

Job Track: **51012**

Plan Log: **202055**

Layout ID: **406778**

Builder / Location:

ROYAL PINE HOMES / RICHMOND HILL

Project: **CENTREFIELD**

Date: **2020-10-14**

Sales: **Mario DiCano**

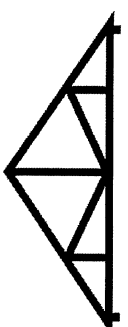
Designer: **LC**

Model / Elevation:














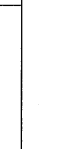
38-09 / A Bloomington

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DELIVERY SHIPLIST	
 <p>TAMARACK ROOF TRUSSES INC. <small>— ALPA LUMBER GROUP —</small></p>	<p>Lumber Yard: TAMARACK LUMBER</p> <p>Builder: ROYAL PINE HOMES</p> <p>Project: CENTREFIELD</p> <p>Location: RICHMOND HILL</p> <p>Model: 38-09</p> <p>Lot #: A</p> <p>Elevation: A</p>
<p>Job Track: 51012</p> <p>PlanLog: 202055</p> <p>Layout ID: 406778</p> <p>Ref # 11780</p> <p>Page: 1 of 2</p> <p>Date: 10-14-2020</p> <p>Designer: Leo Chen</p> <p>Sales Rep: Mario DiCano</p>	

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	1 2-ply	T1Z4 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.08 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.48 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	256 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.07 168.00		
	5	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	658.86 410.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	268.06 168.67		
	1	T8 Common	8 /12	12-00-00	5-04-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	53 31.83		
	1 2-ply	T11Z5 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T11Z6 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1	T26 Hip Girder	8 /12	12-00-00	5-03-13	2 x 4 2 x 6	1-03-08	1-04-13 1-04-13	55.99 33.83		
	1	T27 Common	8 /12	7-06-00	3-10-13	2 x 4		1-04-13 1-04-13	29.78 19.33		
	3	T27S Scissor	8 /12 6 /12	7-06-00	3-10-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	102.05 72.00		

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CITY OF RICHMOND HILL
BUILDING DIVISION
03/10/2021
P: Danielle Devitt

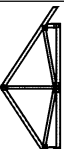



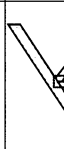


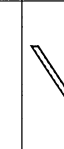


TAMARACK
ROOF TRUSSES INC.
— ALPHA LUMBER GROUP —

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: A	Job Track: 51012 PlanLog: 202055 Layout ID: 406778 Ref #: 11780 Page: 2 of 2 Date: 10-14-2020 Designer: Leo Chen Sales Rep: Mario DiCano
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Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	T28 Common	8 /12	9-08-00	4-07-08	2 x 4	1-03-08	1-04-13 1-04-13	78.59 50.00		
	2	T28S Scissor	8 /12 6 /12	9-08-00	4-07-08	2 x 4	1-03-08	1-04-13 1-04-13	80.3 54.00		
	3	PB1 Piggyback	8 /12	5-10-11	1-11-09	2 x 4			39.28 26.00		
	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	C21 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 1-01	1-04-13 2-08-02	9.34 6.33		
	1	C22 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		
	1	C23 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	C24 Jack-Open	8 /12	5-10-08	4-00-02	2 x 4	1-03-08	1-04-13 5-03-13	16.5 10.33		

TOTAL # TRUSS= 58

TOTAL BFT OF ALL TRUSSES= 2132.67

BFT.

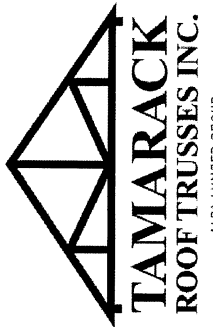
TOTAL WEIGHT OF ALL TRSSES 3379.82 LBS

HARDWARE










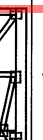
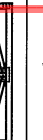



QTY	TYPE	MODEL	LENGTH
2	Hardware	LJS26DS	
7	Hardware	LUS24	
3	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 12

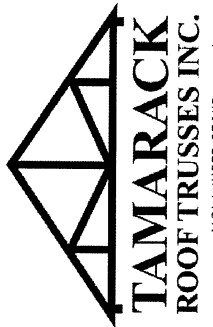


DELIVERY SHIPLIST			
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: B </td> <td style="width: 50%; vertical-align: top;"> Job Track: 51012 PlanLog: 202055 Layout ID: 406777 Ref #: 11780 Page: 1 of 3 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano </td> </tr> </table>	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: B	Job Track: 51012 PlanLog: 202055 Layout ID: 406777 Ref #: 11780 Page: 1 of 3 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano
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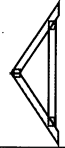

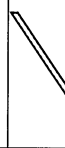





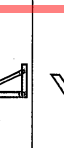



Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	1 2-ply	T1Z5 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.08 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.48 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	256 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.07 168.00		
	5	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	658.86 410.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	268.06 168.67		
	1 2-ply	T11Z7 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T11Z8 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1	T27 Common	8 /12	7-06-00	3-10-13	2 x 4		1-04-13 1-04-13	29.78 19.33		
	1	T2Z2 Common Girder	8 /12	7-06-00	3-10-13	2 x 4	1-03-08	1-04-13 1-04-13	31.55 20.67		
	1	T31 Hip	8 /12	12-00-00	6-02-13	2 x 4 2 x 6	1-03-08	2-10-13 2-10-13	67.02 42.33		
	1	T31Z Hip Girder	8 /12	12-00-00	6-02-13	2 x 4 2 x 6	1-03-08	2-10-13 2-10-13	67.02 42.33		

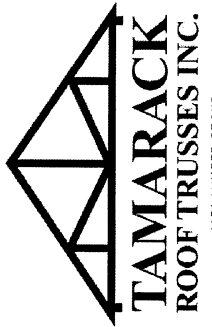
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BUILDING DIVISION
08/10/2021
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Per danielle.devitt

DELIVERY SHIPLIST			
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: B </td> <td style="width: 50%; border: none; vertical-align: top;"> Job Track: 51012 PlanLog: 202055 Layout ID: 406777 Ref # 11780 Page: 2 of 3 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano </td> </tr> </table>	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: B	Job Track: 51012 PlanLog: 202055 Layout ID: 406777 Ref # 11780 Page: 2 of 3 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano
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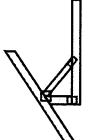
Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T32 Hip	8 /12	12-00-00	4-10-13	2 x 4 2 x 6	1-03-08	2-10-13 2-10-13	62.2 39.17		
	1	T33 Common Girder	8 /12	10-00-00	4-08-13	2 x 4	1-03-08	1-04-13 1-04-13	41.9 28.17		
	3	PB1 Piggyback	8 /12	5-10-11	1-11-09	2 x 4			39.28 26.00		
	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	J31 Jack-Open	8 /12	5-00-00	4-08-13	2 x 4	1-03-08	1-04-13 4-08-13	16.99 10.33		
	1	J32 Jack-Open	8 /12	3-09-00	3-10-13	2 x 4	1-03-08	1-04-13 3-10-13	13.85 9.00		
	4	C21 Jack-Open	8 /12	1-10-07	2-08-02	2 x 4	1-04-00 1-01	1-05-02 2-08-02	37.22 25.33		
	1	C21S Jack-Open	8 /12	1-10-07	4-02-02	2 x 4	1-04-00 1-01	2-11-02 4-02-02	11.97 8.17		
	2	C22 Jack-Open	8 /12	1-11-08	4-00-02	2 x 4	1-04-00 1-10-15	1-05-02 2-08-13	24.09 15.33		
	1	C22S Jack-Open	8 /12	1-11-08	5-06-02	2 x 4	1-04-00 1-10-15	2-11-02 4-02-13	14.72 9.50		
	2	C31 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 3-01-01	1-04-13 2-08-02	25.51 16.67		
	1	C31S Jack-Open	8 /12	1-10-07	4-02-02	2 x 4	1-04-00 3-01-01	2-11-02 4-02-02	15.4 10.17		
	2	C32 Jack-Open	8 /12	3-10-15	4-00-02	2 x 4	1-03-08 1-01-01	1-04-13 4-00-02	31 19.33		
	1	C32S Jack-Open	8 /12	3-10-07	5-06-02	2 x 4	1-04-00 1-01-01	2-11-02 5-06-02	18.14 11.50		

CITY OF RICHMOND HILL
BUILDING DIVISION
08/20/2021
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Per: danielle.devitt

DELIVERY SHIPLIST	
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	<p>Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: B Elevation: B</p>
<p>Job Track: 51012 PlanLog: 202055 Layout ID: 406777 Ref #: 11780 Page: 3 of 3 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano</p>	

Roof Trusses

PROFILE	QTY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	C33 Jack-Open	8/12	1-10-15	2-08-02	2 x 4	1-03-08 1-10-01	1-04-13 2-08-02	22.66 15.33		

TOTAL # TRUSS= 68

TOTAL BFT OF ALL TRUSSES= 2181.01

BFT.


TOTAL WEIGHT OF ALL TRSSES 3459.46 LBS

HARDWARE










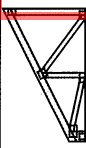
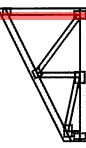

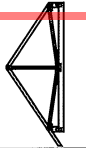
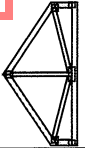
QTY	TYPE	MODEL	LENGTH
4	Hardware	LJS26DS	
2	Hardware	LUS24	
3	Hardware	LUS26-2	

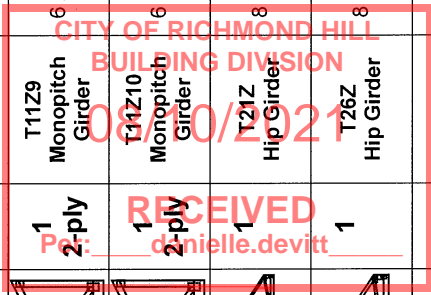
TOTAL NUMBER OF ITEMS= 9


<p>CITY OF RICHMOND HILL BUILDING DIVISION</p> <p>08/10/2021</p> <p>RECEIVED</p> <p>Per: <u>danielle.devitt</u></p>

DELIVERY SHIPLIST			
 <p>TAMARACK ROOF TRUSSES INC. <small>— ALPHA LUMBER GROUP —</small></p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: C </td> <td style="width: 50%; vertical-align: top;"> Job Track: 51012 PlanLog: 202055 Layout ID: 413405 Ref #: 11780 Page: 1 of 2 Date: 10-14-2020 Designer: Leo Chen Sales Rep: Mario DiCano </td> </tr> </table>	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-09 Lot #: Elevation: C	Job Track: 51012 PlanLog: 202055 Layout ID: 413405 Ref #: 11780 Page: 1 of 2 Date: 10-14-2020 Designer: Leo Chen Sales Rep: Mario DiCano
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Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	1 2-ply	T1Z6 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	266.76 164.67		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.08 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.48 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	256 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.07 168.00		
	5	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	658.86 410.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	288.06 168.67		
	1	T8 Common	8 /12	12-00-00	5-04-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	53 31.83		
	1 2-ply	T11Z9 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T14Z10 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1	T21Z Hip Girder	8 /12	18-06-00	4-01-04	2 x 4 2 x 6	1-03-08	1-04-13 1-04-13	86.7 55.00		
	1	T26Z Hip Girder	8 /12	12-00-00	5-03-13	2 x 4 2 x 6	1-03-08	1-04-13 1-04-13	55.99 33.83		
	1	T27 Common	8 /12	7-06-00	3-10-13	2 x 4		1-04-13 1-04-13	29.78 19.33		





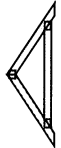

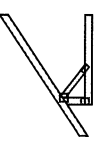
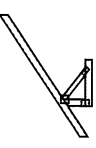
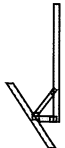
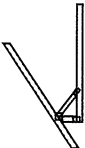
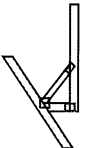
TAMARACK
 ROOF TRUSSES INC.
— ALPHA LUMBER GROUP —

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
Builder: ROYAL PINE HOMES
Project: CENTREFIELD
Location: RICHMOND HILL
Model: 38-09
Lot #:
Elevation: C

Job Track: 51012
PlanLog: 202055
Layout ID: 413405
Ref # 11780
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 LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T27Z Common Girder	8 /12	7-06-00	3-10-13	2 x 4	1-03-08	1-04-13 1-04-13	31.55 20.67		
	3	PB1 Piggyback	8 /12	5-10-11	1-11-09	2 x 4			39.28 26.00		
	23	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	386.27 245.33		
	1	J32 Jack-Open	8 /12	3-09-00	3-10-13	2 x 4	1-03-08	1-04-13 3-10-13	13.86 9.00		
	3	C21 Jack-Open	8 /12	2-00-00	2-08-02	2 x 4	1-03-08	1-04-13 2-08-13	28.02 19.00		
	1	C22 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		
	1	C23 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	C24 Jack-Open	8 /12	5-10-08	4-00-02	2 x 4	1-03-08	1-04-13 5-03-13	16.5 10.33		
	2	C33 Jack-Open	8 /12	1-10-15	2-08-02	2 x 4	1-03-08 1-10-01	1-04-13 2-08-02	22.67 15.33		

TOTAL # TRUSS= 63


TOTAL BFT OF ALL TRUSSES= 2122.67

TOTAL WEIGHT OF ALL TRSSES 3376.31 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	HGUS26-2	
3	Hardware	LUS26DS	
4	Hardware	LUS24	
1	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 10

CITY OF RICHMOND HILL
 BUILDING DIVISION
 08/10/2021
 Per  danielle.devlin

Tamarack Roof Truss, Burlington

PLATES (table is in inches)

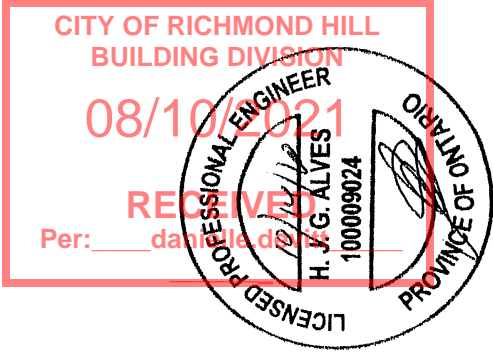
JT TYPE	W	LEN	Y	X
B TMWV-p	5.0	6.0	1.50	3.00
C TTWW-m	5.0	8.0	2.00	2.75
D TMWV-i	4.0	4.0		
E TS-i	3.0	6.0		
F TMWV-w	2.0	4.0		
G TMWV-i	4.0	4.0		
H TTWW-m	5.0	8.0	2.00	2.75
I TMWV-p	5.0	6.0	1.50	3.00
J K BMV1+P	3.0	6.0		
L M, P, Q				
L BMWV-i	5.0	6.0		
N BS-i	5.0	6.0		
O BMWVW-i	5.0	8.0		
R BMV1+P	3.0	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	-169	-169		FRONT	VERT	SNOW		C1
E	11-0-12	-76	-76		FRONT	VERT	TOTAL		C1
F	14-6-0	-76	-76		FRONT	VERT	TOTAL		C1
H	24-11-5	-40	-40		FRONT	VERT	DEAD		C1
H	24-11-5	-169	-169		FRONT	VERT	SNOW		C1
N	15-11-4	-21	-21		FRONT	VERT	TOTAL		C1
O	14-6-0	-21	-21		FRONT	VERT	TOTAL		C1
S	50-12	-76	-76		FRONT	VERT	TOTAL		C1
T	7-0-12	-76	-76		FRONT	VERT	TOTAL		C1
U	9-0-12	-76	-76		FRONT	VERT	TOTAL		C1
V	13-0-12	-76	-76		FRONT	VERT	TOTAL		C1
W	15-11-4	-76	-76		FRONT	VERT	TOTAL		C1
X	17-11-4	-76	-76		FRONT	VERT	TOTAL		C1
Y	19-11-4	-76	-76		FRONT	VERT	TOTAL		C1
Z	21-11-4	-76	-76		FRONT	VERT	TOTAL		C1
AA	23-11-4	-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	17-11-4	-21	-21		FRONT	VERT	TOTAL		C1
AJ	19-11-4	-21	-21		FRONT	VERT	TOTAL		C1
AK	21-11-4	-21	-21		FRONT	VERT	TOTAL		C1
AL	23-11-4	-21	-21		FRONT	VERT	TOTAL		C1
AM	25-11-4	-21	-21		FRONT	VERT	TOTAL		C1
AN	27-11-4	-21	-21		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	T1Z4	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						

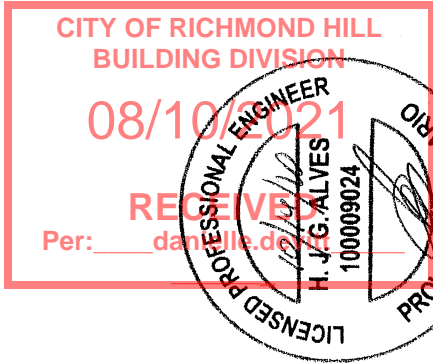
Version 8.330 S May 6 2020 Mittek Industries, Inc. Tue Oct 13 21:27:15 2020 Page 2
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PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	5.0	6.0	1.50	3.00
C	TTWW-m	6.0	9.0	1.75	3.75
D	TMVW-l	4.0	4.0		
E	TS-l	3.0	6.0		
F	TMVW-w	2.0	4.0		
G	TMVW-l	4.0	4.0		
H	TTWW-m	6.0	9.0	1.75	3.75
I	TMVW-p	5.0	6.0	1.50	3.00
K	BMV1+p	3.0	6.0		
L	BMVW-l	5.0	6.0		
M	BMVW-l	5.0	6.0	2.50	2.50
N	BS-l	5.0	8.0		
O	BMVWVW-l	5.0	8.0		
P	BMVW-l	5.0	6.0	2.50	2.50
Q	BMVW-l	5.0	6.0		
R	BMV1+p	3.0	6.0		

CONNECTION REQUIREMENTS

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



Structural component only
 DWG# T-2022077 1/2

JOB NAME

406777

TRUSS NAME

T1Z5

QUANTITY

1

PLY

2

JOB DESC.

ROYAL PINE HOMES

DRWG NO.

Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 21:32:49 2020 Page 2

ID:a5XeHvInRA7TositrhQwbfrhWj?~4hXhVhZAG4QBxv4OhhRWw?L29SGa5OxxXhEldYIEY

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TWVW-p	MT20	5.0	6.0	1.50 3.00
C	TTWVW-m	MT20	6.0	9.0	1.75 3.50
D	TTWVW-l	MT20	4.0	4.0	
E	TS-l	MT20	3.0	6.0	
F	TWVW-w	MT20	2.0	4.0	
G	TTWVW-l	MT20	4.0	4.0	
H	TTWVW-m	MT20	6.0	9.0	1.75 3.50
I	TTWVW-p	MT20	5.0	6.0	1.50 3.00
K	BMV1+p	MT20	3.0	6.0	
L	BMWVW-l	MT20	5.0	6.0	
M	BMWVW-l	MT20	5.0	6.0	2.50 2.25
N	BS-l	MT20	5.0	8.0	
O	BMWVWVW-l	MT20	5.0	8.0	2.50 2.25
P	BMWVW-l	MT20	5.0	6.0	
Q	BMWVW-l	MT20	5.0	6.0	
R	BMV1+p	MT20	3.0	6.0	

CONNECTION REQUIREMENTS

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

CITY OF RICHMOND HILL

BUILDING DIVISION

08/10/2021

RECEIVED

Per: danielle.g...

LICENSED PROFESSIONAL ENGINEER

H. J.G. ALVES

100009024

PROVINCE OF ONTARIO

Structural component only

DWG# T-2022094

CITY OF RICHMOND HILL
BUILDING DIVISION
08/10/2021
Per: danielle.ogryzlo

RECEIVED
18/10/2021
H. J.G. ALVES
100009024

PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

Structural component only
 DWG# T-2022094 *mm*

Tamarack Roof Truss Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:40:22 2020 Page 1

ID: a5XehVhRA7TosirhQwbylvJ-JrPYTOAJUL892928OKJqNRGVH81CYnc6WW69N7T7

1:3:8 0:0 4:0:11 4:0:11 5:3:5 9:3:5 10:2:8 10:9 4:3:8 14:5:0 4:3:8 4:3:8 18:9:8 19:8:1 10:9 24:11:5 4:0:11 29:0:0 1:3:8 30:3:8

Scale: 1:49.3



DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:	LOAD(P/F)	
CHORDS #ROWS SURFACE SPACING (IN)		
TOP CHORDS : 0.12X37" SPIRAL NAILS		
<p>BEARING MATERIAL TO BE SYP NO.2 OR BETTER AT JOINT(S) R, K</p> <p>BRACING</p> <p>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.83 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.</p> <p>ALL PITCH BREAKS AND PERMETER CORNER JOINTS MUST BE Laterally RESTRAINED.</p> <p>*** NON STANDARD GIRDER *** ADDITIONAL USER-DEFINED LOADS APPLIED TO ALL</p>		
SPACING = 24.0	IN/C	
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12		

	T	U	H	J	H	J	R	B	K	R	Q	P
-7922	0	-91.8	-91.8	0.89	11	2.83	C	P	0	3516		
-7922	0	-91.8	-91.8	0.89	11	2.83	C	P	0	0.42 (1)		
-4736	0	-91.8	-91.8	0.25	11	4.22	M	H	0	112		
0	35	-91.8	-91.8	0.07	11	10.00			0	4680		
2727	0	0.0	0.0	0.10	11	7.81						
-3992	0	0.0	0.0	0.14	11	7.18						
0	2618	-18.5	-18.5	0.04	41	10.00						
0	2618	-18.5	-18.5	0.21	11	10.00						

ALLOWABLE DEF. (LL)= L/360 (0.97")

CALCULATED DEF. DEF. (LL)= L/999 (0.177")

ALLOWABLE DEF. (TL)= L/360 (0.97")

CALCULATED DEF. DEF. (TL)= L/999 (0.327")

CSI: TC= 0.891/100 (G-H:1), BC= 0.60/100 (M-Q:1),

WB= 0.581/100 (H-M:1), SS= 0.221/100 (G-H:1)

COL. JUMBER= 2X6 S4S, 1000 LBS/FT

08/

R

SPECIFIED CONCENTRATED LOADS (LBS)				FACE				TYPE		HEEL		CONN.	
JT	LOC.	LCT	MAX+	MAX+	FRONT	DIR.							
H	24-11-3	-40	-40		FRONT	VERT		DEAD		----		C1	
H	24-11-5	-171	-171		FRONT	VERT		SNOW		----		C1	
M	18-7-8	-1705	-1705		BACK	VERT		TOTAL		----		C1	
S	19-11-4	-76	-76		BACK	VERT		TOTAL		----		C1	
T	21-11-4	-76	-76		BACK	VERT		TOTAL		----		C1	
U	23-11-4	-76	-76		BACK	VERT		TOTAL		----		C1	
V	19-11-4	-21	-21		BACK	VERT		TOTAL		----		C1	
W	21-11-4	-21	-21		BACK	VERT		TOTAL		----		C1	
X	23-11-4	-21	-21		BACK	VERT		TOTAL		----		C1	
Y	25-11-4	-21	-21		BACK	VERT		TOTAL		----		C1	
Z	27-11-4	-21	-21		BACK	VERT		TOTAL		----		C1	

Structural component only
DWG# T-2022102 112

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413405	T1Z6	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						

Version 8.330 S May 6 2020 MtTruss Industries, Inc. Tue Oct 13 21:40:22 2020 Page 2

ID: a5XeHvHRA7TosirhQwbnvUJ7-JFY1OAIUL892928QKJgNHRGvY81CvN66WW69ivITZ

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	
C	TTWV-m	MT20	6.0	9.0	1.75	3.50
D	TMVW-t	MT20	4.0	6.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-w	MT20	2.0	4.0		
G	TMVW-t	MT20	4.0	6.0		
H	TTWV-m	MT20	6.0	9.0	1.75	3.50
I	TMVW-p	MT20	5.0	8.0	Edge	
K	BMV1-p	MT20	3.0	6.0		
L	BMVW-t	MT20	5.0	6.0	2.50	2.50
M	BMVW-t	MT20	6.0	9.0	4.50	2.25
N	BS-t	MT20	5.0	6.0		
O	BMVW-w-t	MT20	5.0	8.0		
P	BMVW-t	MT20	6.0	9.0	4.50	2.25
Q	BMVW-t	MT20	5.0	6.0	2.50	2.50
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.

CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

RECEIVED

Per: danielle de...

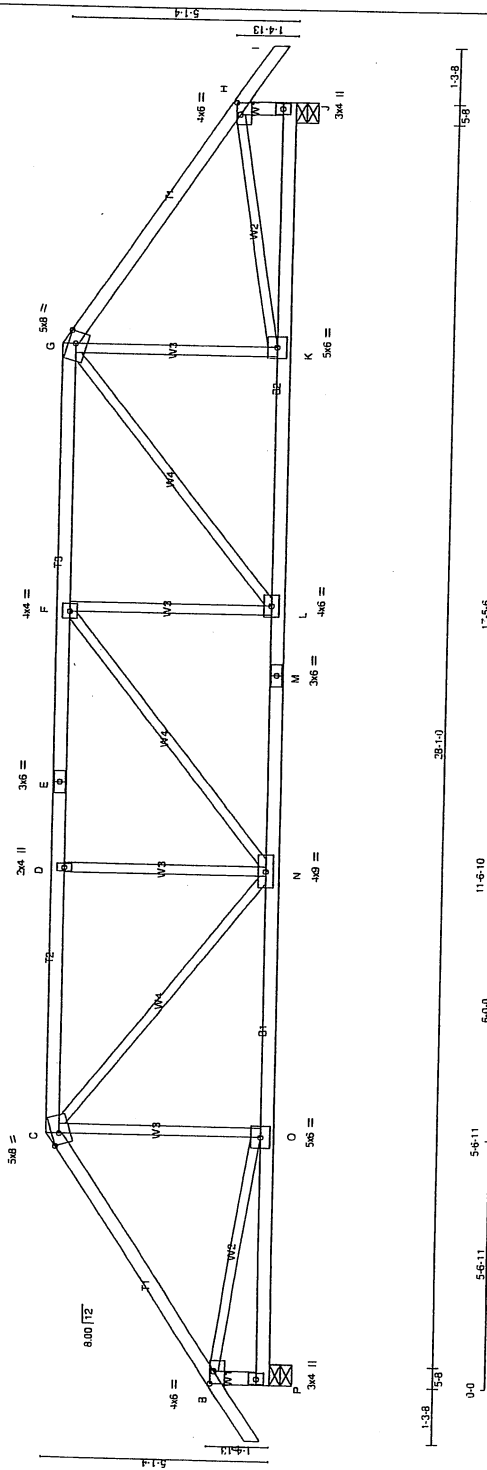
LICENSED PROFESSIONAL ENGINEER

H. J. G. ALVES

100009024

PROVINCE OF ONTARIO

JOB NAME 406773	TRUSS NAME T2	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS NO.
Tamarack Roof Truss, Burlington					
Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:06:26 2020 Page 1					
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1-3-8 0-0	5-6-11	5-6-11	5-6-11	23-5-6	29-0-0 30-3-8
1-3-8	5-6-11	5-6-11	5-6-11	5-6-11	1-3-8
Scale = 1:48.2					



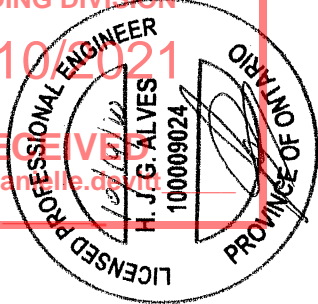
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N.L.G.A. RULES										TOTAL WEIGHT = 2 X 116 = 232 lb									
LUMBER										[M]									
CHORDS																			
SIZE																			
DRY																			
No.2																			
SPF																			
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	T11Z5	1	2	TRUSS DESC.		

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:27:16 2020 Page 2
ID:saJ2i zSJJDfRSpKVQVvYle2E-KdwP3eHb7qIMv4OFONWWhZKwvU2a1WMD7WwRvTK9

PLATES (table is in inches)

PLATE	W	LEN	Y	X
D BMWV1+p MT20	4.0	6.0		
E BMWV1 MT20	5.0	6.0		
F BMW1+p MT20	3.0	6.0		



Structural component only
DWG# T-2022078 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	T11Z6	1	2	TRUSS DESC.		

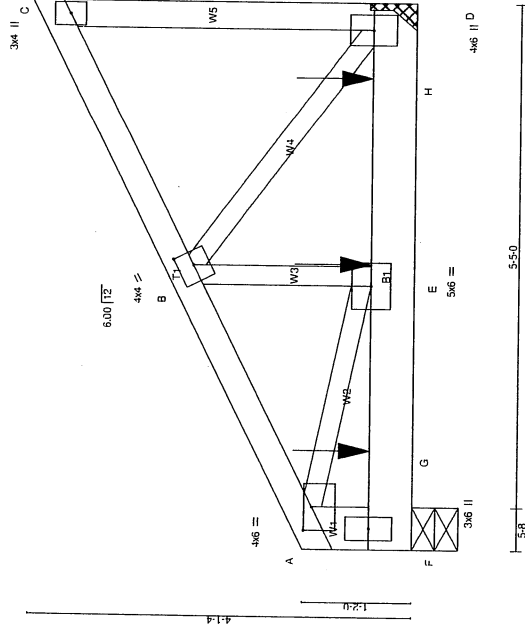
Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:27:17 2020 Page 1

ID sau2i_zSJIDFrSpKVQViy/e2E-opUnH_gJM9FXMWXGzkb3uFKTKFz5536us36y1jk8

Scale = 1/2" = 1'-0"

0-0 2-11-4 2-11-4 2-11-4 5-10-8



0-0 1-0-12 1-0-12 2-11-4 3-0-12 2-0-0 5-0-12 5-10-8

5-8 5-5-0

TOTAL WEIGHT = 2 X 29 = 58 LB

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 256 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, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, CBC 2012, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPC 2011, TPC 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 DEF. (LL) = L/360 (0.20")
CALCULATED VERT. DEF. (LL) = L/999 (0.01")
ALLOWABLE DEF. (TL) = L/360 (0.20")
CALCULATED VERT. DEF. (TL) = L/999 (0.01")

CSI: TC=0.06/1.00 (A-B:1), BC=0.16/1.00 (D-E:1), WB=0.13/1.00 (B-D:1), SS=0.12/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00 AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES
PLATE (PSI) GRIP (DRY) SHEAR SECTION (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1967 1566

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI (GRIP = 0.51 (B) (INPUT = 0.90))
JSI METAL = 0.19 (D) (INPUT = 1.00)

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

BEARINGS

JT	VERT	HORZ	DOWN	MAXIMUM FACTORED GROSS REACTION	INPUT BRG UPLIFT IN-SX	REQD BRG IN-SX
JT	1119	0	1119	0	0	0
F	1074	0	1074	0	5-8	5-8

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

UNFACTORED REACTIONS

JT	COMBINED	SHOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	789	532.0	0.0	0.0	0.0	257.0	0.0
F	757	511.0	0.0	0.0	0.0	246.0	0.0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. CS (LC)	UNBRACED LENGTH (FT)	MEMB. MAX. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	-939.0	-91.8	0.06 (1)	6.25	E-B	0.752
A-B	-12.0	-91.8	0.06 (1)	6.25	B-D	-1071.0
B-C	-108.0	0.0	0.01 (1)	7.81	A-E	0.880
D-C	-758.0	0.0	0.03 (1)	7.81		

F-G	0.0	-18.5	-18.5	0.12 (1)	10.00	
G-E	0.0	-18.5	-18.5	0.12 (1)	10.00	
H-D	0.851	-18.5	-18.5	0.16 (1)	10.00	
H-D	0.851	-18.5	-18.5	0.16 (1)	10.00	

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	3-0-12	-362	---	---	BACK	VERT	TOTAL	---	C1
G	1-0-12	-362	---	---	BACK	VERT	TOTAL	---	C1
H	5-0-12	-363	---	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

LUMBER

N. L. G. A. RULES

CHORDS	#ROWS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	2x4	DRY	No.2	SPF
D - C	2x4	2x4	DRY	No.2	SPF
F - A	2x6	2x6	DRY	No.2	SPF
F - D	2x6	2x6	DRY	No.2	SPF

ALL WEBS 2x3

EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS

SURFACE

SPACING (IN)

TOP CHORDS: (0.122"x3") SPIRAL NAILS

A-C 1 12

F-A 2 12

F-D 2 12

WEBS: (0.122"x3") SPIRAL NAILS

2x3 1 6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

SIDE - PLY SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING.

REMAINING PLY MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-p	MT20	4.0	6.0	1.00	3.00
B	TMWV-p	MT20	4.0	4.0	2.00	1.75
C	TMWV-p	MT20	3.0	4.0		

CITY OF RICHMOND HILL
BUILDING DIVISION
08/10/2021
RECEIVED
H. J. G. ALVES
100009024
PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

Structural component only
DWG# T-2022079

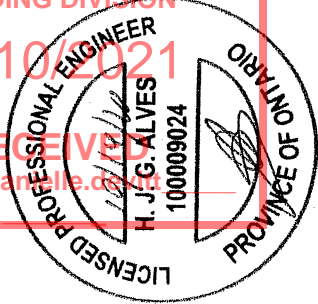
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	T11Z6	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						

Version 8.330 S May 6 2020 MITek Industries, Inc. Tue Oct 13 21:27:17 2020 Page 2
 ID: saJ2i zSJJD FrSpKVQVwVe2E-opUjH qJM9FXMWXGzdkb3uFKTJkFr253bs36vTK8

PLATES (table is in inches)

PLATE TYPE	W	LEN	Y	X
D BMW1+p	4.0	6.0		
E BMW1	5.0	6.0		
F BMW1+p	3.0	6.0		



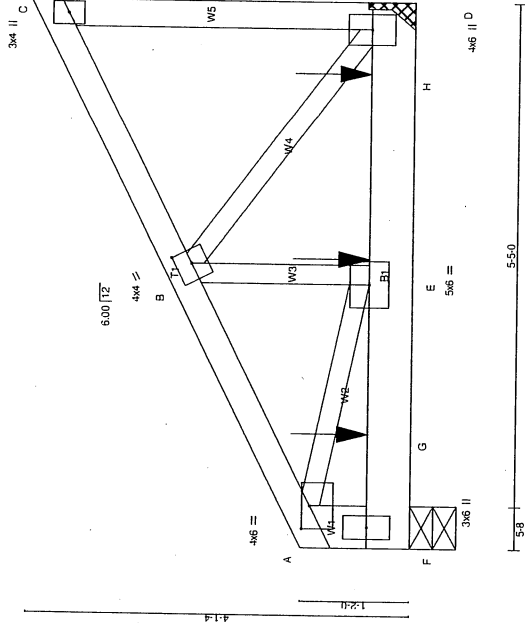
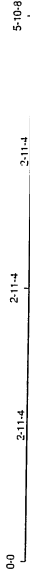
Structural component only
 DWG# T-2022079 *mr*

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	T11Z7	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:32:50 2020 Page 1
ID:saJ2L_zSulDFrSpKVQVlyle2E-Yl5gArCxTCHpUyOCg36YvTyYJek4AB1B14yJTex

Scale = 1/25.5



LUMBER		N. L. G. A. RULES		CHORDS		DESCR.	
A	C	2x4	DRY	No.2	SPF	SPF	SPF
D	C	2x4	DRY	No.2	SPF	SPF	SPF
F	A	2x6	DRY	No.2	SPF	SPF	SPF
F	D	2x6	DRY	No.2	SPF	SPF	SPF
ALL WEBS		2x3	DRY	No.2	SPF	SPF	SPF
EXCEPT							
DRY: SEASONED LUMBER.							

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

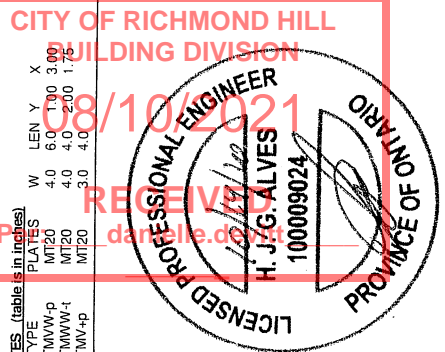
CHORDS #ROWS	SURFACE	SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS			
A-C 1	12		TOP
C-D 1	12		TOP
F-A 2	12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
F-D 2	12		SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS			
2x3 1	6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER RAILING 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.



Structural component only
DWG# T-2022095 1/2

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

BUILDING BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX	JT	SOIL
JT	1615	0	1440	0	0	MECHANICAL	5-8	JT	0
F	1615	0	1440	0	0	MECHANICAL	5-8	F	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
JT	1015	682.0	0.0	0.0	0.0	333.0	0.0
F	1139	787.0	0.0	0.0	0.0	372.0	0.0

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

BRACING

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

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		VERT. LOAD LC1		MAX. FACTORED		W E B S	
MEMB.	FORCE (LBS)	FROM TO	PLF	CS1 (LC)	UNBRAC	LENGTH FR-TO	MEMB.	FORCE (LBS)	MAX
FR-TO									
A-B	-1322.0	91.8	-91.8	0.06 (1)	6.25	E-B	0	1189	0.15 (1)
B-C	-11.0	-91.8	-91.8	0.05 (1)	6.25	B-D	-1500	0	0.18 (1)
D-C	-11.0	0.0	0.0	0.01 (1)	7.81	A-E	0	1233	0.15 (1)
F-A	-1021.0	0.0	0.0	0.04 (1)	7.81				
F-G	0.0	-18.5	-18.5	0.26 (1)	10.00				
G-E	0.0	-18.5	-18.5	0.26 (1)	10.00				
E-H	0	1193	-18.5	0.19 (1)	10.00				
H-D	0	1193	-18.5	0.19 (1)	10.00				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	FACE	DIR.	TYPE	HEEL	CONN.
JT								
E	3-1-4	453	453	FRONT	VERT	TOTAL	---	C1
G	12-1-2	-788	-788	FRONT	VERT	TOTAL	---	C1
H	5-1-4	-455	-455	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
BOT CH. LL = 8.0 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. O.C.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPC 2011, TPC 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 DEF.(LL) = L/360 (0.20")
CALCULATED VERT. DEF.(LL) = L/999 (0.01")
ALLOWABLE DEF.(TL) = L/360 (0.20")
CALCULATED VERT. DEF.(TL) = L/999 (0.02")

CSI: TC=0.06/1.00 (A-B:1), BC=0.26/1.00 (E-F:1), WB=0.18/1.00 (B-D:1), SS=0.20/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.81 (B) (INPUT = 0.90)

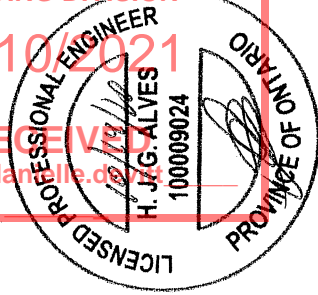
JSI METAL = 0.27 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	T11Z7	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						

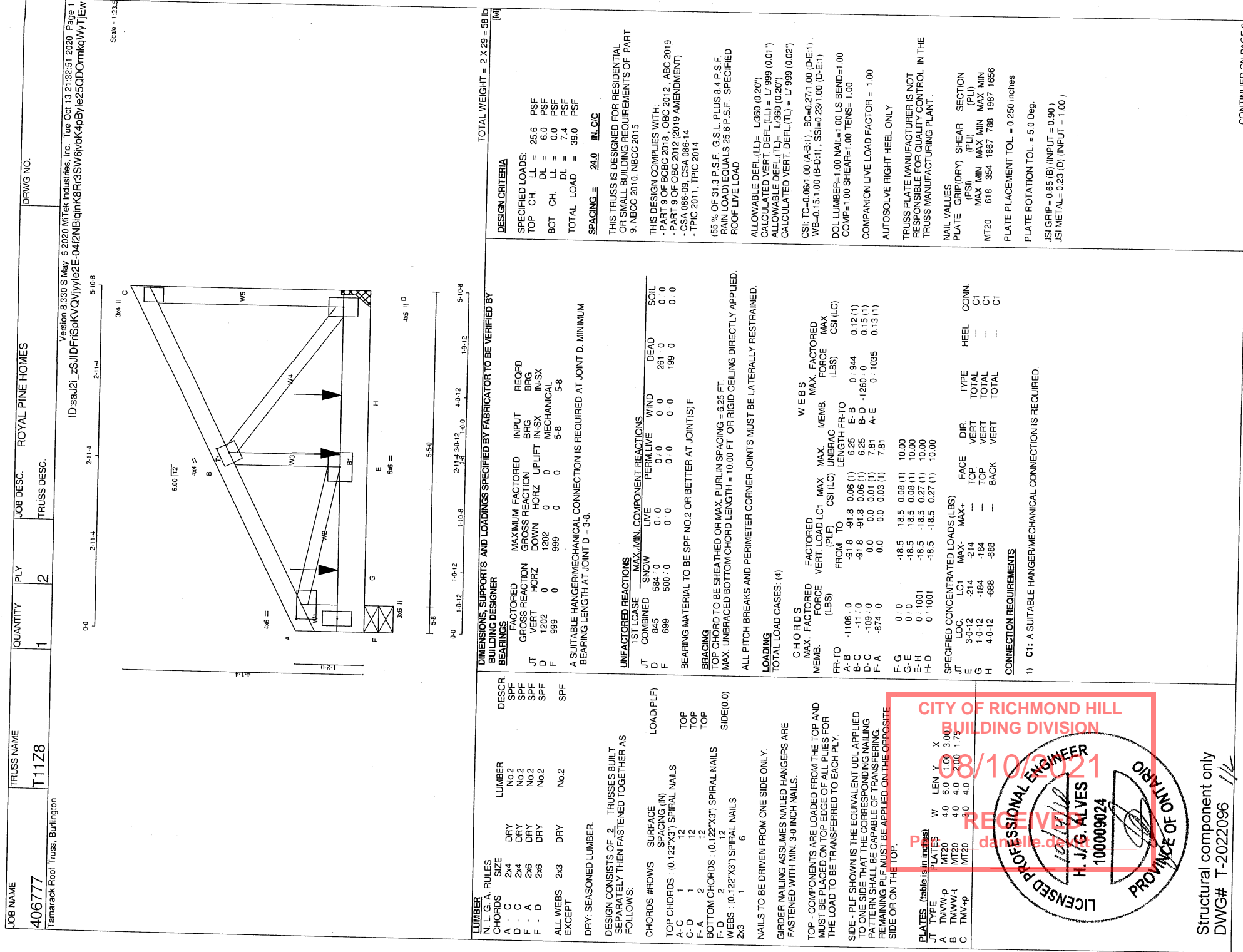
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PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
D	BMWV1+p	MT20	4.0	6.0	
E	BMWV1	MT20	5.0	6.0	
F	BMW1+p	MT20	3.0	6.0	



Structural component only
 DWG# T-2022095 2/2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	T11Z8	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						
Version 8.330 S May 6 2020 MiTek Industries, Inc. Tue Oct 13 21:32:51 2020 Page 2						
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PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
D	BMVW1+p	MT20	4.0	6.0	
E	BMVW1	MT20	5.0	6.0	
F	BMV1+p	MT20	3.0	6.0	

CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

RECEIVED

Per: danielle.oss

LICENSED PROFESSIONAL ENGINEER

H. J. C. ALVES

100009024

PROVINCE OF ONTARIO

Structural component only
DWG# T-2022096 2/2

CITY OF RICHMOND HILL
BUILDING DIVISION
08/10/2021
RECEIVED
Per: damirne.d...

LICENSED PROFESSIONAL ENGINEER

H. J.G. ALVES

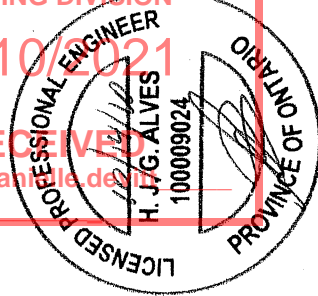
100009024

PROVINCE OF ONTARIO

Structural component only
DWG# T-2022096 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRAWG NO.
413405	T1179	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington Version 8.330 S May 6 2020 MITek Industries Inc. Tue Oct 13 21:40:23 2020 Page 2 ID:saJ2i_zSjIDFrSpKVQVyywle2E-n1zwEkBLFiG0fIdK tqwep399aixVRiKAGhJY177S						
PLATES (table is in inches) JT TYPE PLATES W LEN Y X C TMV+p MT20 3.0 4.0 D BMVW1+p MT20 4.0 6.0 E BMVW4+ MT20 5.0 6.0 F BMV1+p MT20 3.0 6.0						

CITY OF RICHMOND HILL
BUILDING DIVISION
08/10/2021
RECEIVED
Per: daniel de...



Structural component only
DWG# T-2022103 *W*

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413405	T11Z10	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MITek Industries, Inc. Tue Oct 13 21:40:23 2020 Page 2

ID:saJ2i zSJIDFrSokVQVwyle2E-n1zwEKBLFfG0fIdK 1qvwep379U5xWRIKAGhJhJ7TS

PLATES (table is in inches)

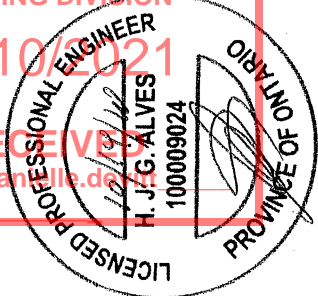
JT TYPE	PLATES	W	LEN	Y	X
D	BMVW1+P	4.0	6.0		
E	BMVW1+P	5.0	6.0		
F	BMV1+P	3.0	6.0		

CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

RECEIVED

Per: dan.mile.d...



Structural component only
DWG# T-2022104 *mt*

JOB NAME

T28

JOB NO.

DRWG NO.

406778

Tamarack Roof Truss, Burlington

JOB DESC.

ROYAL PINE HOMES

QUANTITY

2

PLY

1

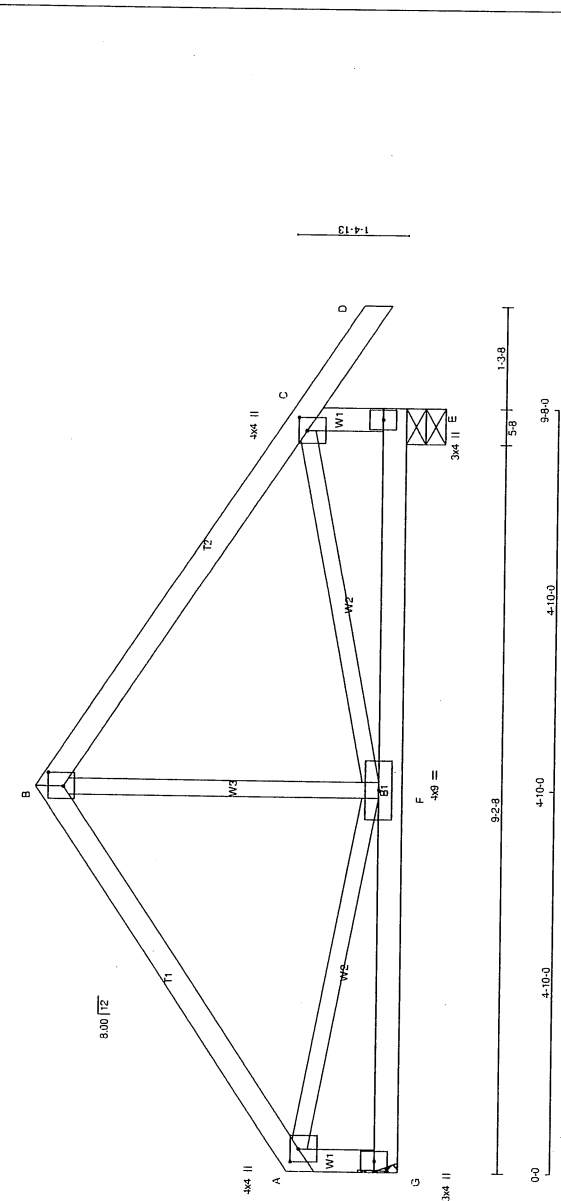
TRUSS DESC.

TRUSS

Version 8.330 S May 6 2020 MITek Industries, Inc. Tue Oct 13 21:27:20 2020 Page 1

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Scale = 1:27.7



TOTAL WEIGHT = 2 X 39 = 79 LB

DESIGN CRITERIA

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

SPACING = 24.0 IN. OC

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBCC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFLECT (LL) = L/360 (0.32")
CALCULATED VERT. DEFLECT (LL) = L/399 (0.00")
ALLOWABLE DEFLECT (TL) = L/360 (0.32")
CALCULATED VERT. DEFLECT (TL) = L/999 (0.02")

CSI: TC=0.28(1.00) (B-C:1), BC=0.12(1.00) (F-G:4), WB=0.07(1.00) (A-F:1), SS=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) (PLI) (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP= 0.46 (C) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)

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

BEARINGS

FACTORED
GROSS REACTION
DOWN HORZ
533 0
659 0

MAXIMUM FACTORED
GROSS REACTION
DOWN HORZ
533 0
659 0

INPUT
BRG IN-SX
MECHANICAL
5-8

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

UNFACTORED REACTIONS

1ST LCASE
COMBINED
377
464

MAX. MIN. COMPONENT REACTIONS
LIVE PERM. LIVE
0.0 0.0 0.0 0.0

DEAD
130 0
146 0

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

BRACING

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS
MEMB.
FR-TO
A-B
B-C
C-D
G-A
E-C
G-F
F-E

W E B S
MAX. FACTORED
FORCE (LBS)
-29 / 73
0 318
0 318
7.81
10.00
10.00

MEMB.
FR-TO
F-B
A-F
F-C
7.81
10.00
10.00

MAX. FACTORED
FORCE (LBS)
-29 / 73
0 318
0 318
7.81
10.00
10.00

MAX. FACTORED
FORCE (LBS)
-29 / 73
0 318
0 318
7.81
10.00
10.00

MAX. FACTORED
FORCE (LBS)
-29 / 73
0 318
0 318
7.81
10.00
10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. OC

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBCC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFLECT (LL) = L/360 (0.32")
CALCULATED VERT. DEFLECT (LL) = L/399 (0.00")
ALLOWABLE DEFLECT (TL) = L/360 (0.32")
CALCULATED VERT. DEFLECT (TL) = L/999 (0.02")

CSI: TC=0.28(1.00) (B-C:1), BC=0.12(1.00) (F-G:4), WB=0.07(1.00) (A-F:1), SS=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) (PLI) (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP= 0.46 (C) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)

[illegible]

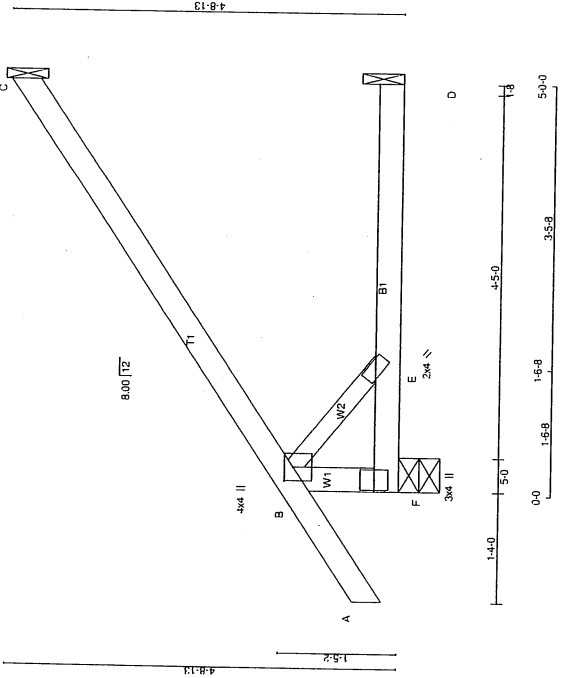
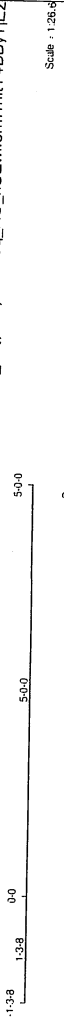
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	J31	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:sa121_zSJIDFrSpKVQVwyle2E-cv_vl9gxPsyZaKnuq_AC_nSEwlf6rmInitY4DBytIEZ



LUMBER

N.L.G.A. RULES

CHORDS

JT TYPE SIZE

F - B 2x4

A - C 2x4

F - D 2x4

ALL WEBS 2x3

DRY: SEASONED LUMBER.

DESCR.	LUMBER	LEN	Y	X
SPF	No.2	4.0	4.0	1.25
SPF	No.2	2.0	4.0	2.00
SPF	No.2	3.0	4.0	4.0

PLATES (table is in inches)

JT TYPE PLATES

B TMWV+P MT20 4.0 2.0 4.0

E BMW+P MT20 3.0 4.0

F BMV1+P MT20 3.0 4.0

DESCR.	FACTORED	MAXIMUM	INPUT	REQD
JT	GROSS REACTION	DOWN	BRG	BRG
F	403	0	5-0	5-0
C	227	0	1-8	1-8
D	46	0	1-8	1-8

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

UNFACTORED REACTIONS

1ST LOOSE

JT COMBINED

F 283

C 137

D 37

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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED CSI (LC)	MAX. FACTORED UNBRAC LENGTH FR-TO	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
F-B	-357.0	0.0	0.0	0.04 (1)	7.81	0.0	0.00 (1)
A-B	0.36	-91.8	-91.8	0.13 (1)	10.00	0.0	0.00 (1)
B-C	0.0	-91.8	-91.8	0.38 (1)	10.00	0.0	0.00 (1)
F-E	0.0	-18.5	-18.5	0.11 (4)	10.00	0.0	0.00 (1)
E-D	0.0	-18.5	-18.5	0.13 (4)	10.00	0.0	0.00 (1)

DESIGN CRITERIA

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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, CBC 2012, ABC 2019

- PART 9 OF CBC 2012 (2019 AMENDMENT)

- CSA 086-09, CSA 086-14

- TPC 2011, TPC 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 DEFLECTION = L/360 (0.19")

CALCULATED VERT. DEFLECTION = L/360 (0.19")

ALLOWABLE DEFLECTION = L/360 (0.19")

CALCULATED VERT. DEFLECTION = L/360 (0.19")

CS1, TC=0.38(1.00 (B-C-1), BC=0.13(1.00 (D-E-4)).

WB=0.00(1.00 (B-E-1)), SS=0.15(1.00 (B-C-1))

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PLI)

(PSI) (PLI)

MAX MIN MAX MIN

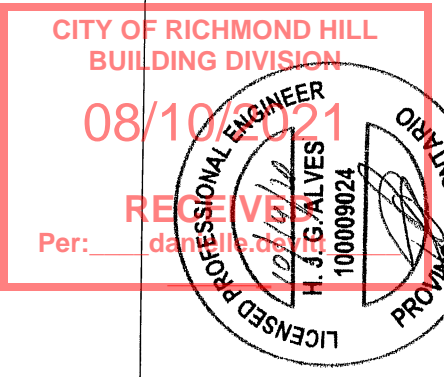
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.25 (B) (INPUT = 0.90)

JSI METAL = 0.07 (B) (INPUT = 1.00)



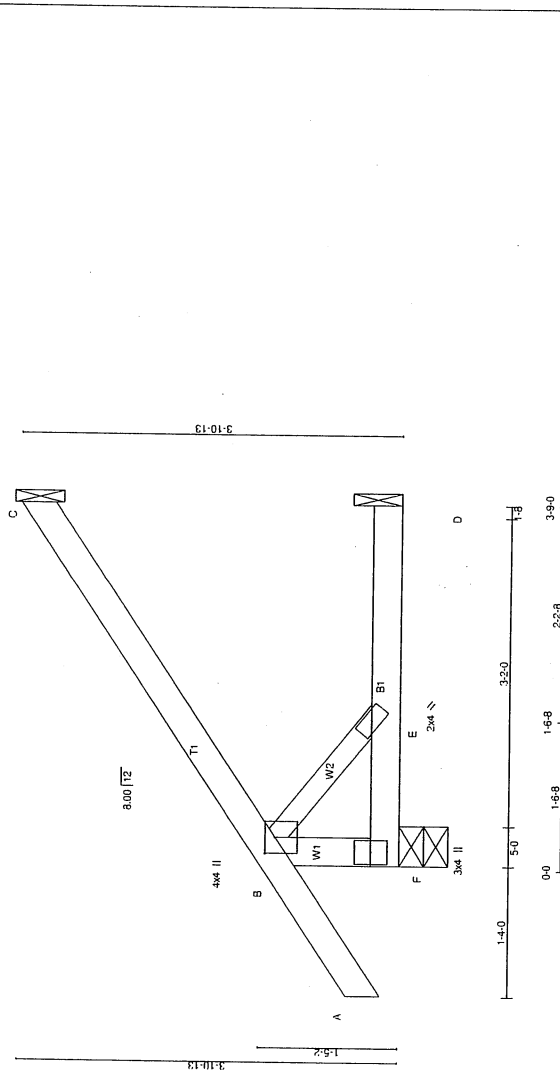
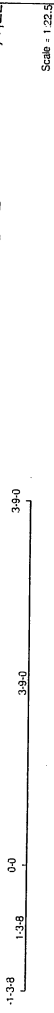
Structural component only

DWG# T-2022092

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	J32	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:sa12i_zsJlDFrSpKvQVlye2E-cV_19qPspZaKuaq_AC_hSGZJ1rm1m14DBy1IEZ



LUMBER
N. L. G. A. RULES
CHORDS
F - B 2x4
A - C 2x4
F - D 2x4
ALL WEBS 2x3
DRY: SEASONED LUMBER

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

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

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

JT	TYPE	PLATES	W	LEN	Y	X	DESCR.
B	TM/W+P	MT20	4.0	4.0	1.25	2.00	SPF
E	BM/W+P	MT20	2.0	4.0			SPF
F	BM/W+P	MT20	3.0	4.0			SPF

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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, CBC 2012, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, 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 DEF. (LL) = L/360 (0.19")
CALCULATED VERT. DEF. (LL) = L/999 (0.007")
ALLOWABLE DEF. (TL) = L/360 (0.19")
CALCULATED VERT. DEF. (TL) = L/999 (0.017")

CSI: TC=0.21/1.00 (B-C-1), BC=0.07/1.00 (D-E-4), WB=0.00/1.00 (B-E-1), SSI=0.11/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

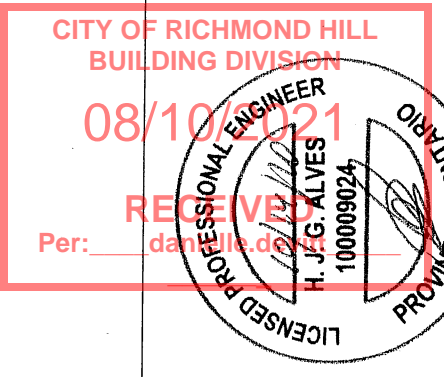
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1967 1656

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-2022093

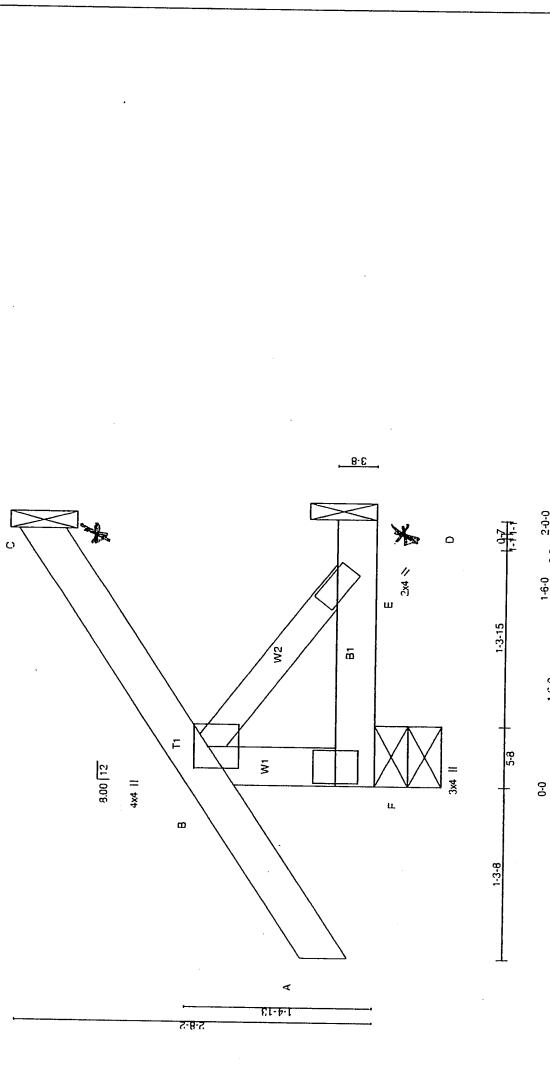
JOB NAME	TRUSS NAME	QUANTITY	PLV	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	C21	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:sa12i_zsUJDFrSpKVQViyvE2E-SsguDGbXdcGleJ9PQMYnIfG6prKc9IRvTjKd

Scale: 1"=6'-5"



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

LUMBER		N.L.G.A. RULES		CHORDS		DESOR.	
JT	TYPE	SIZE	DRY	SPF	SPF	SPF	SPF
F	B	2x4	DRY	SPF	SPF	SPF	SPF
A	C	2x4	DRY	SPF	SPF	SPF	SPF
F	D	2x4	DRY	SPF	SPF	SPF	SPF
ALL WEBS 2x3 DRY							
DRY: SEASONED LUMBER							

PLATES (table is in inches)		W		LEN		Y		X	
JT	TYPE	SIZE	DRY	SPF	SPF	SPF	SPF	SPF	SPF
B	TWVW+P	2x4	DRY	SPF	SPF	SPF	SPF	SPF	SPF
E	BMVW+P	2x4	DRY	SPF	SPF	SPF	SPF	SPF	SPF
F	BMV1+P	2x4	DRY	SPF	SPF	SPF	SPF	SPF	SPF

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		MAX. MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	SOIL	SOIL
F	193	144.0	0.0	0.0	0.0	49.0	0.0	0.0	0.0
C	29	24.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
D	15	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS		FACTORED		MAX. FACTORED		W E B S	
MEMB.	FORCE (LBS)	VERT. (PLF)	MAX. (LBS)	MEMB. (LBS)	MAX. (LBS)	MAX. (LBS)	MAX. (LBS)
FR-TO	-259.0	0.0	0.03 (1)	7.81	0.0	0.00 (1)	0.00 (1)
F-B	0.35	-91.8	0.12 (1)	10.00	0.0	0.00 (1)	0.00 (1)
B-C	-25.0	-91.8	0.12 (1)	6.25	0.0	0.00 (1)	0.00 (1)
F-E	0.0	-18.5	0.02 (4)	10.00	0.0	0.00 (1)	0.00 (1)
E-D	0.0	-18.5	0.02 (4)	10.00	0.0	0.00 (1)	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

BOT CH. LL = 6.0 PSF

TOTAL LOAD = 39.0 PSF

SPACING

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBC 2010, NBC 2012, ABC 2019
- CSA 086-09, CSA 086-14
- TPC 2011, TPC 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 23.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFLECTION

ALLOWABLE DEFLECTION (LL) = L/360 (0.19")

ALLOWABLE DEFLECTION (TL) = L/999 (0.007")

ALLOWABLE DEFLECTION (TL) = L/999 (0.007")

CSL

CSL TC=0.12/1.00 (A-B-1), BC=0.02/1.00 (E-F-4), WB=0.00/1.00 (B-E-1), SB=0.09/1.00 (B-C-1)

DOL LUMBER

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

COMPANION LIVE LOAD FACTOR

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 (PLU)

MAX MIN MAX MIN

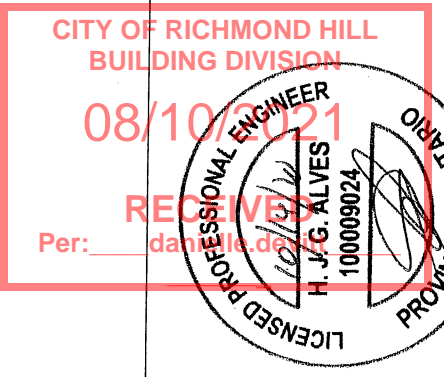
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (B) (INPUT = 0.90)

JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only

DWG# T-2022073

JOB NAME 406777	TRUSS NAME C21S	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.																																																																																																																												
Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Mon Jun 7 08:20:20 2021 Page 1 Tamarack Roof Truss, Burlington ID:sauj2l_zsJIDfHspKVQVjyIe2E-slpvKUSql_m0wdg_CMcQM2kEQn8jHeOdnudDvz81v																																																																																																																																	
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<table><tr><td>LUMBER</td><td>N.L.G.A. RULES</td><td>SIZE</td><td>DESCR.</td></tr><tr><td>F - B</td><td>CHORDS</td><td>No.2</td><td>SPF</td></tr><tr><td>A - C</td><td>FLOOR JOISTS</td><td>No.2</td><td>SPF</td></tr><tr><td>F - D</td><td>CEILING JOISTS</td><td>No.2</td><td>SPF</td></tr><tr><td>ALL WEBS</td><td>2x3</td><td>Dry</td><td>SPF</td></tr><tr><td colspan="4">Dry; Seasoned Lumber.</td></tr></table>						LUMBER	N.L.G.A. RULES	SIZE	DESCR.	F - B	CHORDS	No.2	SPF	A - C	FLOOR JOISTS	No.2	SPF	F - D	CEILING JOISTS	No.2	SPF	ALL WEBS	2x3	Dry	SPF	Dry; Seasoned Lumber.																																																																																																							
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<div>CITY OF RICHMOND HILL BUILDING DIVISION 08/10/2021 RECEIVED Per: [Signature] H. J. G. ALVES 100009024 PROVINCE OF ONTARIO LICENSED PROFESSIONAL ENGINEER</div>																																																																																																																																	
Structural component only DWG# T-2117956																																																																																																																																	

JOB NAME

406777

TRUSS NAME

C22S

QUANTITY

1

PLY

1

JOB DESC.

ROYAL PINE HOMES

TRUSS DESC.

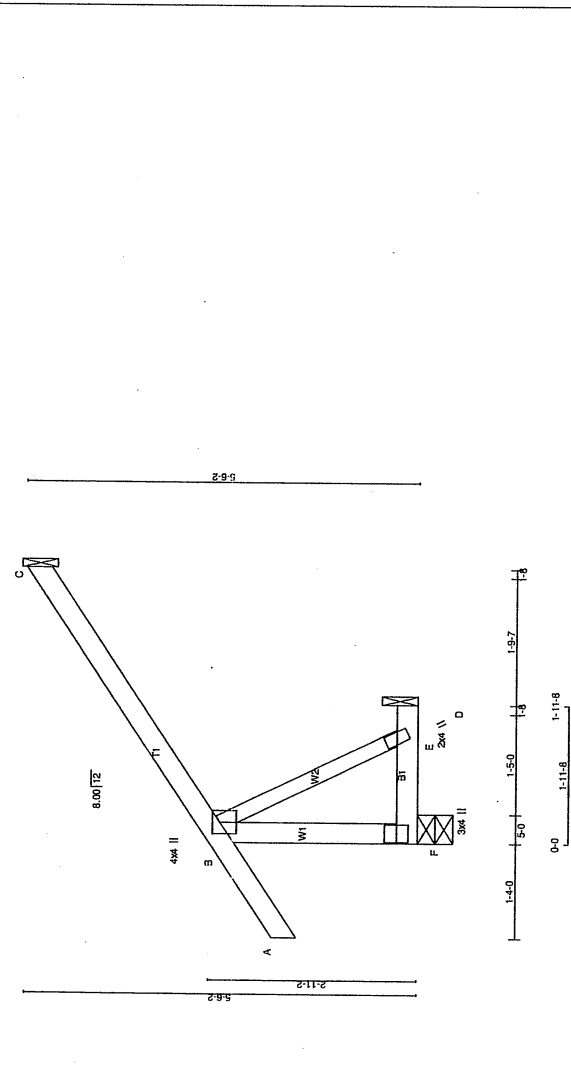
DRWG NO.

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Mon Jun 7 08:20:21 2021 Page 1

ID:saJ2i_z5JUDFtSPKvQViyIe2E-KuHf6gU4beutYnF8m47NfGuNg7NSku9SRdZLZ811u

Scale = 1/32' = 9



LUMBER

N.L.G.A. RULES

CHORDS

F - B

A - C

F - D

ALL WEBS

2x3

DRY

DRY

DRY

DRY

DRY

SEASONED LUMBER

W

LEN

Y

X

4.0

4.0

1.25

2.00

2.0

4.0

3.0

4.0

MIT20

MIT20

MIT20

DESCR.	LUMBER	DESOR.
SPF	No.2	SPF
SPF	No.2	SPF
SPF	No.2	SPF
SPF	No.2	SPF

PLATES (Table is in inches)	W	LEN	Y	X
JT	2.0	4.0	1.25	2.00
B	2.0	4.0	1.25	2.00
E	2.0	4.0	1.25	2.00
F	2.0	4.0	1.25	2.00

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

DESIGN CRITERIA	DESIGN CRITERIA
SPACING = 24.0 IN./C/C	SPACING = 24.0 IN./C/C
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015
THIS DESIGN COMPLIES WITH:	THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019	- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)	- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14	- CSA 086-14
- TPC 2014	- TPC 2014

DESIGN CRITERIA	DESIGN CRITERIA
ALLOWABLE DEFLECTION (LL) = L/360 (0.19")	ALLOWABLE DEFLECTION (LL) = L/360 (0.19")
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")	CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")
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CSH TC=0.23/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WS=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)	CSH TC=0.23/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WS=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)
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COMPANION LIVE LOAD FACTOR = 1.00	COMPANION LIVE LOAD FACTOR = 1.00

DESIGN CRITERIA	DESIGN CRITERIA
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.	TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
NAIL VALUES	NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PLI)	PLATE GRIP(DRY) SHEAR SECTION (PLI)
MAX MIN MAX MIN	MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873	MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches	PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.	PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP= 0.20 (B) (INPUT = 0.90)	JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)	JSI METAL= 0.06 (B) (INPUT = 1.00)

DESIGN CRITERIA	DESIGN CRITERIA
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015
THIS DESIGN COMPLIES WITH:	THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019	- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)	- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14	- CSA 086-14
- TPC 2014	- TPC 2014

DESIGN CRITERIA	DESIGN CRITERIA
ALLOWABLE DEFLECTION (LL) = L/360 (0.19")	ALLOWABLE DEFLECTION (LL) = L/360 (0.19")
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")	CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")
ALLOWABLE DEFLECTION (TL) = L/360 (0.19")	ALLOWABLE DEFLECTION (TL) = L/360 (0.19")
CALCULATED VERT. DEFLECTION (TL) = L/999 (0.00")	CALCULATED VERT. DEFLECTION (TL) = L/999 (0.00")
CSH TC=0.23/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WS=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)	CSH TC=0.23/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WS=0.00/1.00 (B-E:1), SS=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	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	COMPANION LIVE LOAD FACTOR = 1.00

CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

RECEIVED

Per: darlene

PROFESSIONAL ENGINEER

H. J. G. ALVES

100009024

PROVINCE OF ONTARIO

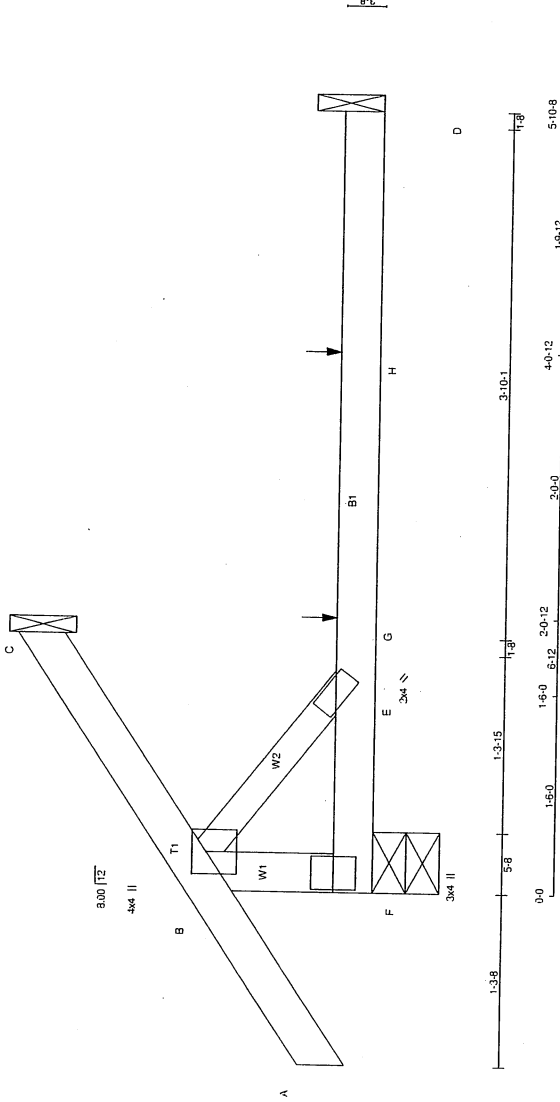
Structural component only
DWG# T-2117957

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	C23	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Tue Oct 13 21:27:13 2020 Page 1
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LUMBER
N.L.G.A. RULES
CHORDS
F - B 2x4
A - C 2x4
F - D 2x4
ALL WEBS 2x3
DRY: SEASONED LUMBER.

PLATES (table is in inches)
JT TYPE PLATES
B TMW+P MT20 4.0 4.0 1.25 2.00
E BMW+P MT20 2.0 4.0
F BMV1+P MT20 3.0 4.0

DESOR.
SPF
SPF
SPF
SPF

LUMBER
No.2
No.2
No.2

DRY
No.2
No.2
No.2

LEN
4.0
2.0
3.0

Y
4.0
4.0
4.0

X
1.25
2.00
2.00

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, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBC 2010, NBC 2015
- PART 9 OF NBC 2012 (2015 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPC 2011, TPC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
- 55% OF 31 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 23.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFLECTION (LL) = L/360 (0.20")
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")
ALLOWABLE DEFLECTION (LL) = L/360 (0.20")
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.00")

CSI: TC=0.131, 0.0 (A-B-1), BC=0.191, 0.0 (D-E-4), WB=0.001, 0.0 (B-E-1), SS=0.091, 0.0 (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.

MAIL VALUES
PLATE GRIPDRY SHEAR SECTION (PSI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1655

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (B) (INPUT = 0.90)
JSI METAL = 0.05 (B) (INPUT = 1.00)

TOTAL WEIGHT = 14.1b

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

BEARINGS

JT	VERT	MAXIMUM FACTORED GROSS REACTION	INPUT BRG IN-SX	REQD BRG IN-SX
JT	313	0	0	0
F	42	0	0	0
C	42	0	0	0
D	54	0	0	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	222	144.0	0.0	0.0	0.0	77.0	0.0
F	29	24.0	0.0	0.0	0.0	6.0	0.0
C	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	FACTORED FORCE (LBS)	VERT. LOAD LC1	MAX. FACTORED FORCE (LBS)	W E B S	MAX. FACTORED FORCE (LBS)
FR-TO	F-B	-259.0	0.0	0.0	0.03 (1)	7.81
	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

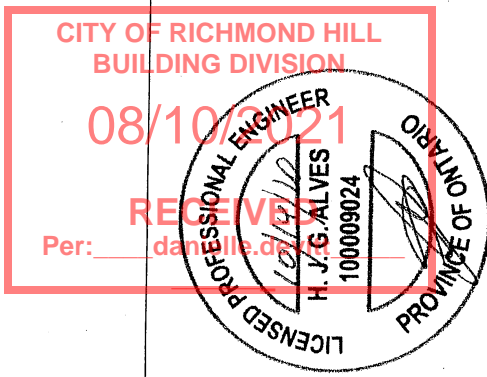
SPECIFIED CONCENTRATED LOADS (LBS)

SPECIFIED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
G	20-12	1	1	---	FRONT	VERT	TOTAL
H	40-12	1	1	---	FRONT	VERT	TOTAL
							HEEL

							C1
							C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022075

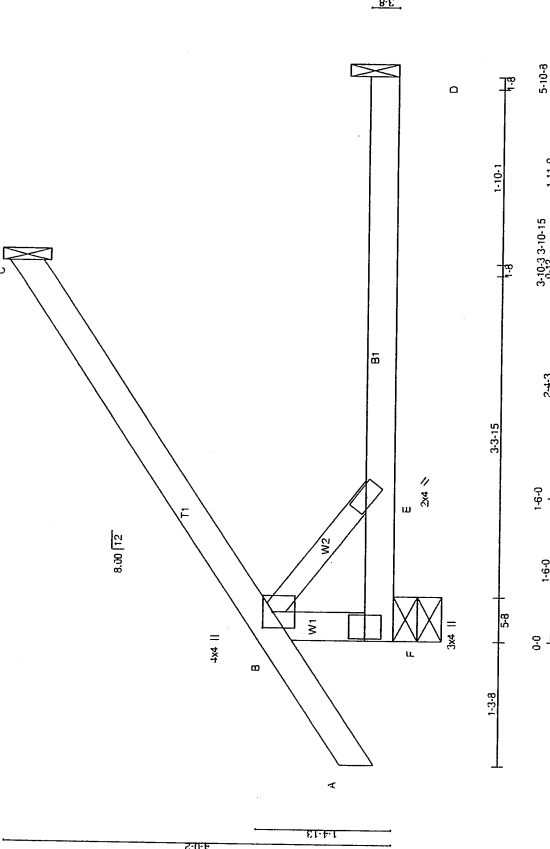
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406778	C24	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTek Industries, Inc. Tue Oct 13 21:27:14 2020 Page 1

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Scale = 1/2" = 1'-0"



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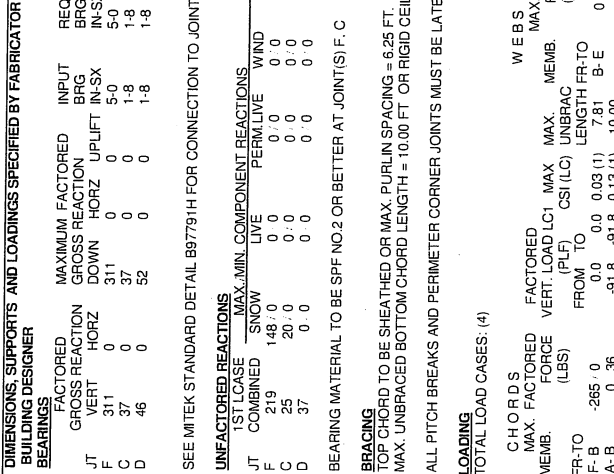
CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

RECEIVED

Per: danielle.d...

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



F. E	0 0	-18.5	-18.5	0.11 (4)	10.00	TYPE
E-G	0 0	-18.5	-18.5	0.13 (4)	10.00	TOTAL
G-H	0 0	-18.5	-18.5	0.13 (4)	10.00	TOTAL
H-D	0 0	-18.5	-18.5	0.13 (4)	10.00	

SPECIFIED CONCENTRATED LOADS (LBS)						
	LOC.	LC1	MAX-	MAX+	FACE	DIR.
JT	2-0-12	1	1	---	FRONT	VERT
G	4-0-12	-0	-0	---	FRONT	VERT

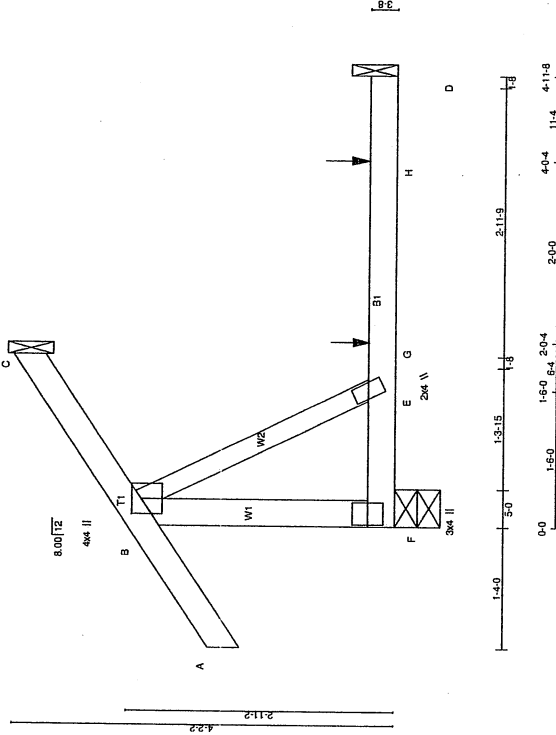
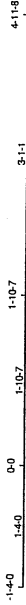
CONNECTION REQUIREMENTS

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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406777	C31S	1	1	TRUSS DESC.		

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Mon Jun 7 08:20:21 2021 Page 1
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Scale: 1/2"=1'



TOTAL WEIGHT = 15 lb

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

BEARINGS

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

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

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN.	COMPONENT REACTIONS	W	LEN	Y	X
JT	COMBINED	SNOW	4.0	4.0	1.25	2.00
F	219	148/0	2.0	4.0		
C	25	20/0	2.0	4.0		
D	37	0/0	3.0	4.0		

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. FACTORED CSI (LC)	MAX. FACTORED FORCE (LBS)	WEBS	MEMB.	MAX. FACTORED FR-TO LENGTH (IN)	MAX. FACTORED FR-TO (B-E)	MAX. FACTORED FR-TO (C1)
F-B	-265/0	0.0	0.0	0.04 (1)	7.81	B-E	0/0	0.00 (1)		
A-B	0/36	-91.8	-91.8	0.13 (1)	10.00					
B-C	-27/0	-91.8	-91.8	0.12 (1)	6.25					
F-E	0/0	-18.5	-18.5	0.11 (4)	10.00					
E-G	0/0	-18.5	-18.5	0.13 (4)	10.00					
G-H	0/0	-18.5	-18.5	0.13 (4)	10.00					
H-D	0/0	-18.5	-18.5	0.13 (4)	10.00					

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
JT	2-0-4	1	1	FRONT	VERT	TOTAL	--	C1
G	4-0-4	-0	-0	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, NBC 2015

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFLECT (LL) = L/360 (0.19")
ALLOWABLE DEFLECT (TL) = L/360 (0.19")
CALCULATED VERT. DEFLECT (TL) = L/999 (0.03")
CALCULATED VERT. DEFLECT (LL) = L/999 (0.03")
CSI: TC=0.13/1.00 (A-B-1), BC=0.13/1.00 (D-E-4), WE=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

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

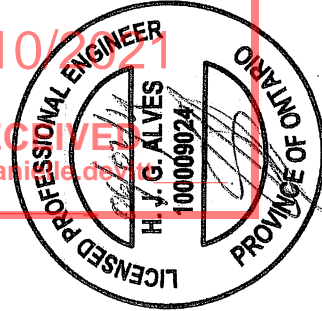
NAIL VALUES
PLATE GRIP (DRY) SHEAR SECTION (PLI)
MAX MIN MAX MIN
MT20 630 1747 788 1987 1873
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP=0.18 (B) (INPUT=0.90)
JSI METAL=0.05 (B) (INPUT=1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

08/10/2021

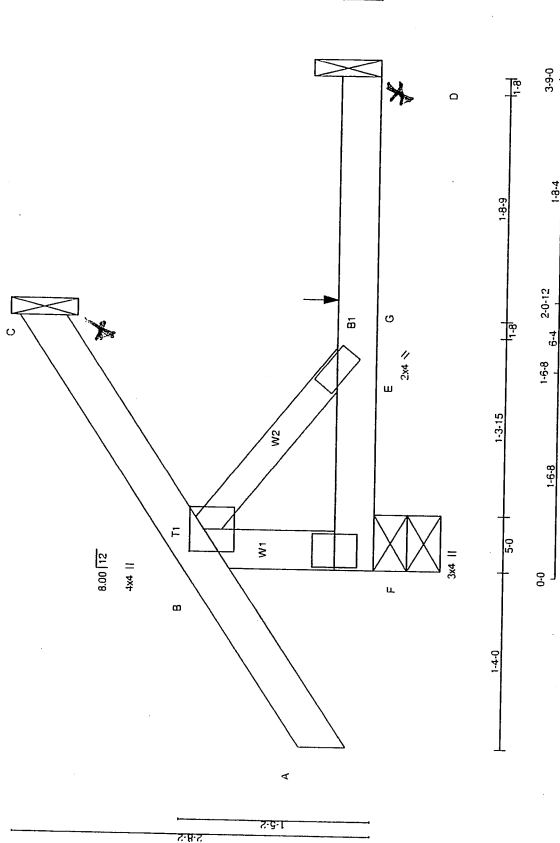
RECEIVED

Per: daniel de...



Structural component only
DWG# T-2117958

JOB NAME 406777 Tamarack Roof Truss, Burlington		TRUSS NAME C32S		QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES		DRAWG NO.	
Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Mon Jun 7 08:20:22 2021 Page 1 ID:saJ2L_zsJIDrISpKVQVjyle2E-p5AK0VMyOkAxqKneurT037DRtBB8J55V7Hz811									
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DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

Table with 4 columns: LUMBER, N.L.G.A. RULES, CHORDS, and JOINTS. It lists various truss members and their specifications.

Table with 4 columns: BUILDING DESIGNER, MAXIMUM FACTORED, INPUT, and RECORD. It lists various truss members and their specifications.

PLATES (Table is in inches)

Table with 4 columns: PLATE TYPE, W, L, Y, X. It lists various plate types and their dimensions.

DESIGN CRITERIA

Table with 4 columns: SPECIFIED LOADS, TOP CH, LL, DL, BOT CH, LL, DL, TOTAL LOAD. It lists various load specifications.

SPACING = 24.0 IN. C.C.

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

- THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, CBC 2012, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, 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

LOADING

TOTAL LOAD CASES: (5)

Table with 4 columns: CHORDS, MEMB., FACTORED, and W.E.B.S. It lists various truss members and their specifications.

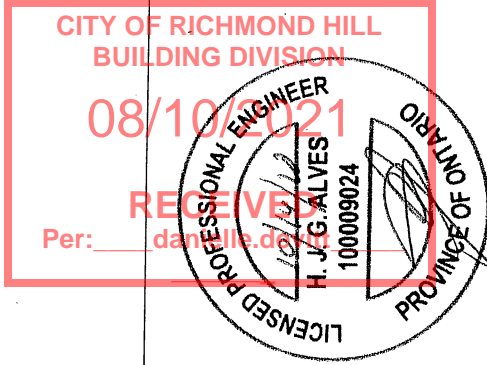
SPECIFIED CONCENTRATED LOADS (LBS)

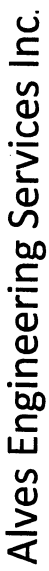
Table with 4 columns: JT, LOC, LC1, MAX+. It lists various truss members and their specifications.

CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED. CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

Table with 4 columns: NAIL VALUES, PLATE GRIP(DRY), SHEAR, SECTION (PLI). It lists various nail values and specifications.





RESPONSABILITIES

Feb 09, 2018

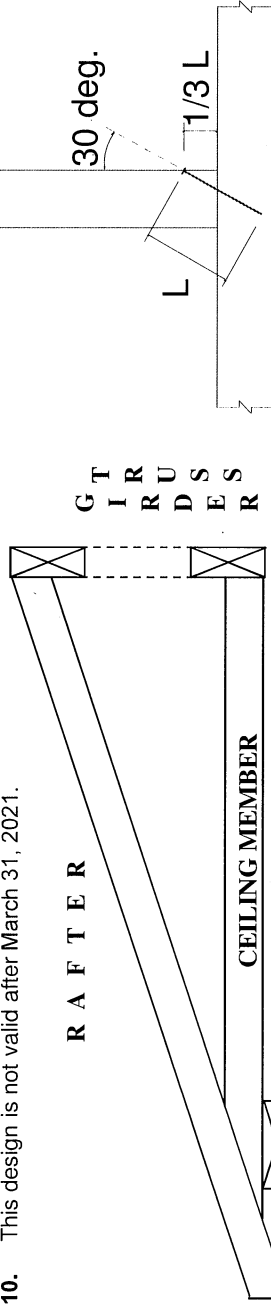
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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

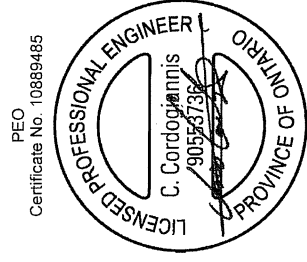
NOTES:

- 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				
2X6 D. Fir				



Mitek
MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

December 2, 2019

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

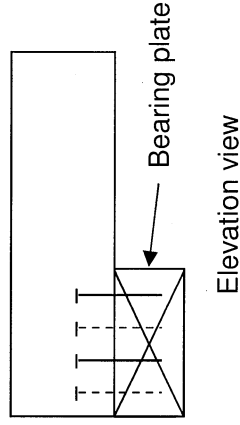
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON	3.00	0.122	26	36
SPIRAL	3.25	0.122	28	40
	3.50	0.152	36	50

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

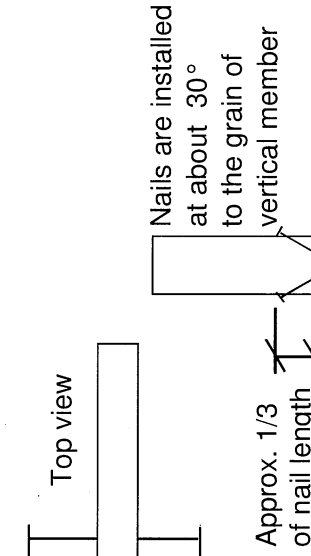
NOTES:

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 B3757/9H1).
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

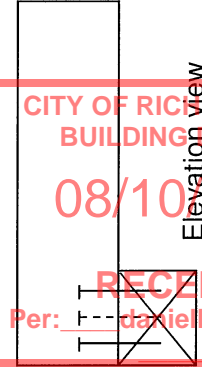


Top view



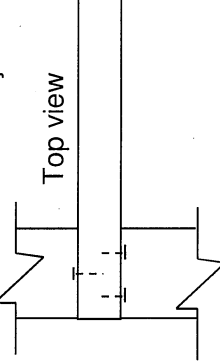
Elevation view

Toe-nailing on 2x4 Bearing Plate

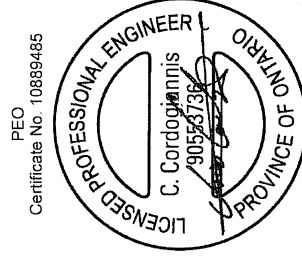


Top view

Toe-nailing viewed from end of joist or truss



RECEIVED
Per: danielle.devitt
CITY OF RICHMOND HILL
BUILDING DIVISION
08/10/2021



Mitek
MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

December 2, 2019

TECHNICAL BULLETIN

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:

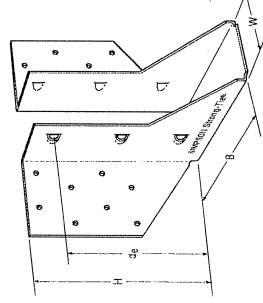
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

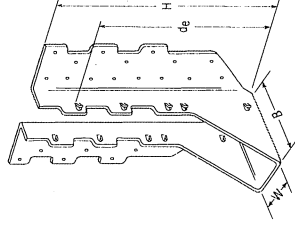
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

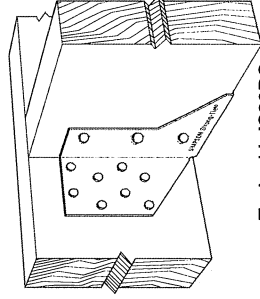
- See current catalogue for options



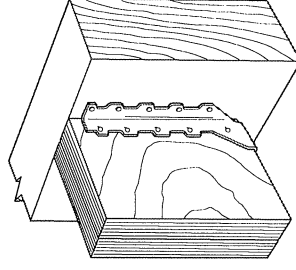
LJS26DS



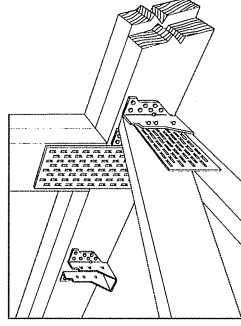
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



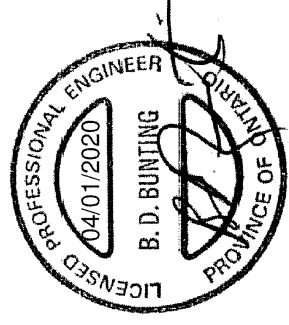
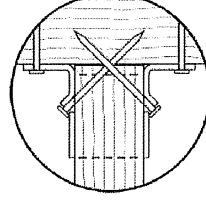
Typical HUS Installation



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 _e ¹		D.Fir-L		S-P-F	
							Uplift (K _o =1.15) lb.	Normal (K _o =1.00) lb.	Uplift (K _o =1.15) lb.	Normal (K _o =1.00) lb.
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	2055	4265	1460	4115
HUS26	16	1 5/8	5 3/4	3	3 15/16	(14) 16d	2705	4940	2065	3875
HUS28	16	1 5/8	7 3/4	3	6 3/32	(22) 16d	3605	5365	2675	4345
HUS210	16	1 1/8	9 9/16	3	7 3/32	(30) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	(30) 16d	4505	6450	4010	5200

1. d_e is the distance from the seat of the hanger to the highest joist nail.



LIMIT
STATES
DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPEC HUS20 3/20 exp. 6/22

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strongtie.com

TECHNICAL BULLETIN

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:

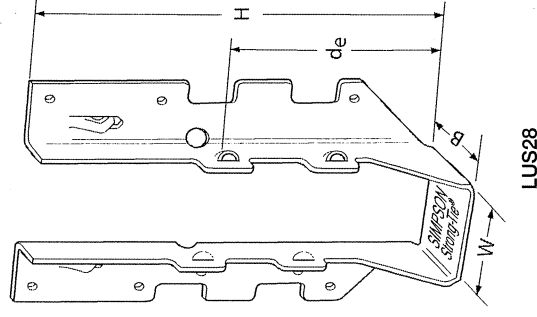
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

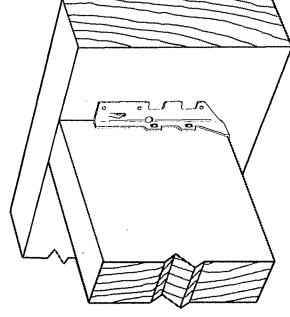
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



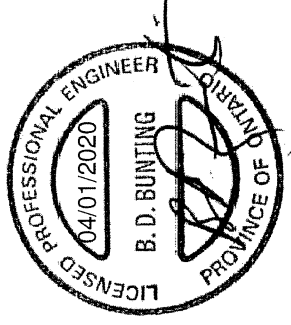
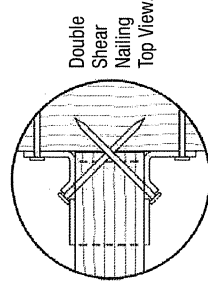
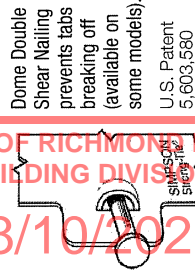
LUS28



Typical LUS Installation

Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F		
								Uplift (K _B =1.15)	Normal (K _B =1.00)	Uplift (K _B =1.15)	Normal (K _B =1.00)	
LUS24	18	1 9/16	3 3/8	1 3/4	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155	
LUS24-2	18	3 1/8	3 3/8	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 5/8	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790	
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575	
LUS28-3	18	4 5/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375	
LUS210	18	1 9/16	7 13/16	1 3/4	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210	
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195	
LUS210-3	18	4 5/8	8 3/8	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375	

1. d_e is the distance from the seat of the hanger to the highest joist nail.



LIMIT STATES DESIGN

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T-SPEC LUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

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:

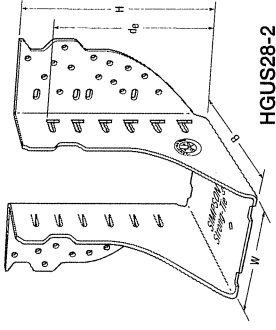
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

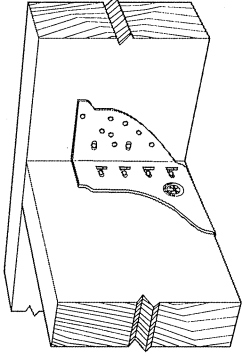
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

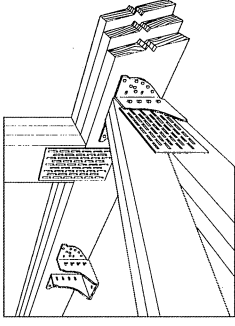
- See current catalogue for options



HGUS28-2



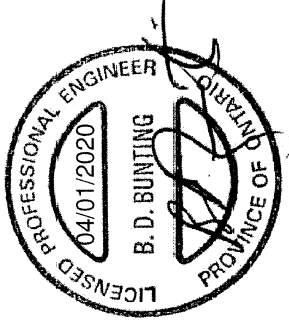
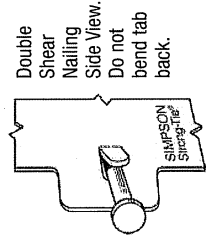
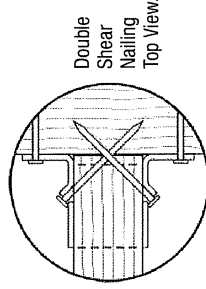
Typical HGUS Installation



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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)		
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F
								Uplift	Normal	Uplift Normal
HGUS26	12	1 5/8	5 3/8	5	4 5/8	(20) 16d	(8) 16d	2685	6625	2685 5700
HGUS26-2	12	3 3/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100 6355
HGUS26-3	12	4 13/16	5 1/2	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100 6355
HGUS26-4	12	6 3/8	5 1/8	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 3/8	7 3/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310 9215
HGUS28-3	12	4 13/16	7 1/4	4	6 3/8	(36) 16d	(12) 16d	6070	12980	4310 9215
HGUS28-4	12	6 3/8	7 3/8	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 3/8	9 3/8	4	8 1/8	(46) 16d	(16) 16d	6840	14015	4855 10270
HGUS210-3	12	4 13/16	9 1/4	4	8 3/8	(46) 16d	(16) 16d	6840	14645	4855 10400
HGUS210-4	12	6 3/8	9 3/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855 10400
HGUS212-4	12	6 3/8	10 3/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425 10645
HGUS214-4	12	6 3/8	12 3/8	4	11 1/8	(66) 16d	(22) 16d	10130	16400	7195 11645

1. d_e is the distance from the seat of the hanger to the highest joist nail.



LIMIT
STATES
DESIGN

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T-SPECHGUS20 3/20 exp. 6/22

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ONTARIO WOOD TRUSS
FABRICATORS ASSOCIATION

TECH-NOTES

TN 15-001

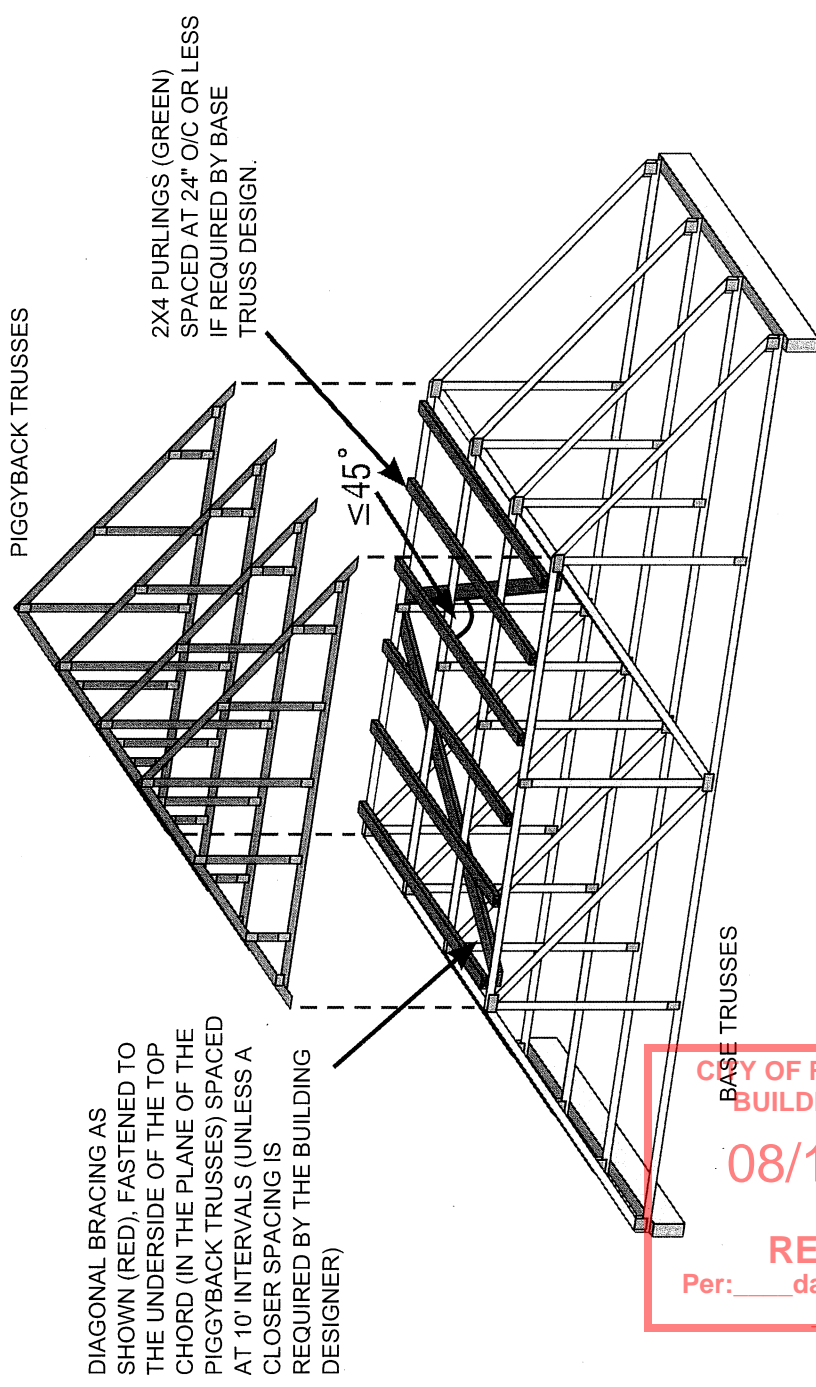
Piggyback Bracing

Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

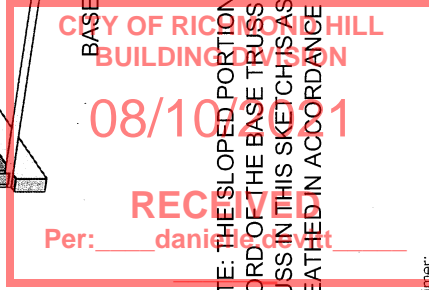
Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

SKETCH FROM BCSI-CANADA 2013

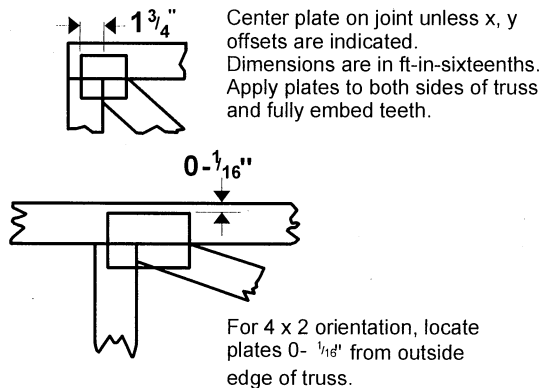


Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

Symbols

PLATE LOCATION AND ORIENTATION



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

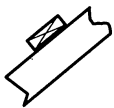
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

4 x 4

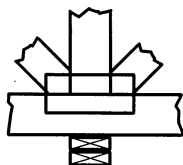
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

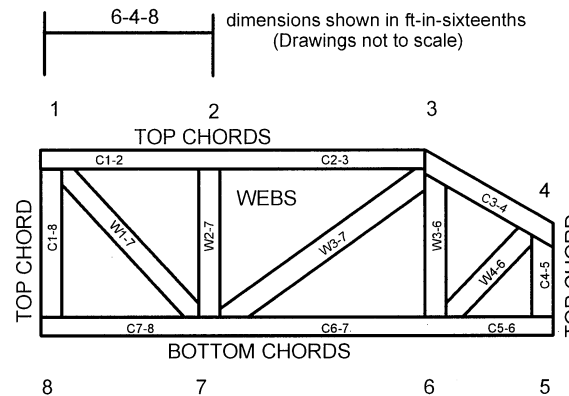


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

ST. LOUIS, MO
BUILDING DIVISION

08/10/2021

RECEIVED