0	449 / 0	0 / 0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.50 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 (PLF)	LC1 MAX	MAX UNBRAC LENGTH	MEMB. FORCE (LBS)	MAX FACTORED FORCE (LBS)	MAX	CS1 (LC)
A-B	0 35	-91.8	-91.8	0.14 (1)	10.00	B-1	0 1633	0.40 (1)	
B-C	-1938 0	-91.8	-91.8	0.82 (1)	3.78	I-C	0 591	0.15 (1)	
C-D	-1632 0	-91.8	-91.8	0.46 (1)	4.58	I-D	-359 0	0.29 (1)	
D-E	-2245 0	-91.8	-91.8	0.88 (1)	3.50	G-D	0 501	0.12 (1)	
J-B	-1739 0	0.0	0.0	0.12 (1)	7.49	G-E	0 1892	0.47 (1)	
F-E	-1829 0	0.0	0.0	0.13 (1)	7.35				
J-I	0 0	-18.5	-18.5	0.22 (1)	10.00				
I-K	0 1877	-18.5	-18.5	0.88 (1)	10.00				
K-H	0 1877	-18.5	-18.5	0.88 (1)	10.00				
H-G	0 1877	-18.5	-18.5	0.88 (1)	10.00				
G-L	0 0	-18.5	-18.5	0.25 (1)	10.00				
L-M	0 0	-18.5	-18.5	0.25 (1)	10.00				
M-F	0 0	-18.5	-18.5	0.25 (1)	10.00				

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
D	10-7-8	-361	-361	---	BACK	VERT	TOTAL	---	C1
G	10-5-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
K	8-6-8	-726	-726	---	BACK	VERT	TOTAL	---	C1
L	12-5-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
M	14-5-4	-29	-29	---	BACK	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

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

SPACING = 24.0 IN./C/C

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

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

**THIS DESIGN COMPLIES WITH:**

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.55")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.55")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CS1: TC=0.88/1.00 (D-E-1), BC=0.88/1.00 (G-I-1), WB=0.47/1.00 (E-G-1), SS1=0.42/1.00 (G-I-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 (PSI)	GRIP (PLI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20 650 371	1747 788	1987 1873

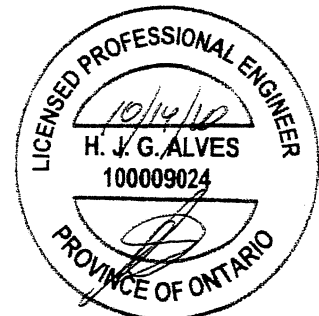
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (C) (INPUT = 0.90)  
JSI METAL= 0.43 (G) (INPUT = 1.00)

TOTAL WEIGHT = 78 lb

(M)

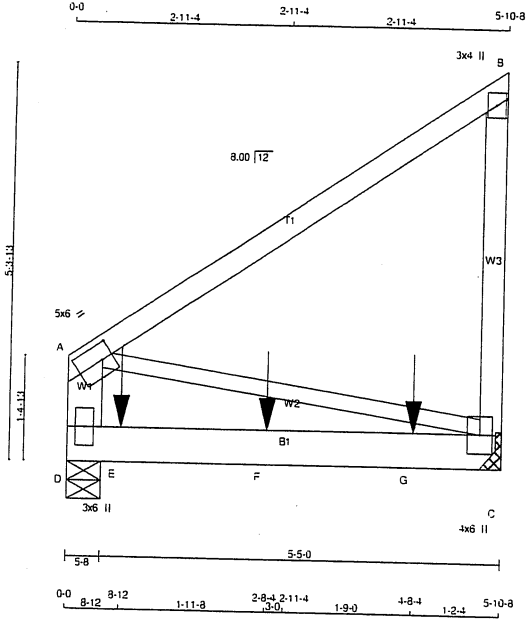


Structural component only  
DWG# T-2022037

JOB NAME 413376	TRUSS NAME T42	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 M/Tek Industries, Inc. Tue Oct 13 20:49:13 2020 Page 1  
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Scale 1/29.4

TOTAL WEIGHT = 2 X 30 = 60 lb (M)

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
C - B	2x4	DRY No.2	SPF
D - A	2x6	DRY No.2	SPF
D - C	2x6	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-B	12	TOP
B-C	12	TOP
D-A	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
D-C	12	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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 PLYS FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

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

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-1	MT20	5.0	6.0	2.50 1.75
B	TMV-p	MT20	3.0	4.0	
C	BMVW1+p	MT20	4.0	6.0	

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	REQRD
C	1051	0	1051	0	0	MECHANICAL	5-8	5-8
D	1047	0	1047	0	0	5-8	5-8	

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

**UNFACTORED REACTIONS**

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	741	501	0	0	0	240	0
D	736	511	0	0	0	224	0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	FR-TO	CHORDS		WEBS	
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
A-B	0 0	-91.8	-91.8	0.30 (1)	10.00
C-B	-270 0	0.0	0.0	0.06 (1)	7.81
D-A	-270 0	0.0	0.0	0.01 (1)	7.81
D-E	0 0	-18.5	-18.5	0.55 (1)	10.00
E-F	0 0	-18.5	-18.5	0.55 (1)	10.00
F-G	0 0	-18.5	-18.5	0.55 (1)	10.00
G-C	0 0	-18.5	-18.5	0.55 (1)	10.00

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	8-12	-182	-182	---	TOP	VERT	TOTAL	---	C1
F	2-8-4	-523	-523	---	FRONT	VERT	TOTAL	---	C1
G	4-8-4	-313	-313	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN./C**

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/558 (0.13")

CSI: TC=0.30/1.00 (A-B:1), BC=0.55/1.00 (C-D:1), WB=0.00/1.00 (A-C:1), SSI=0.26/1.00 (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 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	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.06 (B) (INPUT = 0.90)  
JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022038



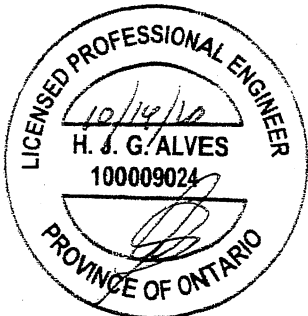
JOB NAME 413376	TRUSS NAME T42	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:49:13 2020 Page 2  
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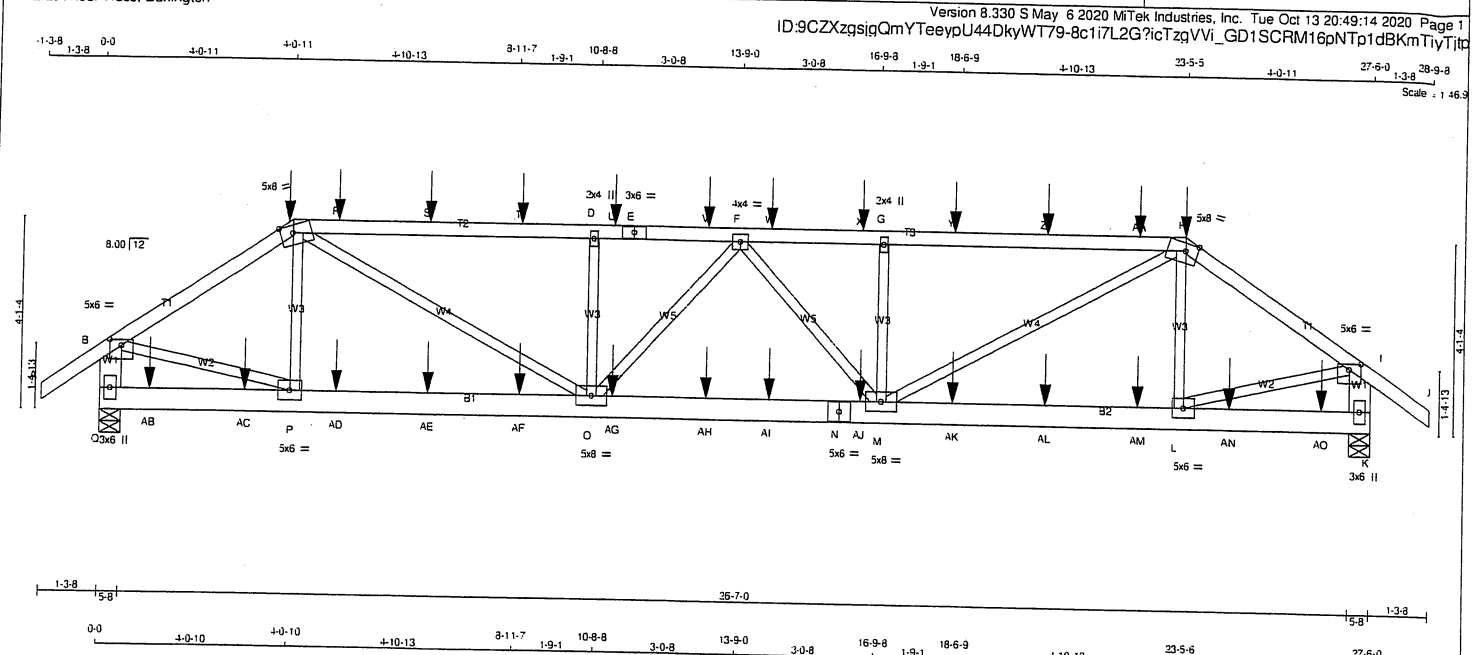
PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
D	BMV1+p MT20	3.0	6.0		



Structural component only  
 DWG# T-2022038

JOB NAME 413376	TRUSS NAME T45	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 20:49:14 2020 Page 1	



**LUMBER**

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
Q - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
N - K	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2  
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)
C-E	1	12	SIDE(61.0)
E-H	1	12	SIDE(61.0)
H-J	1	12	SIDE(61.0)
Q-B	2	12	TOP
K-I	2	12	TOP

BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS

Q-N	2	12	SIDE(0.0)
N-K	2	12	SIDE(0.0)

WEBS : (0.122"x3") SPIRAL NAILS

2x3	1	6	
-----	---	---	--

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

**BEARINGS**

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2685	0	5-8
Q VERT	2685	0	5-8
K VERT	2685	0	5-8

**UNFACTORED REACTIONS**

1ST LCASE	MAX. COMPONENT REACTIONS	MIN. COMPONENT REACTIONS
JT COMBINED	1898	1253
Q COMBINED	1898	1253
K COMBINED	1898	1253

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.80 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD		MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
		FR TO	TO					
FR-TO								
A-B	0 35	-91.8	-91.8	0.07 (1)	10.00	P-C	-404 6	0.05 (1)
B-C	-3088 0	-91.8	-91.8	0.19 (1)	5.08	L-H	-404 6	0.05 (1)
C-R	-4715 0	-91.8	-91.8	0.65 (1)	3.80	B-P	0 2637	0.33 (1)
R-S	-4715 0	-91.8	-91.8	0.65 (1)	3.80	L-I	0 2637	0.33 (1)
S-T	-4715 0	-91.8	-91.8	0.65 (1)	3.80	M-G	-1001 0	0.13 (1)
T-D	-4715 0	-91.8	-91.8	0.65 (1)	3.80	M-H	0 2485	0.31 (1)
D-U	-4715 0	-91.8	-91.8	0.52 (1)	3.80	C-O	0 2485	0.31 (1)
U-E	-4715 0	-91.8	-91.8	0.52 (1)	3.80	O-D	-1001 0	0.13 (1)
E-V	-4715 0	-91.8	-91.8	0.52 (1)	3.80	O-F	-48 0	0.01 (1)
V-F	-4715 0	-91.8	-91.8	0.52 (1)	3.80	F-M	-48 0	0.01 (1)
F-W	-4715 0	-91.8	-91.8	0.52 (1)	3.80			
W-X	-4715 0	-91.8	-91.8	0.52 (1)	3.80			
X-G	-4715 0	-91.8	-91.8	0.52 (1)	3.80			
G-Y	-4715 0	-91.8	-91.8	0.65 (1)	3.80			
Y-Z	-4715 0	-91.8	-91.8	0.65 (1)	3.80			
Z-AA	-4715 0	-91.8	-91.8	0.65 (1)	3.80			
AA-H	-4715 0	-91.8	-91.8	0.65 (1)	3.80			
H-I	-3088 0	-91.8	-91.8	0.19 (1)	5.08			
I-J	0 35	-91.8	-91.8	0.07 (1)	10.00			
Q-B	-2646 0	0.0	0.0	0.09 (1)	7.81			
K-I	-2646 0	0.0	0.0	0.09 (1)	7.81			

**DESIGN CRITERIA**

\*\*\* SPECIAL LOADS ANALYSIS \*\*\*

GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.

LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C/C

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

\*\*\* NON STANDARD GIRDER \*\*\*

ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")  
ALLOWABLE DEFL.(TL)= L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.65/1.00 (C-D:1) , BC=0.37/1.00 (M-O:1) , WB=0.33/1.00 (L-I) . SSI=0.23/1.00 (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) (PL) (PL)

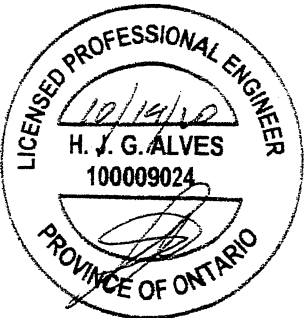
MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 768 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)  
JSI METAL= 0.44 (N) (INPUT = 1.00)



Structural component only  
DWG# T-2022039

JOB NAME 413376	TRUSS NAME T45	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MTEK Industries, Inc. Tue Oct 13 20:49:15 2020 Page 2  
 ID:9CZXzgsiqQmYTeeyoU44DkyWT79-dob5Kh2vm0kKbg4hGinSafkc6RR26w3Arr4J08yTito

**PLATES (table is in inches)**

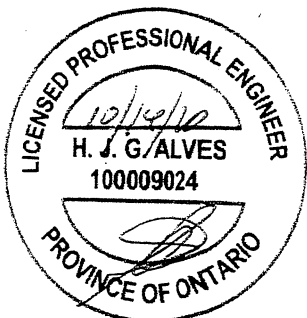
JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50 3.00
C	TTWW-m	MT20	5.0	8.0	2.00 3.25
D	TMW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	6.0	
F	TMWV-t	MT20	4.0	4.0	
G	TMW+w	MT20	2.0	4.0	
H	TTWW-m	MT20	5.0	8.0	2.00 3.25
I	TMVW-p	MT20	5.0	6.0	1.50 3.00
K	BMV1+p	MT20	3.0	6.0	
L	BMWV-t	MT20	5.0	6.0	
M	BMWVW-t	MT20	5.0	8.0	
N	BS-t	MT20	5.0	6.0	
O	BMWVW-t	MT20	5.0	8.0	
P	BMWV-t	MT20	5.0	6.0	
Q	BMV1+p	MT20	3.0	6.0	

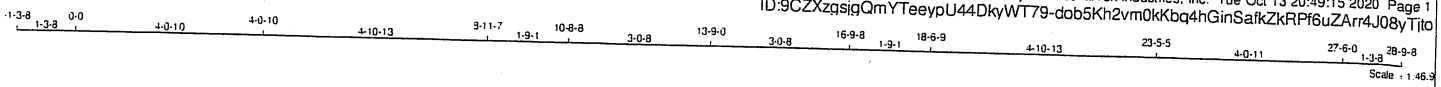
**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.	
C	4-0-11		-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11		-171	-171	---	FRONT	VERT	DEAD	---	C1
H	23-5-5		-40	-40	---	FRONT	VERT	SNOW	---	C1
H	23-5-5		-171	-171	---	FRONT	VERT	SNOW	---	C1
R	5-0-12		-76	-76	---	FRONT	VERT	TOTAL	---	C1
S	7-0-12		-76	-76	---	FRONT	VERT	TOTAL	---	C1
T	9-0-12		-76	-76	---	FRONT	VERT	TOTAL	---	C1
U	11-0-12		-76	-76	---	FRONT	VERT	TOTAL	---	C1
V	13-0-12		-76	-76	---	FRONT	VERT	TOTAL	---	C1
W	14-5-4		-76	-76	---	FRONT	VERT	TOTAL	---	C1
X	16-5-4		-76	-76	---	FRONT	VERT	TOTAL	---	C1
Y	18-5-4		-76	-76	---	FRONT	VERT	TOTAL	---	C1
Z	20-5-4		-76	-76	---	FRONT	VERT	TOTAL	---	C1
AA	22-5-4		-76	-76	---	FRONT	VERT	TOTAL	---	C1
AB	1-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AC	3-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AD	5-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AE	7-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AF	9-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AG	11-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AH	13-0-12		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AI	14-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AJ	16-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AK	18-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AL	20-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AM	22-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AN	24-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1
AO	26-5-4		-21	-21	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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





**LUMBER**

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY No.2	SPF
E - H	2x4	DRY No.2	SPF
H - J	2x4	DRY No.2	SPF
Q - B	2x6	DRY No.2	SPF
K - I	2x6	DRY No.2	SPF
Q - N	2x6	DRY No.2	SPF
N - K	2x6	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 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	12	TOP
C-E	12	TOP
E-H	12	SIDE(61.0)
H-J	12	SIDE(61.0)
Q-B	12	TOP
K-I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q-N	12	TOP
N-K	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	SIDE(319.4)
G-M	5	
O-D	5	

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 PLYS FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

**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	2539	0	5-8
Q VERT	3441	0	5-8
K VERT	0	0	5-8

**UNFACTORED REACTIONS**

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
Q	1791	1204	0	0	0	587	0
K	2427	1626	0	0	0	801	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 = 3.05 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.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNI. BRAC. LENGTH (LC)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. UNI. BRAC. LENGTH (LC)
FR-TO						
A-B	0.35	-91.8	0.07 (1)	10.00	P-C 440	0.06 (1)
B-C	-2925	-91.8	0.19 (1)	5.20	L-H 566	0.07 (1)
C-D	-5276	-91.8	0.49 (1)	3.86	B-P 0	2498 0.31 (1)
D-E	-5276	-91.8	0.36 (1)	3.86	L-I 0	3504 0.43 (1)
E-F	-5276	-91.8	0.36 (1)	3.86	M-G 858	0.11 (1)
F-G	-6814	-91.8	0.57 (1)	3.14	M-H 0	3934 0.49 (1)
G-R	-6813	-91.8	0.87 (1)	3.05	C-O 0	3287 0.41 (1)
R-S	-6813	-91.8	0.87 (1)	3.05	O-D 627	0.08 (1)
S-T	-6813	-91.8	0.87 (1)	3.05	O-F 1158	0.23 (1)
T-H	-6813	-91.8	0.87 (1)	3.05	F-M 0	1226 0.15 (1)
H-I	-4102	-91.8	0.22 (1)	4.51		
I-J	0.35	-91.8	0.07 (1)	10.00		
Q-B	-2523	0.0	0.09 (1)	7.81		
K-I	-3413	0.0	0.12 (1)	7.55		
Q-P	0	-18.5	-18.5 0.04 (4)	10.00		
P-O	0	-18.5	-18.5 0.19 (1)	10.00		
O-N	0	-18.5	-18.5 0.46 (1)	10.00		
N-M	0	-18.5	-18.5 0.46 (1)	10.00		
M-U	0	-18.5	-18.5 0.29 (1)	10.00		
U-V	0	-18.5	-18.5 0.29 (1)	10.00		
V-W	0	-18.5	-18.5 0.29 (1)	10.00		
W-L	0	-18.5	-18.5 0.29 (1)	10.00		
L-X	0	-18.5	-18.5 0.07 (4)	10.00		
X-Y	0	-18.5	-18.5 0.07 (4)	10.00		
Y-K	0	-18.5	-18.5 0.07 (4)	10.00		

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	23-5-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
H	23-5-5	-171	-171	---	FRONT	VERT	SNOW	---	C1
M	16-7-8	-1356	-1356	---	BACK	VERT	TOTAL	---	C1
R	18-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
S	20-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
T	22-5-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
U	18-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
V	20-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
W	22-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
X	24-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Y	26-5-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

TOTAL WEIGHT = 2 X 126 = 251 lb

**DESIGN CRITERIA**

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

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF BCBC 2018, ABC 2019  
 - PART 9 OF NBC 2012 (2019 AMENDMENT)  
 - CSA O86-14  
 - TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.15")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.26")

CSI: TC=0.87(1.00) (G-H:1), BC=0.46(1.00) (M-O:1), WB=0.49(1.00) (H-M:1), SSI=0.23(1.00) (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) (MAX MIN)  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)  
 JSI METAL= 0.59 (N) (INPUT = 1.00)



Structural component only  
 DWG# T-2022040 1/2

JOB NAME 413376	TRUSS NAME T45Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MITek Industries, Inc. Tue Oct 13 20:49:15 2020 Page 2  
 ID:9CZxzsigsqQmYTeepU44DkyWT79-dob5Kh2vm0kKbg4hGinSafkZkRPf6uZArr4J08yTito

PLATES (table is in inches)

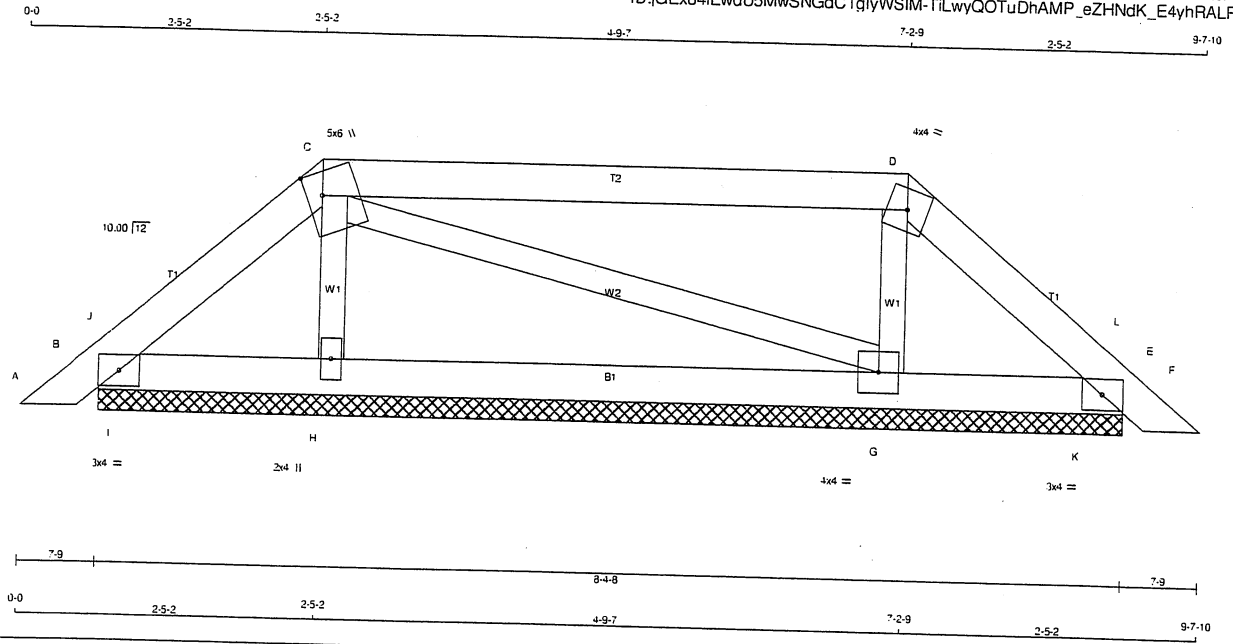
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	5.0	8.0	1.75	2.00
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW-m	MT20	5.0	8.0	1.75	2.00
I	TMVW-p	MT20	5.0	6.0	1.50	3.00
K	BMV1+p	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMWWW-t	MT20	6.0	9.0	4.00	2.75
N	BS-t	MT20	5.0	6.0		
O	BMWWW-t	MT20	6.0	9.0	4.00	3.75
P	BMWW-t	MT20	5.0	6.0		
Q	BMV1+p	MT20	3.0	6.0		

CONNECTION REQUIREMENTS

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



Structural component only  
 DWG# T-2022040 *HL*



TOTAL WEIGHT = 2 X 28 = 56 lb (M)

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4 DRY	No.2	SPF
C - D	2x4 DRY	No.2	SPF
D - F	2x4 DRY	No.2	SPF
B - E	2x4 DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2  
 DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN Y	X
B	TMB1-I	MT20	3.0	4.0
C	TTWW+m	MT20	5.0	6.0 2.25 1.50
D	TTW-m	MT20	4.0	4.0
E	TMB1-I	MT20	3.0	4.0
G	BMW1-I	MT20	4.0	4.0
H	BMW1-w	MT20	2.0	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	188	0	188	0	8-4-8	8-4-8
E	178	0	178	0	8-4-8	8-4-8
H	319	0	319	0	8-4-8	8-4-8
G	337	0	337	0	8-4-8	8-4-8

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	130	104.0	0.0	0.0	0.0	26.0	0.0
E	123	98.0	0.0	0.0	0.0	25.0	0.0
H	228	136.0	0.0	0.0	0.0	92.0	0.0
G	241	146.0	0.0	0.0	0.0	95.0	0.0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.  
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

FR-TO	CHORDS				WEBS					
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	LENGTH FR-TO		
A-B	0	14	-91.8	-91.8	0.02 (1)	10.00	H-C	-228	0	0.03 (1)
B-J	-58	0	-91.8	-91.8	0.01 (1)	10.00	C-G	-13	0	0.01 (1)
J-C	-85	0	-91.8	-91.8	0.03 (1)	6.25	G-D	-242	0	0.04 (1)
C-D	-34	0	-91.8	-91.8	0.36 (1)	6.25	I-J	-119	0	0.00 (1)
D-L	-70	0	-91.8	-91.8	0.03 (1)	6.25	K-L	-121	0	0.00 (1)
L-E	-41	2	-91.8	-91.8	0.01 (1)	6.25				
E-F	0	14	-91.8	-91.8	0.02 (1)	10.00				
B-I	0	61	-18.5	-18.5	0.04 (1)	10.00				
I-H	0	61	-18.5	-18.5	0.07 (4)	10.00				
H-G	0	46	-18.5	-18.5	0.07 (4)	10.00				
G-K	0	50	-18.5	-18.5	0.07 (4)	10.00				
K-E	0	50	-18.5	-18.5	0.04 (1)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.36/1.00 (C-D:1), BC=0.07/1.00 (H-I:4), WB=0.04/1.00 (D-G:1), SSI=0.17/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

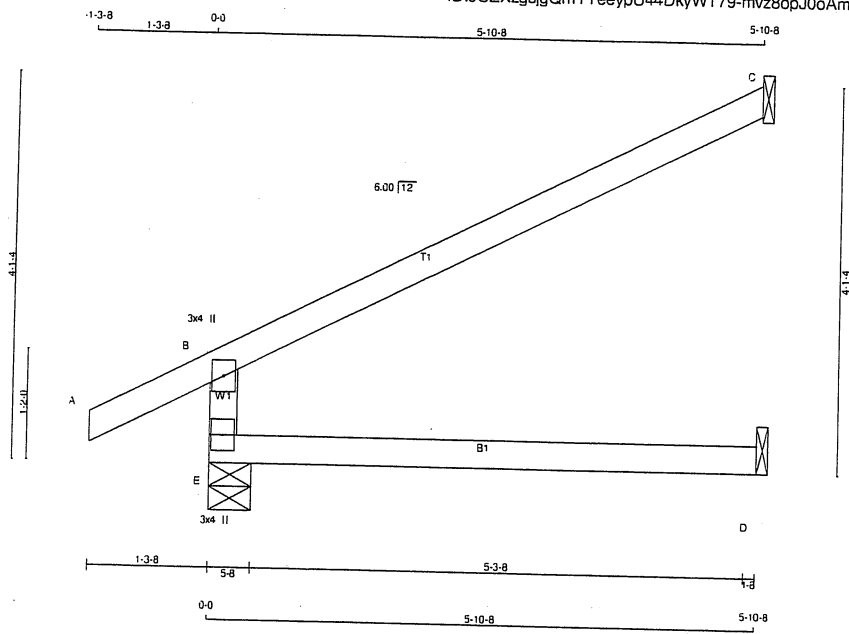
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (D) (INPUT = 0.90)  
 JSI METAL = 0.05 (H) (INPUT = 1.00)



JOB NAME 413359	TRUSS NAME J1	QUANTITY 18	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZxZgsjgQmYTeypU44DkyW179-mvz8opJ0oAmmzstzw3q8JPqF6O4wxSPvqWA6h\_yTK34



Scale = 1:23.3

TOTAL WEIGHT = 18 X 17 = 302 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

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	REQD BRG
	VERT	HORZ	DOWN	HORZ
E	525	0	0	0
C	202	0	0	0
D	45	0	0	0

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST CASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	369	257.0	0.0	0.0	0.0	111.0	0.0
C	139	113.0	0.0	0.0	0.0	26.0	0.0
D	36	0.0	0.0	0.0	0.0	36.0	0.0

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

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

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

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

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	MEMB. FORCE (LBS)	MAX. FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
E-B	-461	0	0.0	0.13 (4)	7.81			
A-B	0	28	-91.8	-91.8	0.12 (1)	10.00		
B-C	-30	0	-91.8	-91.8	0.54 (1)	6.25		
E-D	0	0	-18.5	-18.5	0.13 (4)	10.00		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN./C**

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.20")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.54/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (na:0), SSI=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

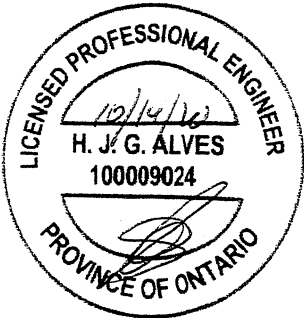
**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

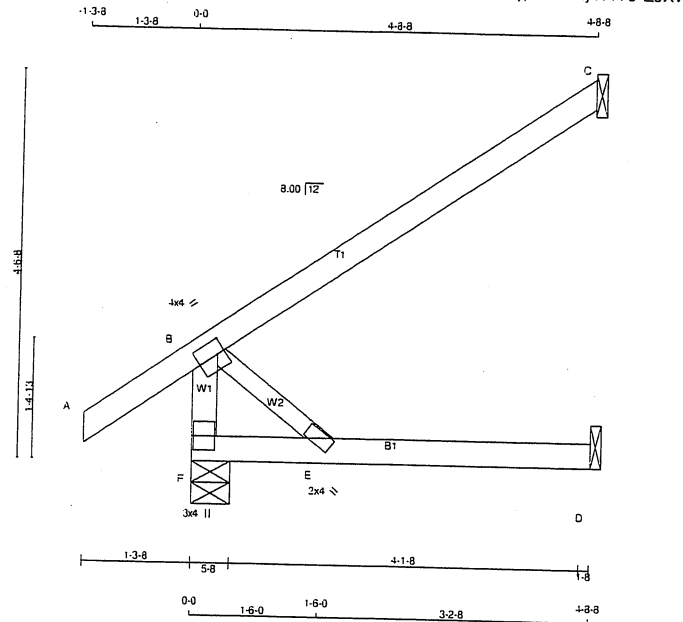
JSI GRIP = 0.18 (E) (INPUT = 0.90)  
 JSI METAL = 0.13 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2021996

JOB NAME 413359	TRUSS NAME J2	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZxZgsigQmYTeeyU44DkyWT79-E5XW09KeZUvdb0S6WmMNsDNTuoQJgvf23AwgDRyTk33



TOTAL WEIGHT = 16 lb (M)

**LUMBER**

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

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	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	REORD BRG
	VERT	HORZ	DOWN	HORZ		
F	385	0	385	0	5-8	5-8
C	216	0	216	0	1-8	1-8
D	44	0	49	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS				DEAD	SOIL
		COMBINED	SNOW	LIVE	PERM. LIVE		
F	270	191	0	0	0	0	0
C	149	120	0	0	0	28	0
D	35	0	0	0	0	35	0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS				
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	UNBRAC LENGTH	FR-TO	
F-B	-342	0	0.0	0.0	0.04 (1)	7.81	B-E
A-B	0	35	-91.8	-91.8	0.12 (1)	10.00	
B-C	0	0	-91.8	-91.8	0.35 (1)	10.00	
F-E	0	0	-18.5	-18.5	0.10 (4)	10.00	
E-D	0	0	-18.5	-18.5	0.12 (4)	10.00	

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.35/1.00 (B-C:1), BC=0.12/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.14/1.00 (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
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.90)  
 JSI METAL= 0.06 (B) (INPUT = 1.00)



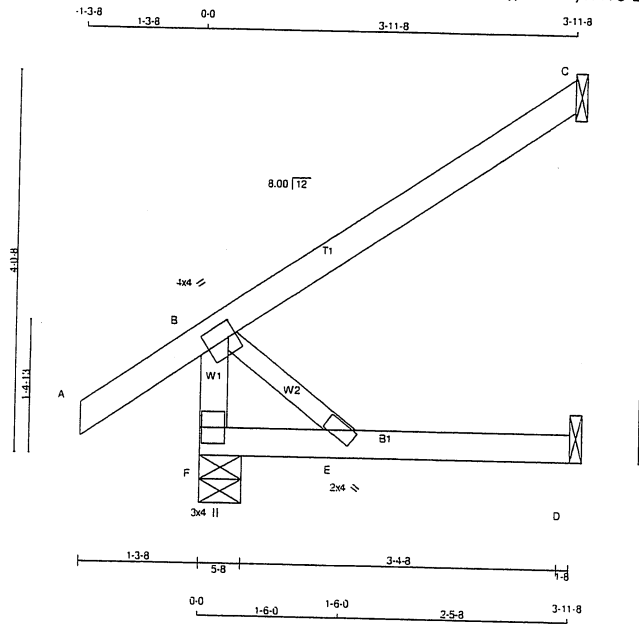
Structural component only  
 DWG# T-2021997



JOB NAME 413359	TRUSS NAME J3	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 2 X 14 = 29 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	No.2	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	TMW-1	MT20	4.0	4.0	2.00 1.00
E	BMW+w	MT20	2.0	4.0	
F	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 IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
F	344	0	344	0	5-8	5-8
C	182	0	182	0	1-8	1-8
D	37	0	41	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS				DEAD	SOIL
		SNOW	LIVE	PERM LIVE	WIND		
F	241	172 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0
C	125	101 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
D	29	0 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (5)

MEMB.	FR-TO	CHORDS				WEBS			
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED MOMENT (LC)	MAX. FACTORED MOMENT (LC)
F-B	-308 / 0	0.0	0.0	0.03 (1)	7.81	0 / 0	0.00 (1)		
A-B	0 / 35	-91.8	-91.8	0.14 (5)	10.00				
B-C	0 / 0	-91.8	-91.8	0.24 (1)	10.00				
F-E	0 / 0	-18.5	-18.5	0.08 (4)	10.00				
E-D	0 / 0	-18.5	-18.5	0.08 (4)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.24/1.00 (B-C:1), BC=0.08/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

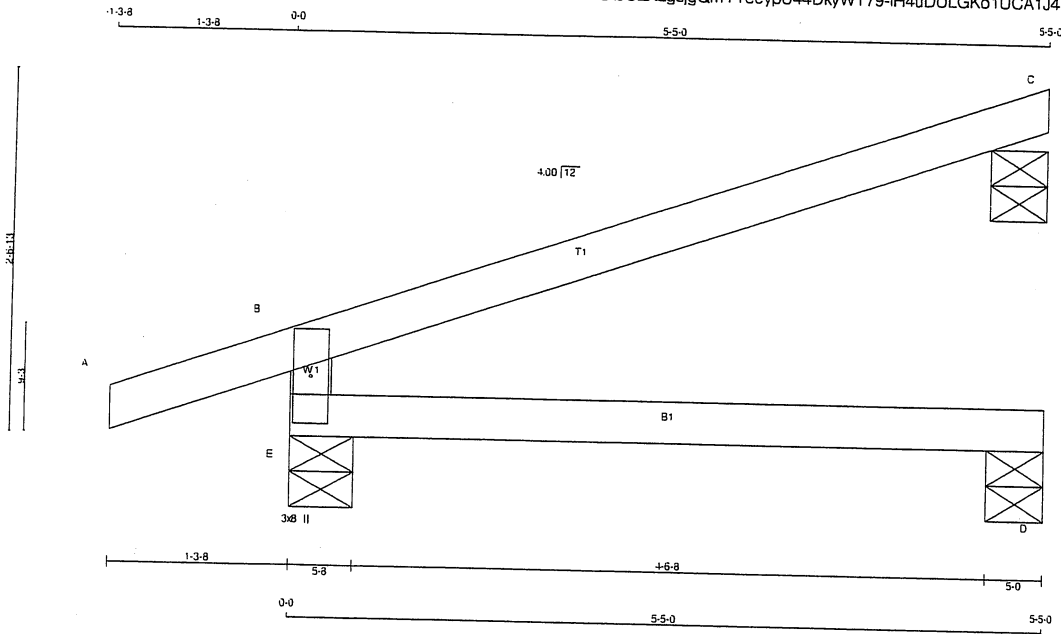
JSI GRIP = 0.19 (B) (INPUT = 0.90)  
JSI METAL = 0.06 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2021998

JOB NAME 413359	TRUSS NAME J4	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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TOTAL WEIGHT = 5 X 15 = 75 lb (M)

**LUMBER**  
 N. L. G. A. RULES  
 CHORDS SIZE LUMBER DESCR.  
 E - B 2x4 DRY No.2 SPF  
 A - C 2x4 DRY No.2 SPF  
 E - D 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
E	TMBMV1+p	MT20	3.0	8.0	

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

**BEARINGS**

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG IN-SX	REQRD BRG IN-SX
E	493	0	493	0	5-8	5-8
C	186	0	186	0	5-0	5-0
D	40	0	45	0	5-0	5-0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

**UNFACTORED REACTIONS**

JT	1ST CASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	346	242	0	0	0	105	0
C	128	104	0	0	0	24	0
D	32	0	0	0	0	32	0

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

**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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)				WEBS MAX. FACTORED FORCE (LBS)			
	FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
E-B	-433	0	0.0	0.0	0.13	(4)	7.81	
A-B	0	19	-91.8	-91.8	0.11	(1)	10.00	
B-C	-20	0	-91.8	-91.8	0.46	(1)	6.25	
E-D	0	0	-18.5	-18.5	0.13	(4)	10.00	

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

**SPACING = 24.0 IN./C/C**  
 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

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

**DESIGN ASSUMPTIONS**  
 - OVERHANG NOT TO BE ALTERED OR CUT OFF.  
 (55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.46/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (na:0), SSI=0.23/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

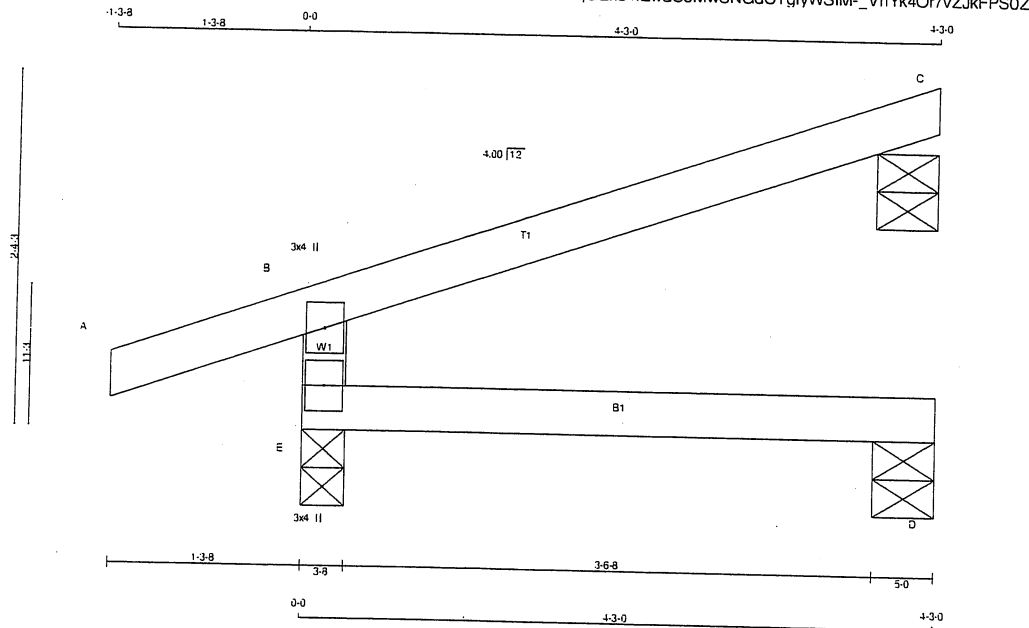
JSI GRIP = 0.13 (E) (INPUT = 0.90)  
 JSI METAL = 0.09 (E) (INPUT = 1.00)



Structural component only  
 DWG# T-2021999

JOB NAME 413367	TRUSS NAME J21	QUANTITY 6	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:GEx84IEwdU5MwSNGdCTglyWSIM\_VnYk4Or7vZJkFPS0ZsOomhwpI5xycy8aACAntCyTjyX



TOTAL WEIGHT = 6 X 12 = 73 lb

**LUMBER**

N. L. G. A. RULES	LUMBER
CHORDS SIZE	No.2
E - B 2x4 DRY	No.2
A - C 2x4 DRY	No.2
E - D 2x4 DRY	No.2

DRY, SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	3.0	4.0		
E	BMV1+p	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	413	0	413	0	3-8	3-8
C	146	0	146	0	5-0	5-0
D	33	0	36	0	5-0	5-0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
E	289	204.0	0.0	0.0	0.0	85.0	0.0
C	101	82.0	0.0	0.0	0.0	19.0	0.0
D	26	0.0	0.0	0.0	0.0	26.0	0.0

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

**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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	FACTORED		MAX. UNBRAC LENGTH FR-TO	MEMB. FORCE (LBS)	WEBS MAX. FACTORED	
			LC1	MAX			CS1 (LC)	MAX
E-B	-366	0	0.0	0.0	0.07 (4)	7.81		
A-B	0	19	-91.8	-91.8	0.11 (1)	10.00		
B-C	-15	0	-91.8	-91.8	0.28 (1)	6.25		
E-D	0	0	-18.5	-18.5	0.07 (4)	10.00		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.28/1.00 (B-C:1), BC=0.07/1.00 (D-E:4), WB=0.00/1.00 (na:0), SSI=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

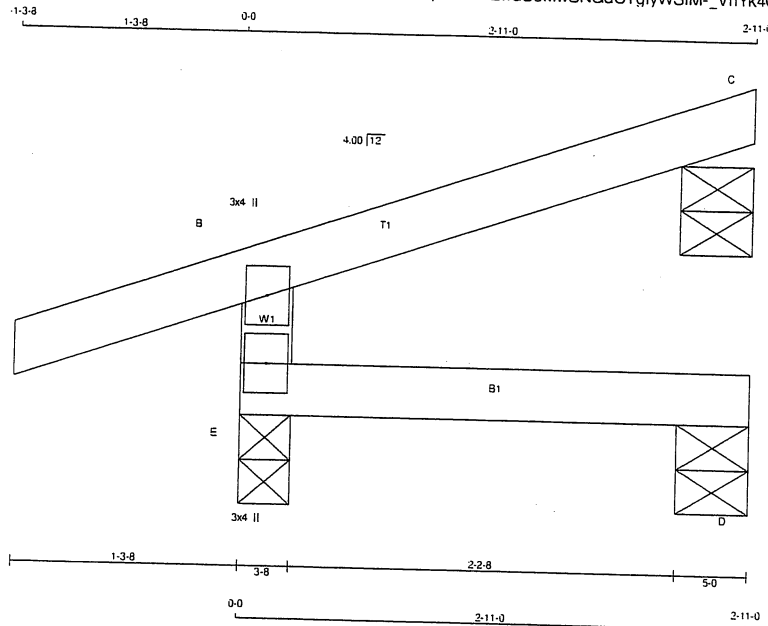
JSI GRIP = 0.15 (E) (INPUT = 0.90)  
 JSI METAL = 0.07 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2022015

JOB NAME 413367	TRUSS NAME J22	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:jGEx84lEwdU5MwSNGdCTglyWSIM-VnYk4Or7vZJkFPS0ZsOomhyk16Tcy8aACAntCyTijX



Scale: 1/12

TOTAL WEIGHT = 4 X 9 = 36 lb

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

E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	321	0	321	0
C	101	0	101	0
D	23	0	26	0

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	224	162	0	0	0	63	0
C	69	56	0	0	0	13	0
D	18	0	0	0	0	18	0

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

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

**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.

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

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

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

**LOADING**  
TOTAL LOAD CASES: (5)

MEMB.	FR-TO	CHORDS				WEBS			
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC)	MAX. UNBRACED LENGTH (LC)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
E-B		-290	0	0.0	0.03 (4)	7.81			
A-B		0	19	-91.8	-91.8 (5)	10.00			
B-C		-11	0	-91.8	-91.8 (1)	6.25			
E-D		0	0	-18.5	-18.5 (4)	10.00			

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.13/1.00 (B-C:1) , BC=0.03/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00  
AUTOSOLVE RIGHT HEEL ONLY

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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



Structural component only  
DWG# T-2022016

**NAIL VALUES**

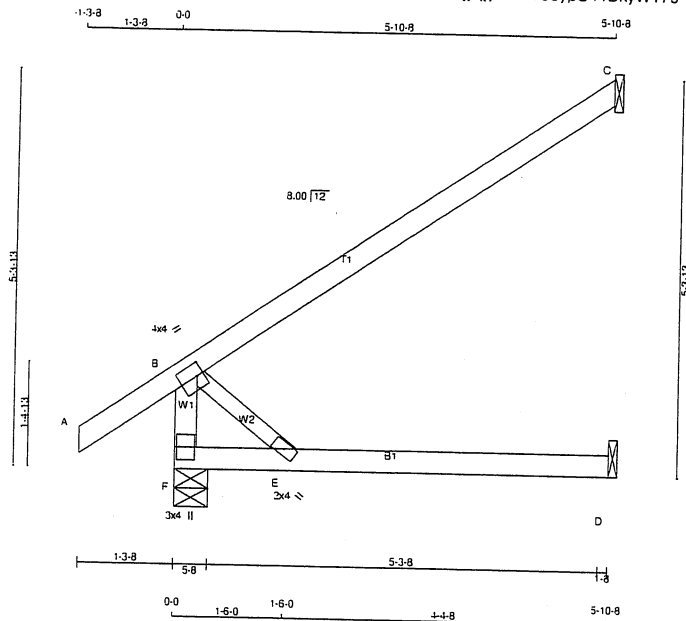
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PL)
MT20	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches  
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (E) (INPUT = 0.90)  
JSI METAL= 0.06 (B) (INPUT = 1.00)

JOB NAME 413376	TRUSS NAME J41	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:9CZXzgsjqmYTeeypU44DkyWT79-GrnChz\_myT61U2Bjt9CHlc1nBCnnRkvRiZMZKxyTjt



TOTAL WEIGHT = 19 lb

**LUMBER**

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	4.0	4.0	2.00 1.00
E	BMW-w	MT20	2.0	4.0	
F	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	REQRD BRG
F	450 0	450 0	5-8	5-8
C	270 0	270 0	1-8	1-8
D	54 0	61 0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	316	221	0	0	0	95	0
C	186	150	0	0	0	35	0
D	43	0	0	0	0	43	0

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

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

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

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

CHORDS		FACTORED				WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT	LC1	MAX	MAX	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO				CS1 (LC)	UNBRAC	FR-TO			
F-B	-395 0	0.0	0.0	0.04 (1)	7.81	B-E	0 0	0.00 (1)	
A-B	0 35	-91.8	-91.8	0.12 (1)	10.00				
B-C	0 0	-91.8	-91.8	0.54 (1)	10.00				
F-E	0 0	-18.5	-18.5	0.14 (4)	10.00				
E-D	0 0	-18.5	-18.5	0.19 (4)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.54/1.00 (B-C:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), 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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

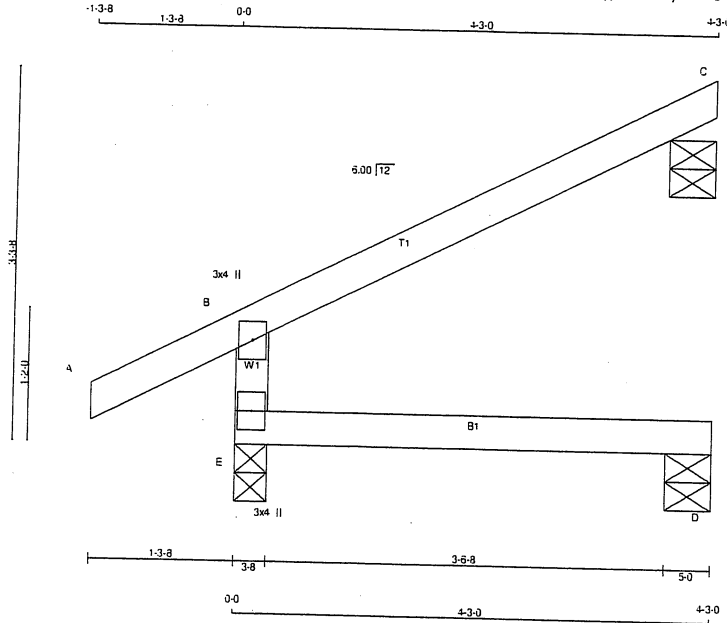
JSI GRIP = 0.24 (B) (INPUT = 0.90)  
JSI METAL = 0.07 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022033

JOB NAME 413376	TRUSS NAME J42	QUANTITY 6	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:9CZxZgsigQmYTeepU44DkyWT79-k1LaVJ?OjnEu6Cmw1sjWPPa0yp8sAB9axD66iNyTjts



Scale: 1/19.4

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

SPF  
SPF  
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	REQD BRG
	VERT	HORZ	DOWN	HORZ		
E	414	0	414	0	3-8	3-8
C	146	0	146	0	5-0	5-0
D	33	0	37	0	5-0	5-0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	290	205	0	0	0	0	84
C	101	82	0	0	0	0	19
D	27	0	0	0	0	0	27

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

**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)

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	MAX. UNBRACED LENGTH FR-TO	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX
E-B	-368	0	0.0	0.0	0.06	(4)	7.81	
A-B	0	28	-91.8	-91.8	0.12	(1)	10.00	
B-C	-22	0	-91.8	-91.8	0.28	(1)	6.25	
E-D	0	0	-18.5	-18.5	0.07	(4)	10.00	

TOTAL WEIGHT = 6 X 13 = 77 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 8.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.28/1.00 (B-C:1), BC=0.07/1.00 (D-E:4), WB=0.00/1.00 (ra: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

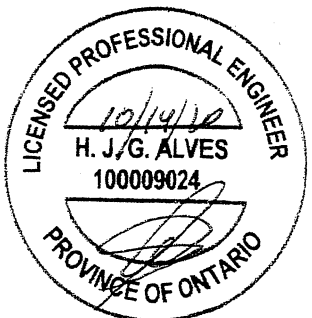
**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

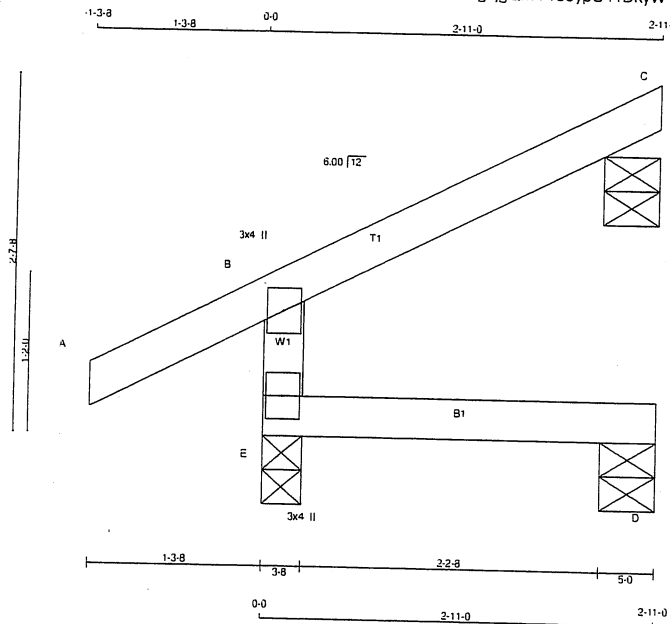
JSI GRIP= 0.15 (E) (INPUT = 0.90)  
JSI METAL= 0.10 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022034

JOB NAME 413376	TRUSS NAME J43	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:9CZxZgsigQmYTeepU44DkyWT79-k1LaVJ?OjnEu6Cmw1sjWPpa2lp9PAB9axD66tNyTjTs



Scale: 3/4"=1'

TOTAL WEIGHT = 4 X 10 = 39 lb

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

CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

SPF  
SPF  
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	REQRD BRG
JT	VERT	DOWN	UP	IN-SX
E	322	0	0	3-8
C	101	0	0	5-0
D	23	0	0	5-0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

**UNFACTORED REACTIONS**

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	225	163.0	0.0	0.0	0.0	63.0	0.0
C	69	56.0	0.0	0.0	0.0	13.0	0.0
D	19	0.0	0.0	0.0	0.0	19.0	0.0

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

**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)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS			UNBRACED LENGTH	MEMB. FORCE (LBS)	WEBS	
		VERT. LOAD (PLF)	LC1	MAX CSI (LC)			MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO			
E-B	-292.0	0.0	0.0	0.02 (4)	7.81			
A-B	0.28	-91.8	-91.8	0.13 (5)	10.00			
B-C	-15.0	-91.8	-91.8	0.13 (1)	6.25			
E-D	0.0	-18.5	-18.5	0.03 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.13/1.00 (B-C:1), BC=0.03/1.00 (D-E:4), WB=0.00/1.00 (na:0), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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)
MAX	MIN	MAX
MIN	MIN	MIN
MT20	650 371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.12 (E) (INPUT = 0.90)  
JSI METAL = 0.08 (B) (INPUT = 1.00)



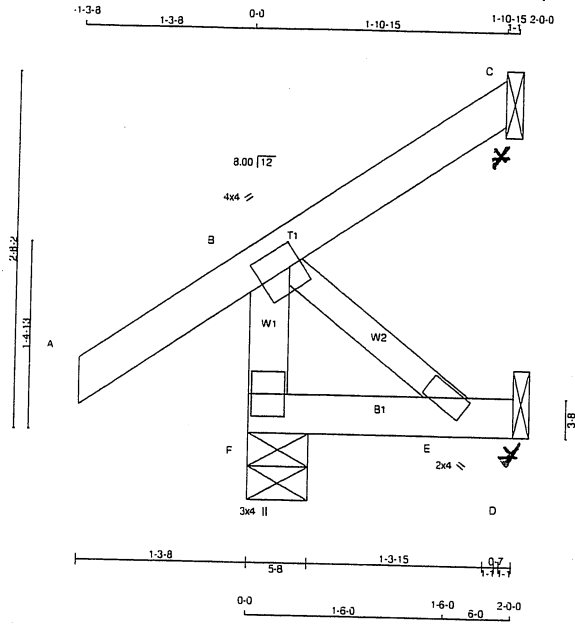
Structural component only  
DWG# T-2022035

JOB NAME 413359	TRUSS NAME C1	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale 1:16.5



TOTAL WEIGHT = 4 X 9 = 37 lb

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

CHORDS	SIZE	DRY	LUMBER
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.

**PLATES (table in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	4.0	4.0	2.00	1.00
E	BMW-w	MT20	2.0	4.0		
F	BMW1+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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	277	0	277	0	5-8	5-8
C	42	0	42	-35	1-8	1-8
D	19	0	21	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D  
PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX-MIN. COMPONENT REACTIONS							
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
F	193	144	0	0	0	0	49	0	0
C	29	24	-25	0	0	0	6	0	0
D	15	0	0	0	0	0	15	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)

MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	CHORDS		WEBS	
			LC1 MAX	UNBRAC LENGTH	MEMB. FORCE (LBS)	MAX FACTORED (LC)
FR-TO						
F-B	-259	0	0.0	0.0	0.03	(1) 7.81
A-B	0	35	-91.8	-91.8	0.12	(1) 10.00
B-C	-25	0	-91.8	-91.8	0.12	(1) 6.25
F-E	0	0	-18.5	-18.5	0.02	(4) 10.00
E-D	0	0	-18.5	-18.5	0.02	(4) 10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.12/1.00 (A-B:1), BC=0.02/1.00 (E-F:4)  
WB=0.00/1.00 (B-E:1), SS=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

**NAIL VALUES**

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.16 (B) / INPUT = 0.90  
JSI METAL = 0.05 (B) / INPUT = 1.00

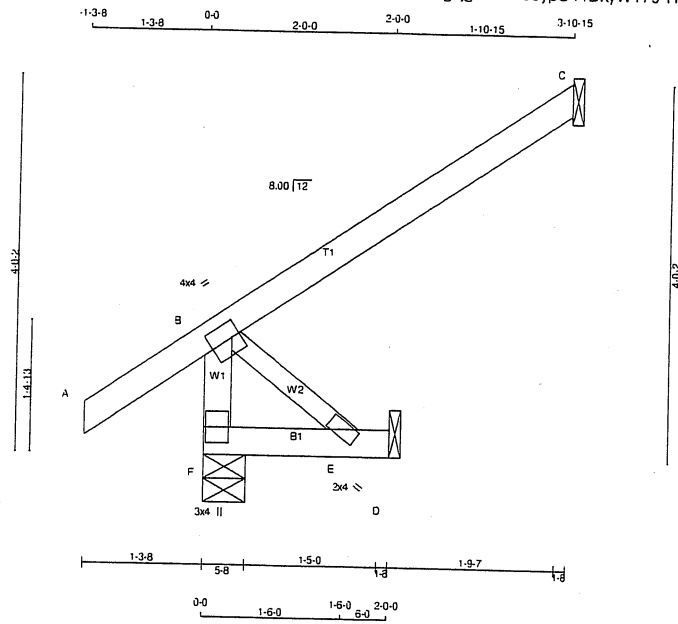


Structural component only  
DWG# T-2021991



JOB NAME 413359	TRUSS NAME C2	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZXzgsjgQmYTeeypU44DkyWT79-HiPmbTIO1teVLiKPMJmCI93\_mOC?AlbsRZ8YyTk35



Scale 1/23.3

TOTAL WEIGHT = 2 X 12 = 24 lb (M)

**LUMBER**

N. L. G. A. RULES	LUMBER	DESCR.
CHORDS SIZE	No.2	SPF
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-t	MT20	4.0	4.0	2.00	1.00
E BMW+w	MT20	2.0	4.0		
F 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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	324	0	324	0	5-8	5-8
C	179	0	179	0	1-8	1-8
D	18	0	21	0	1-8	1-8

SEE MITEK STANDARD DETAIL B977911H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS				DEAD	SOIL
		SNOW	LIVE	PERM.LIVE	WIND		
F	225	170	0	0	0	55	0
C	124	100	0	0	0	23	0
D	15	0	0	0	0	15	0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		WEBS				
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
F-B	-305	0	0.0	0.0	0.03 (1)	7.81	0.00 (1)
A-B	0	35	-91.8	-91.8	0.13 (5)	10.00	
B-C	0	0	-91.8	-91.8	0.24 (1)	10.00	
F-E	0	0	-18.5	-18.5	0.02 (4)	10.00	
E-D	0	0	-18.5	-18.5	0.02 (4)	10.00	

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL)= L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.24/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WB=0.00/1.00 (B-E:1), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)  
 JSI METAL= 0.06 (B) (INPUT = 1.00)



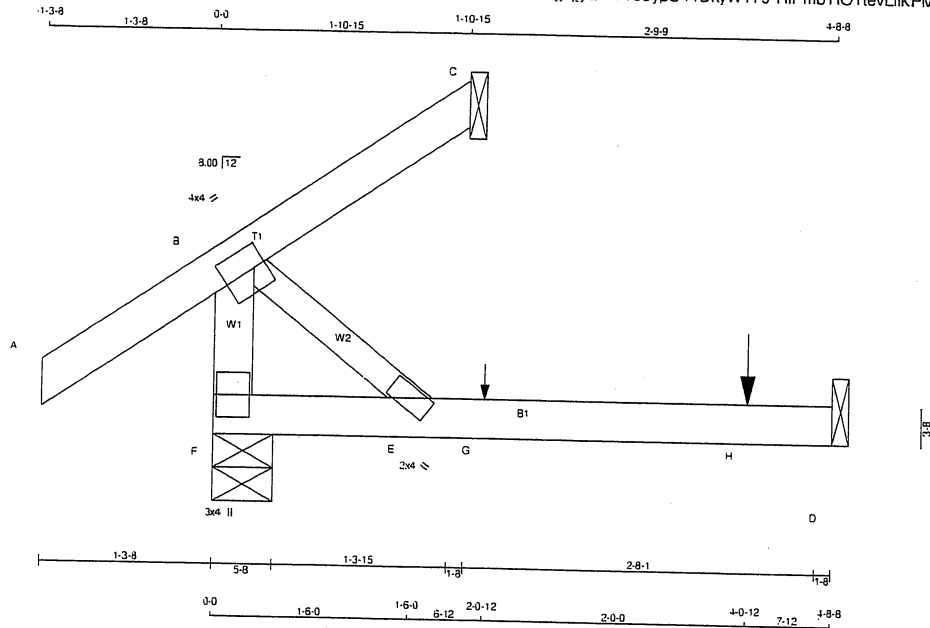
Structural component only  
 DWG# T-2021992

JOB NAME 413359	TRUSS NAME C3	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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ID:9CZXzgsigQmYTeeypU44DkyWT79-HiPmbTIO1teVLiikPMJvMCIbS\_lpc?AibsRZ8YyTk35

Scale - 1/16" = 1'



TOTAL WEIGHT = 2 X 12 = 25 lb

**LUMBER**

N. L. G. A. RULES			
CHORDS	SIZE	DRY	LUMBER No.2
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.			

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-1	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	303	0	303	0	5-8	5-8
C	42	0	42	0	1-8	1-8
D	46	0	52	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM. LIVE	WIND	DEAD
F	213	144 / 0	0 / 0	0 / 0	0 / 0	69 / 0
C	29	24 / 0	0 / 0	0 / 0	0 / 0	6 / 0
D	37	0 / 0	0 / 0	0 / 0	0 / 0	37 / 0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

FR-TO	CHORDS			WEBS		
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	UNBRAC LENGTH
F-B	-259	0	0.0	0.0	0.03 (1)	7.81
A-B	0	35	-91.8	-91.8	0.12 (1)	10.00
B-C	-25	0	-91.8	-91.8	0.12 (1)	6.25
F-E	0	0	-18.5	-18.5	0.11 (4)	10.00
E-G	0	0	-18.5	-18.5	0.12 (4)	10.00
G-H	0	0	-18.5	-18.5	0.12 (4)	10.00
H-D	0	0	-18.5	-18.5	0.12 (4)	10.00

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-12	1	1		FRONT	VERT	TOTAL		C1
H	4-0-12	-3	-3		FRONT	VERT	TOTAL		C1

**CONNECTION REQUIREMENTS**

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.12/1.00 (A-B:1), BC=0.12/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

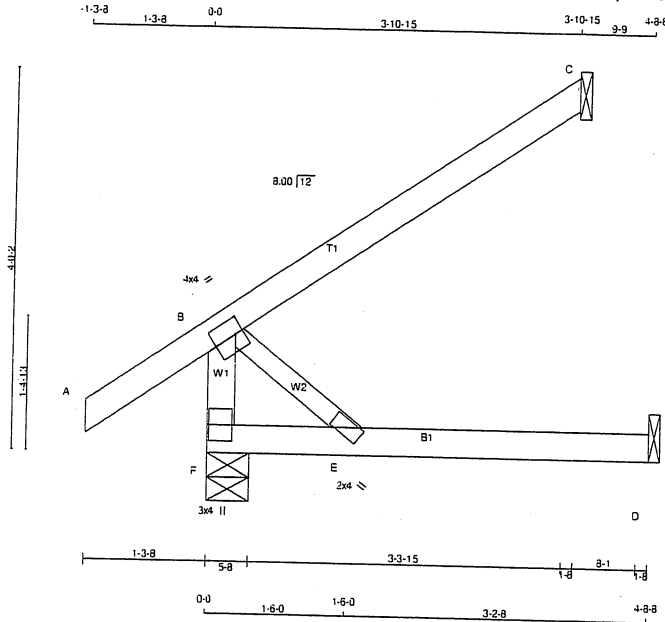
JSI GRIP = 0.16 (B) (INPUT = 0.90)  
JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2021993

JOB NAME 413359	TRUSS NAME C4	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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 ID:9CZxZgsigQmYTeypU44DkyWT79-mvz8opJ0oAmmzstzw3q8JPqKpO54xSPvqWA6h\_yTk34



TOTAL WEIGHT = 2 X 15 = 30 lb [M]

**LUMBER**

N. L. G. A. RULES	CHORDS	SIZE	DRY	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-t	MT20	4.0	4.0	2.00	1.00
E	BMV+w	MT20	2.0	4.0		
F	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		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
F	349	0	349	0	5-8	5-8		
C	179	0	179	0	1-8	1-8		
D	44	0	49	0	1-8	1-8		

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS				WIND	DEAD	SOIL
		COMBINED	SNOW	LIVE	PERM.LIVE			
F	245	170	0	0	0	75	0	0
C	124	100	0	0	0	23	0	0
D	35	0	0	0	0	35	0	0

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS		MAX. UNBRAC LENGTH	MEMB.	WEBS	
		FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)			MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO		FR-TO		
F-B	-305	0	0	0.03 (1)	B-E	0	0.00 (1)
A-B	0	35	-91.8	0.12 (1)			
B-C	0	0	-91.8	0.24 (1)			
F-E	0	0	-18.5	0.10 (4)			
E-D	0	0	-18.5	0.12 (4)			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.24/1.00 (B-C:1), BC=0.12/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 (FSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

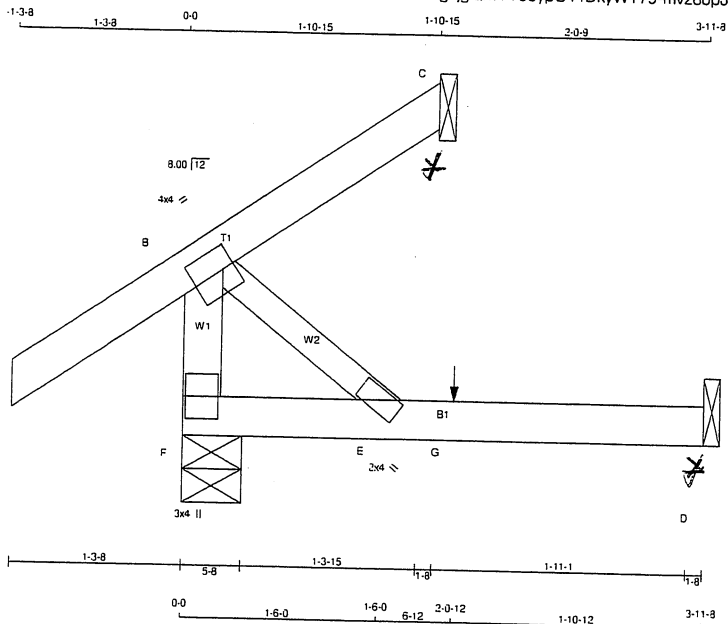
JSI GRIP= 0.19 (B) (INPUT = 0.90)  
 JSI METAL= 0.06 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2021994

JOB NAME 413359	TRUSS NAME C5	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MTEK Industries, Inc. Tue Oct 13 20:37:13 2020 Page 1  
 ID:9CZXzsgjQmYTeepU44DkyWT79-mvz8opJ0oAmmzstzw3q8JPqLK05exSPvqWA6h\_yTK34



Scale = 1/16" = 1'-0"

TOTAL WEIGHT = 2 X 12 = 23 lb

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER
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.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	4.0	4.0	2.00	1.00
E	BMV+w	MT20	2.0	4.0		
F	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	REQD BRG
F	295 0	295 0	5-8	5-8
C	42 0	42 0	-35 1-8	1-8
D	37 0	41 0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
F	207	144 0 0 0	0 0	63 0	0 0
C	29	24 -25 0 0	0 0	6 0	0 0
D	29	0 0 0 0	0 0	29 0	0 0

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

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

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

**LOADING**  
 TOTAL LOAD CASES: (5)

MEMB.	FR-TO	CHORDS		FACTORED		MAX. UNBRAC LENGTH	WEBS	
		MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. (LC1)	MAX. (LC)		MEMB. FORCE (LBS)	MAX. (LC)
F-B	-259 0	0.0	0.0	0.03 (1)	7.81	B-E	0 0	0.00 (1)
A-B	0 35	-91.8	-91.8	0.14 (5)	10.00			
B-C	-25 0	-91.8	-91.8	0.14 (5)	6.25			
F-E	0 0	-18.5	-18.5	0.08 (4)	10.00			
E-G	0 0	-18.5	-18.5	0.08 (4)	10.00			
G-D	0 0	-18.5	-18.5	0.08 (4)	10.00			

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-12	1	1	---	BACK	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 25.6 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.4 PSF  
 TOTAL LOAD = 39.0 PSF

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.14/1.00 (A-B-5), BC=0.08/1.00 (D-E-4)  
 WB=0.00/1.00 (B-E-1), SSI=0.09/1.00 (A-B-5)

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

COMPANION LIVE LOAD FACTOR = 1.00  
 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	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches  
 PLATE ROTATION TOL. = 5.0 Deg.

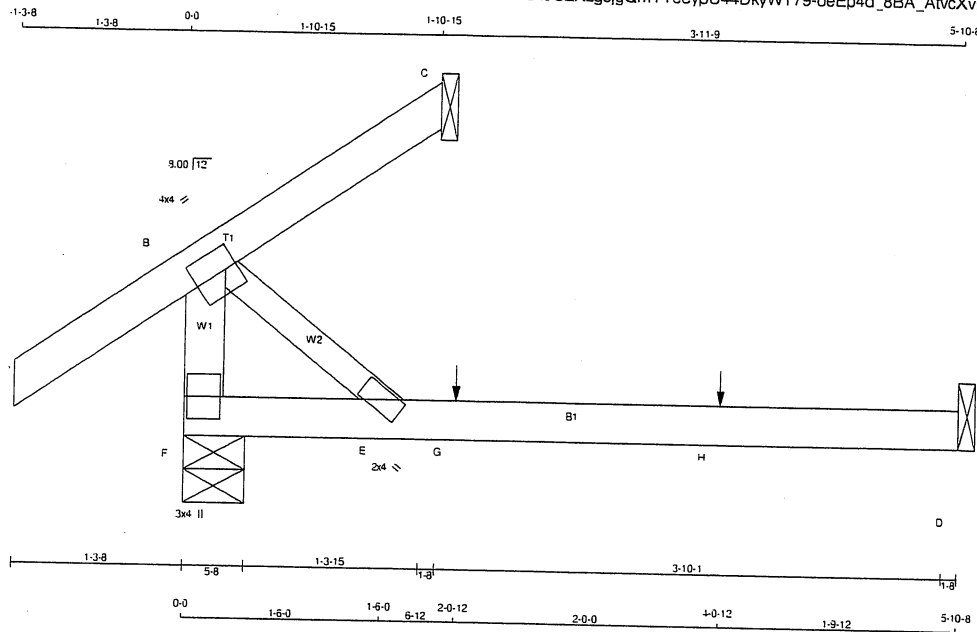
JSI GRIP = 0.16 (B) (INPUT = 0.90)  
 JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2021995

JOB NAME 413376	TRUSS NAME C41	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 20:49:09 2020 Page 1  
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Scale: 1/16.5

TOTAL WEIGHT = 14 lb (M)

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF
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-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	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 VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG IN-SX	REQRD BRG IN-SX
F	313	0	313	0	5-8	5-8
C	42	0	42	0	1-8	1-8
D	54	0	61	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	222	144.0	0.0	0.0	0.0	77.0	0.0
C	29	24.0	0.0	0.0	0.0	6.0	0.0
D	43	0.0	0.0	0.0	0.0	43.0	0.0

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

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

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

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

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX	MEMB. FORCE (LBS)	MAX	MAX FACTORED FORCE (LBS)	MAX
FR-TO					FR-TO			
F-B	-259	0	0.0	0.0	0.03 (1)	7.81	B-E	0 0 0.00 (1)
A-B	0	35	-91.8	-91.8	0.13 (1)	10.00		
B-C	-25	0	-91.8	-91.8	0.12 (1)	6.25		
F-E	0	0	-18.5	-18.5	0.14 (4)	10.00		
E-G	0	0	-18.5	-18.5	0.19 (4)	10.00		
G-H	0	0	-18.5	-18.5	0.19 (4)	10.00		
H-D	0	0	-18.5	-18.5	0.19 (4)	10.00		

**SPECIFIED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-12	1	1	---	BACK	VERT	TOTAL	---	C1
H	4-0-12	1	1	---	BACK	VERT	TOTAL	---	C1

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

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 25.6 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.4 PSF  
TOTAL LOAD = 39.0 PSF

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

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

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

**DESIGN ASSUMPTIONS**  
- OVERHANG NOT TO BE ALTERED OR CUT OFF.  
(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TG=0.13/1.00 (A-B:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.09/1.00 (B-C:1)  
DOL LUMBER=0.98 NAIL=0.98 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**

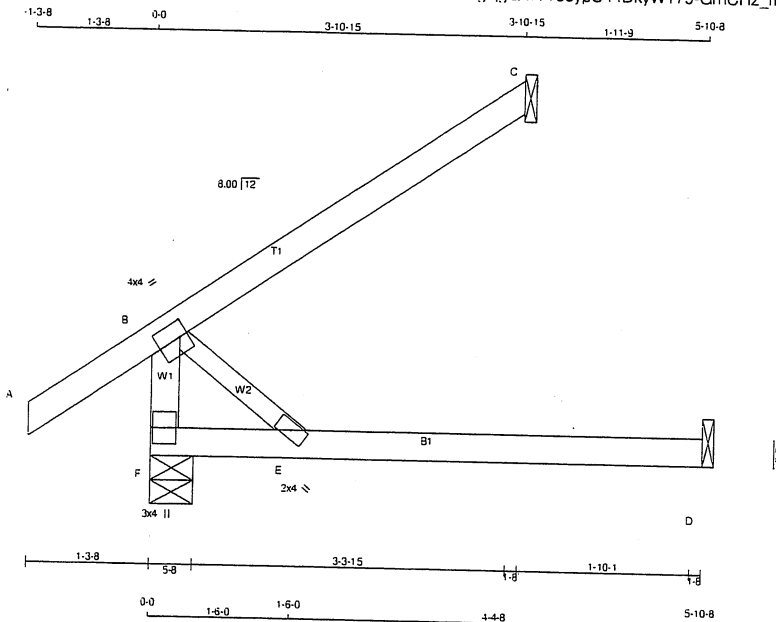
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches  
PLATE ROTATION TOL. = 5.0 Deg.  
JSI GRIP = 0.16 (B) (INPUT = 0.90)  
JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2022031

JOB NAME 413376	TRUSS NAME C42	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington			TRUSS DESC.		



Scale - 1/2" = 1'

TOTAL WEIGHT = 17 lb (M)

**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER No.2	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-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	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 VERT	FACTORED GROSS REACTION HORZ	INPUT BRG DOWN	REORD BRG UPLIFT	IN-SX IN-SX
F	360	0	360	0	5-8
C	179	0	179	0	1-8
D	54	0	61	0	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	254	170.0	0.0	0.0	0.0	83.0	0.0
C	124	100.0	0.0	0.0	0.0	23.0	0.0
D	43	0.0	0.0	0.0	0.0	43.0	0.0

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

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

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

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

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX (LC)	
F-B	-305	0	0.0	0.03 (1)	7.81	B-E	0	0.00 (1)
A-B	0	35	-91.8	0.12 (1)	10.00			
B-C	0	0	-91.8	0.24 (1)	10.00			
F-E	0	0	-18.5	0.14 (4)	10.00			
E-D	0	0	-18.5	0.19 (4)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

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

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

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

- THIS DESIGN COMPLIES WITH:
- PART 9 OF BC8C 2018, ABC 2019
  - PART 9 OF OBC 2012 (2019 AMENDMENT)
  - CSA 086-14
  - TPIC 2014

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

ALLOWABLE DEFL.(LL)	= L/360 (0.20')
CALCULATED VERT. DEFL.(LL)	= L/999 (0.00')
ALLOWABLE DEFL.(TL)	= L/360 (0.20')
CALCULATED VERT. DEFL.(TL)	= L/999 (0.05')

CSI: TC=0.24(1.00 (B-C:1), BC=0.19(1.00 (D-E:4), WB=0.00(1.00 (E:1), SSI=0.12(1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

**NAIL VALUES**

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

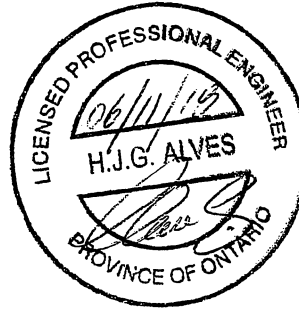
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.19 (B) (INPUT = 0.90)  
 JSI METAL = 0.06 (B) (INPUT = 1.00)



Structural component only  
 DWG# T-2022032



## 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-1900213

Feb 09, 2018

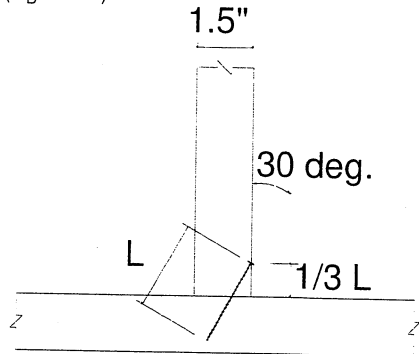
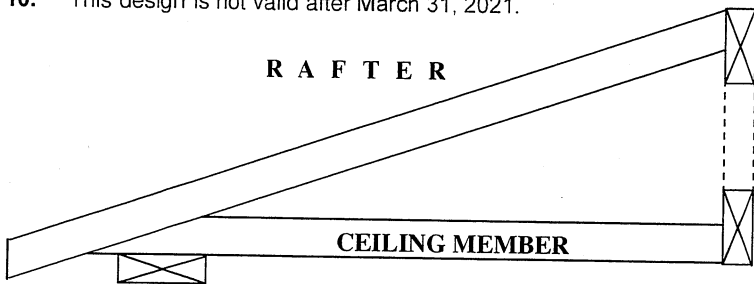
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

**NOTES:**

- Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
- Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-14, section 12.9.4.1.
- For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
- Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
- Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
- Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
- For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 ( $K_D$  factor).
- Lumber must be dry (< 19% moisture content) at the time of nail installation.
- Nail values in this table comply with CSA O86-14, section 12.9.4
- This design is not valid after March 31, 2021.



**TOE-NAIL INSTALLATION**

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	( 3.5" nail )		( 3" and 3.25" nail )	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4

**MiTek**® MiTek Canada Inc  
 100 Industrial Rd.  
 Bradford, Ontario L3Z 3G7

December 2, 2019

PEO  
 Certificate No. 10889485





# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

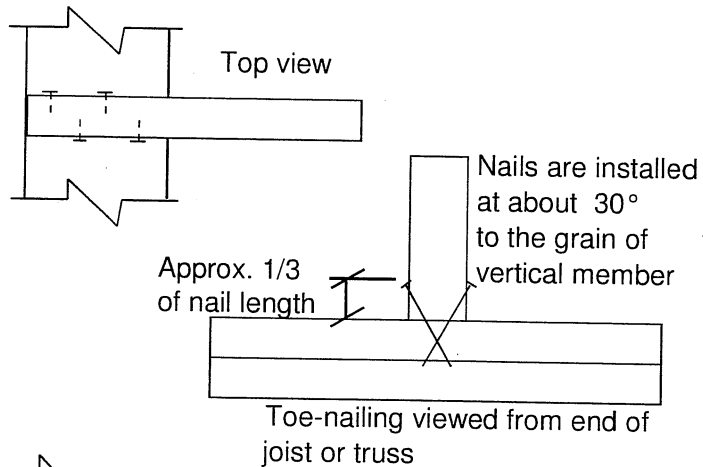
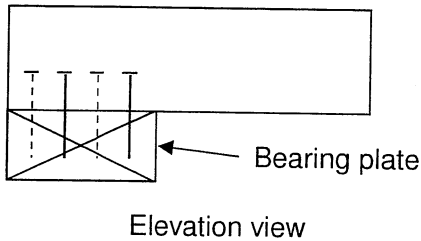
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

**Note:** If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

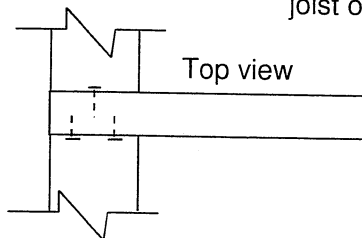
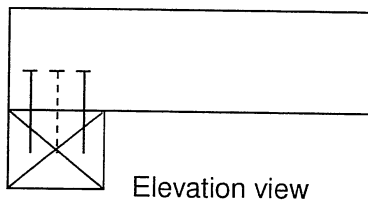
**NOTES:**

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities:  $G = 0.42$ (SPF),  $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content ) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

**Toe-nailing on 2x6 Bearing Plate**



**Toe-nailing on 2x4 Bearing Plate**



PEO  
Certificate No. 10889485



**MiTek**® MiTek Canada Inc  
100 Industrial Rd.  
Bradford, Ontario L3Z 3G7

# HUS/LJS – Double Shear Joist Hangers



All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**Material:** See table

**Finish:** G90 galvanized

**Design:**

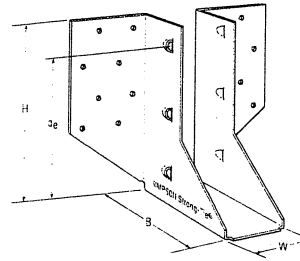
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

**Installation:**

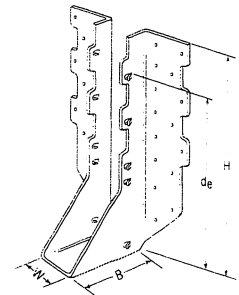
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

**Options:**

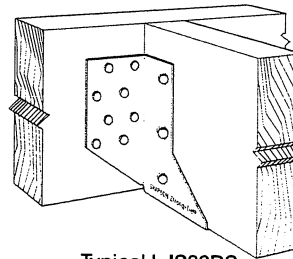
- See current catalogue for options



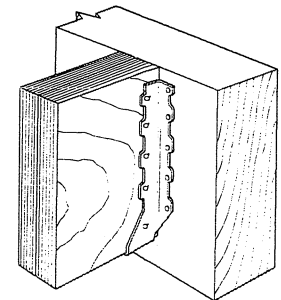
LJS26DS



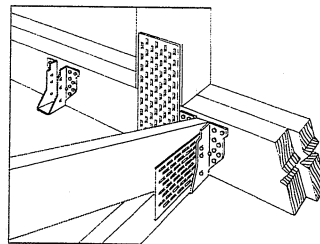
HUS210  
(HUS26, HUS28, similar)



Typical LJS26DS Installation



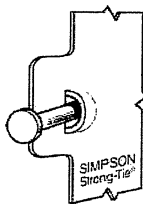
Typical HUS Installation



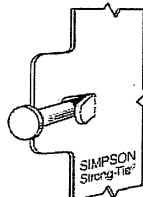
Typical HUS Installation  
(Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d <sub>e</sub>	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K <sub>0</sub> =1.15)	Normal (K <sub>0</sub> =1.00)	Uplift (K <sub>0</sub> =1.15)	Normal (K <sub>0</sub> =1.00)
LJS26DS	18	1¾	5	3½	4¾	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅝	3	3⅞	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7¾	3	6¾	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9¾	3	7¾	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅞	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

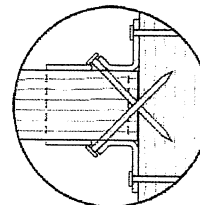
1. d<sub>e</sub> is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).  
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHUS20 3/20 exp. 6/22

(800) 999-5099  
strongtie.com

# LUS – Double Shear Joist Hangers



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:**

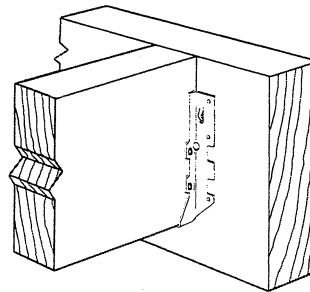
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

**Installation:**

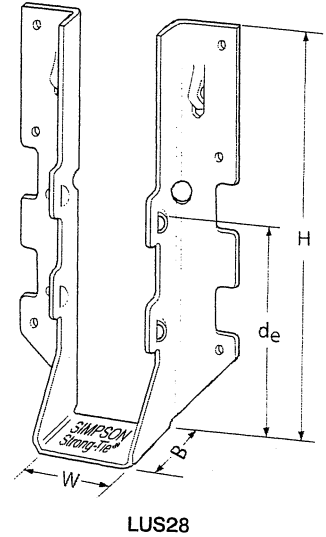
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

**Options:**

- These hangers cannot be modified

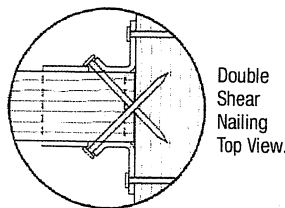
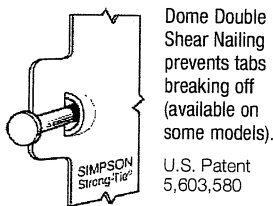


Typical LUS Installation



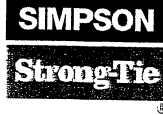
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d <sub>e</sub> <sup>1</sup>	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K <sub>D</sub> =1.15)	Normal (K <sub>D</sub> =1.00)	Uplift (K <sub>D</sub> =1.15)	Normal (K <sub>D</sub> =1.00)
LUS24	18	1 9/16	3 1/8	1 3/4	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 9/16	4 3/4	1 3/4	3 5/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 5/8	4 3/8	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 9/16	6 3/8	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 5/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 9/16	7 13/16	1 3/4	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 5/8	8 3/16	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

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



This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see [strongtie.com](http://strongtie.com).

# HGUS – Double Shear Joist Hangers



All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**Material:** 12 gauge

**Finish:** G90 galvanized

**Design:**

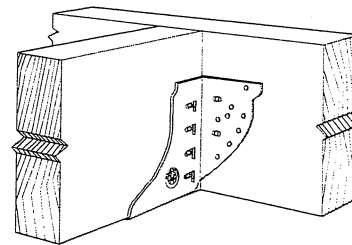
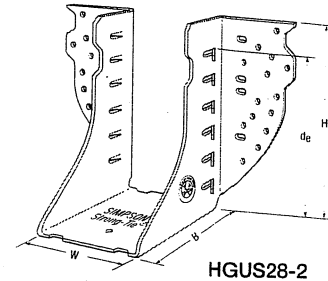
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

**Installation:**

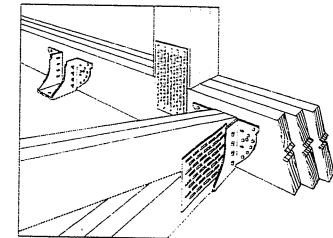
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

**Options:**

- See current catalogue for options



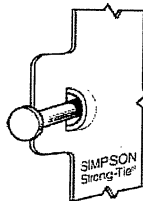
Typical HGUS Installation



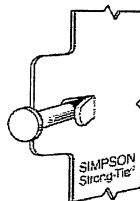
Typical HGUS Installation  
(Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d <sub>e</sub> <sup>1</sup>	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K <sub>v</sub> =1.15)	Normal (K <sub>v</sub> =1.00)	Uplift (K <sub>v</sub> =1.15)	Normal (K <sub>v</sub> =1.00)
HGUS26	12	1 5/8	5 3/8	5	4 5/32	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 5/16	5 7/16	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 15/16	5 1/2	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 3/16	5 7/16	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 5/8	7 1/8	5	6 1/8	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 5/16	7 7/16	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 15/16	7 1/4	4	6 3/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 3/16	7 3/16	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1 5/8	9 1/8	5	7 7/8	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 5/16	9 3/16	4	8 1/8	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 15/16	9 1/4	4	8 3/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 3/16	9 3/16	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 3/16	10 3/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 3/16	12 3/8	4	11 1/8	(66) 16d	(22) 16d	10130	16400	7195	11645

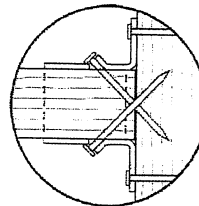
1. d<sub>e</sub> is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).  
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see [strongtie.com](http://strongtie.com).

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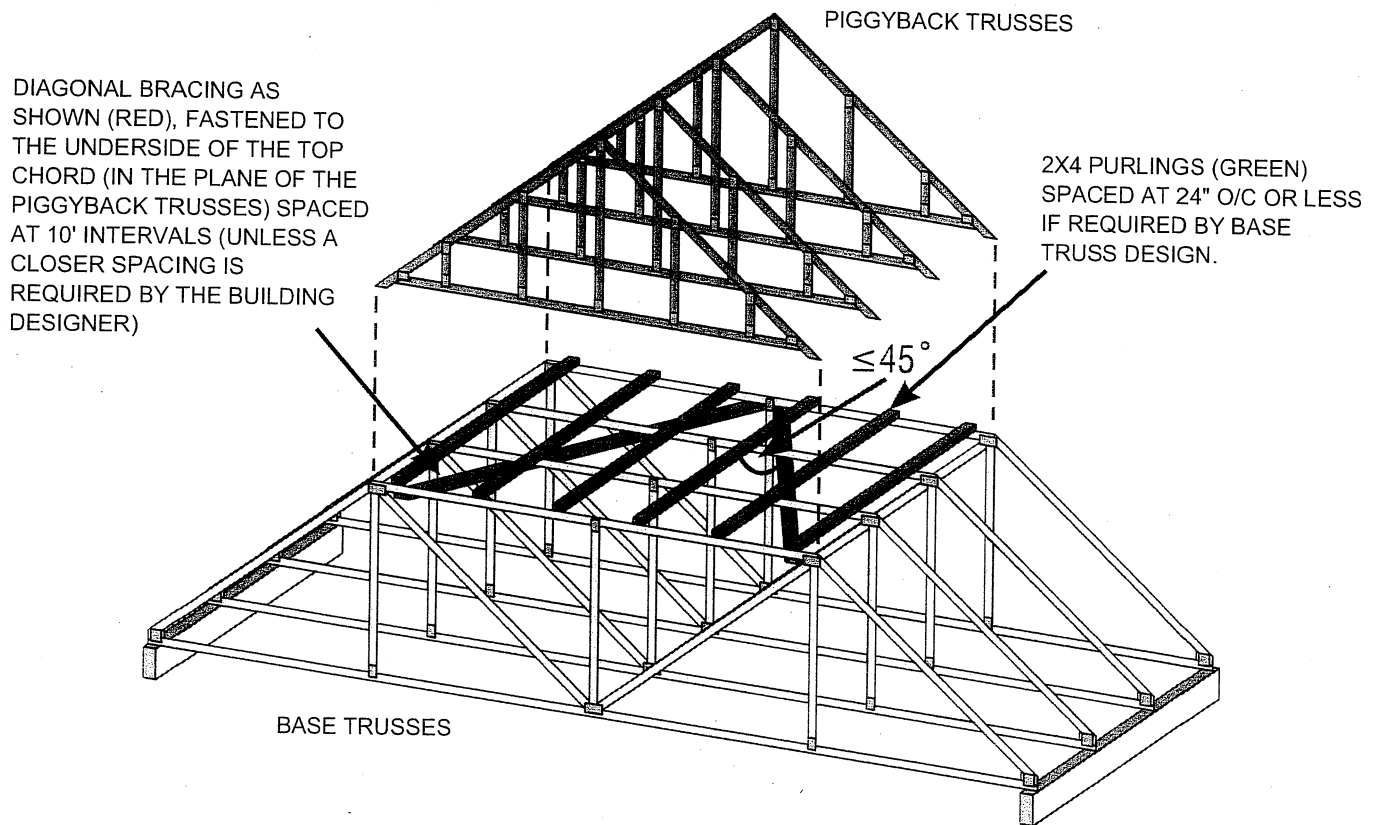


Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

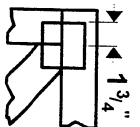
SKETCH FROM BCSI-CANADA 2013

Disclaimer:

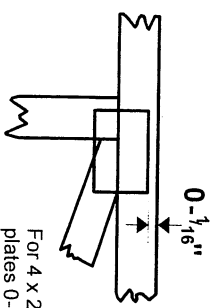
OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

# Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-<sup>1</sup>/<sub>16</sub>" from outside edge of truss.



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

\* Plate location details available in MITek 20120 software or upon request.

## PLATE SIZE

4 X 4

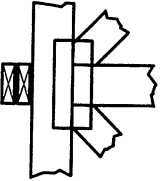
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

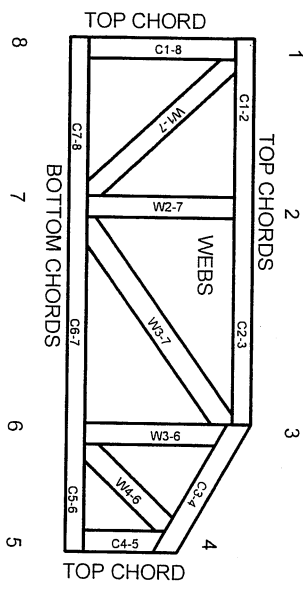
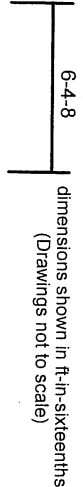


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

- ANSI/TTP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-89: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

- ESR-1311, ESR-1352, ESR1988
- ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TTP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.