

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 56
 Lot #:
 Elevation: B / UNIT12BLK282

Job Track: 51012
 PlanLog: 203502
 Layout ID: 413113
 Ref #
 Page: 1 of 2
 Date: 07-08-2021
 Designer: Andrew Conway
 Sales Rep: Mario DiCano

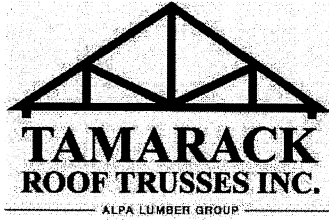
Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	T10G GABLE	6 /12	22-08-08	8-01-04	2 x 4	1-05-00	1-02-00 8-01-04	243.75 153.67		
	1 2-ply	T101 Half Hip Girder	6 /12	19-05-08	4-01-04	2 x 4 2 x 6	1-03-08	1-02-00 4-01-04	182.72 116.00		
	1 2-ply	T101Z Half Hip Girder	6 /12	19-05-08	4-01-04	2 x 4 2 x 6	1-03-08	1-02-00 4-01-04	182.72 116.00		
	2	T102 Half Hip	6 /12	19-05-08	5-01-04	2 x 4	1-03-08	1-02-00 5-01-04	159.13 101.33		
	2	T103 Half Hip	6 /12	19-05-08	6-01-04	2 x 4	1-03-08	1-02-00 6-01-04	172.24 109.67		
	2	T104 Half Hip	6 /12	19-05-08	7-01-04	2 x 4	1-03-08	1-02-00 7-01-04	173.04 108.00		
	8	T105 Half Hip	6 /12	19-05-08	8-01-04	2 x 4	1-03-08	1-02-00 8-01-04	689.37 434.67		
	2	T106 Half Hip	6 /12	19-05-08	9-01-04	2 x 4	1-03-08	1-02-00 9-01-04	181.02 114.00		
	1	T107 Hip Girder	6 /12	9-06-00	2-04-12	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	37.9 25.50		
	2	T108 Hip	6 /12	9-06-00	4-10-12	2 x 4	1-03-08 1-03-08	2-08-00 2-08-00	99.25 67.00		
	1	T109 Hip	6 /12	9-06-00	3-10-12	2 x 4	1-03-08 1-03-08	2-08-00 2-08-00	45.71 31.67		
	1 2-ply	T110 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		
	2	PB101 Piggyback	6 /12	5-07-00	2-00-00	2 x 4		2-00-00	32.19 22.67		
	4	PB102 Piggyback	6 /12	5-07-00	2-09-08	2 x 4		2-09-08	58.98 40.00		

OFFICE OF RICHMOND HILL
 BUILDING DIVISION

09/14/2021

RECEIVED
 Per: danielle.devitt



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Lumber Yard: TAMARACK LUMBER
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 Project: CENTREFIELD
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 Model: BLOCK 56
 Lot #:
 Elevation: B / UNIT12BLK282

Job Track: 51012
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 Page: 2 of 2
 Date: 07-08-2021
 Designer: Andrew Conway
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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	PB103G GABLE	6 /12	8-10-00	2-09-08	2 x 4		2-09-08	51.18 35.33		
	11	J01 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	184.74 117.33		
	5	J03 Jack-Open	4 /12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		
	2	J11 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 6-09	1-02-00 2-01-08	15.69 10.67		
	2	J12 Jack-Open	6 /12	2-05-08	2-04-12	2 x 4	1-03-08	1-02-00 2-04-12	17.09 12.00		
	3	J13 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 1-01	1-02-00 2-01-08	21.97 14.00		
	1	J14 Jack-Open	6 /12	2-00-00	3-01-08	2 x 4	1-03-08 1-10-15	1-02-00 2-02-00	9.87 6.00		
	1	J15 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 3-11-09	1-02-00 2-01-08	11.74 7.33		
	1	J16 Jack-Open	6 /12	3-10-15	3-01-08	2 x 4	1-03-08 1-11-09	1-02-00 3-01-08	14.29 8.67		

TOTAL # TRUSS= 62

TOTAL BFT OF ALL TRUSSES= 1722.51

BFT.

TOTAL WEIGHT OF ALL TRSSES 2693.28 LBS

HARDWARE

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

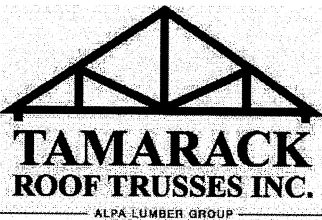
TOTAL NUMBER OF ITEMS= 4

CITY OF RICHMOND HILL
 BUILDING DIVISION

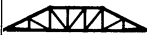













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Per: danielle.devitt

 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	DELIVERY SHIPLIST							
	Lumber Yard: TAMARACK LUMBER						Job Track: 51012	
	Builder: ROYAL PINE HOMES						PlanLog: 203502	
	Project: CENTREFIELD						Layout ID: 413114	
	Location: RICHMOND HILL						Ref #	
Model: BLOCK 56						Page: 1 of 2		
Lot #:						Date: 07-08-2021		
Elevation: B1 / UNIT11BLK282						Designer: Andrew Conway		
						Sales Rep: Mario DiCano		

Roof Trusses

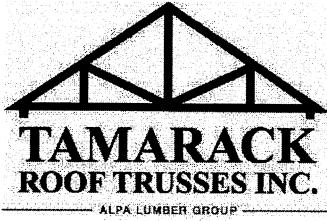
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	5	T11 Piggyback Base	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1279.34 775.00		
	4	T11A Piggyback Base	6 /12	38-03-00	8-01-04	2 x 6	1-03-08	1-02-00 1-02-00	886.16 540.00		
	1	T11G GABLE	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	272.06 169.67		
	1	T11GB GABLE	6 /12	37-03-00	8-01-04	2 x 6	1-03-08	1-02-00 5-03-00	236.81 147.83		
	1 3-ply	T111 Piggyback Base Girder	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	843.15 519.00		
	1	T117 Half Hip Girder	6 /12	8-04-08	2-04-12	2 x 4	1-03-08	1-02-00 2-04-12	34.08 22.83		
	1	T118 Half Hip	6 /12	8-04-08	4-10-12	2 x 4		2-08-00 4-10-12	39.12 26.00		
	1	T119 Half Hip	6 /12	8-04-08	5-10-12	2 x 4		2-08-00 5-10-12	45.3 29.67		
	1	T120 Monopitch	6 /12	8-04-08	6-10-04	2 x 4		2-08-00 6-10-04	41.6 27.33		
	1 3-ply	T121 Jack-Closed Girder	6 /12	8-06-08	6-11-04	2 x 4 2 x 6		2-08-00 6-11-04	141.44 94.00		
	8	PB06 Piggyback	6 /12	17-08-00	4-05-00	2 x 4			410.9 256.00		
	1	PB06G GABLE	6 /12	17-08-00	4-05-00	2 x 4			50.76 31.00		
	1 3-ply	PB06Z Piggyback	6 /12	17-08-00	4-05-00	2 x 4			154.09 96.00		
	1	PB104 Piggyback	6 /12	17-08-00	3-11-04	2 x 4			57.06 37.00		

CITY OF RICHMOND HILL
BUILDING DIVISION





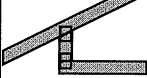
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 <p>TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	DELIVERY SHIPLIST			
	Lumber Yard:	TAMARACK LUMBER	Job Track:	51012
	Builder:	ROYAL PINE HOMES	PlanLog:	203502
	Project:	CENTREFIELD	Layout ID:	413114
	Location:	RICHMOND HILL	Ref #	
	Model:	BLOCK 56	Page:	2 of 2
Lot #:		Date:	07-08-2021	
Elevation:	B1 / UNIT11BLK282	Designer:	Andrew Conway	
		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	PB105G Piggyback	6 /12	8-10-00	2-08-00	2 x 4		2-09-08	25.27 17.67		
	5	J03 Jack-Open	4 /12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		
	1	J11 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 6-09	1-02-00 2-01-08	7.85 5.33		
	3	J12 Jack-Open	6 /12	2-05-08	2-04-12	2 x 4	1-03-08	1-02-00 2-04-12	25.63 18.00		
	1	J13 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 1-01	1-02-00 2-01-08	7.32 4.67		

TOTAL # TRUSS= 45

TOTAL BFT OF ALL TRUSSES= 2850.33

BFT.

TOTAL WEIGHT OF ALL TRSSES 4608.21 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
3	Hardware	LUS24	
4	Hardware	LJS26DS	
1	Hardware	HGUS26-3	
14	Hardware	H2.5T	

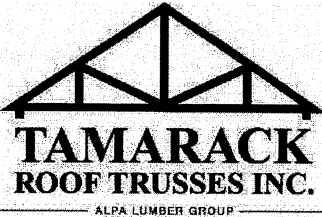
TOTAL NUMBER OF ITEMS= 22

CITY OF RICHMOND HILL
BUILDING DIVISION

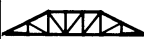
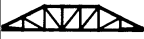

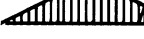





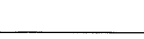
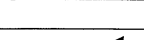



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 <p>TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	<h2>DELIVERY SHIPLIST</h2>					
	Lumber Yard:	TAMARACK LUMBER			Job Track:	51012
	Builder:	ROYAL PINE HOMES			PlanLog:	203502
	Project:	CENTREFIELD			Layout ID:	413115
	Location:	RICHMOND HILL			Ref #	
	Model:	BLOCK 56			Page:	1 of 2
Lot #:				Date:	07-08-2021	
Elevation:	B / UNIT10BLK282			Designer:	Andrew Conway	
				Sales Rep:	Mario DiCano	

Roof Trusses

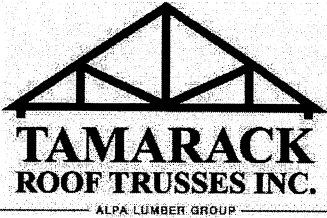
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	5	T11 Piggyback Base	6 / 12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1279.34 775.00		
	4	T11B Piggyback Base	6 / 12	45-00-08	8-01-04	2 x 6	1-03-08	1-02-00 1-02-00	1007.58 617.33		
	1	T11G GABLE	6 / 12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	272.06 169.67		
	1	T11GB GABLE	6 / 12	37-03-00	8-01-04	2 x 6	1-03-08	1-02-00 5-03-00	236.81 147.83		
	1	T122 Hip Girder	6 / 12	8-07-00	2-04-12	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	35.14 23.67		
	1	T123 Common	6 / 12	8-03-08	3-03-12	2 x 4	1-03-08	1-02-00 1-03-12	32.19 20.83		
	1 3-ply	T127 Monopitch Girder	6 / 12	8-05-08	4-09-12	2 x 4 2 x 6		2-08-00 2-08-12	124.02 84.50		
	8	PB06 Piggyback	6 / 12	17-08-00	4-05-00	2 x 4			410.9 256.00		
	1	PB06G GABLE	6 / 12	17-08-00	4-05-00	2 x 4			50.76 31.00		
	1	PB104 Piggyback	6 / 12	17-08-00	3-11-04	2 x 4			57.06 37.00		
	1	PB105G Piggyback	6 / 12	8-10-00	2-08-00	2 x 4			25.27 17.67		
	2	J11 Jack-Open	6 / 12	1-10-15	2-01-08	2 x 4	1-03-08 6-09	1-02-00 2-01-08	15.69 10.67		
	2	J12 Jack-Open	6 / 12	2-05-08	2-04-12	2 x 4	1-03-08	1-02-00 2-04-12	17.09 12.00		
	2	J13 Jack-Open	6 / 12	1-10-15	2-01-08	2 x 4	1-03-08 1-01	1-02-00 2-01-08	14.65 9.33		

CITY OF RICHMOND HILL
BUILDING DIVISION

08/14/2021

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Per: danielle.devitt

DELIVERY SHIPLIST																																	
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	<table border="0"> <tr> <td>Lumber Yard:</td> <td>TAMARACK LUMBER</td> <td>Job Track:</td> <td>51012</td> </tr> <tr> <td>Builder:</td> <td>ROYAL PINE HOMES</td> <td>PlanLog:</td> <td>203502</td> </tr> <tr> <td>Project:</td> <td>CENTREFIELD</td> <td>Layout ID:</td> <td>413115</td> </tr> <tr> <td>Location:</td> <td>RICHMOND HILL</td> <td>Ref #</td> <td></td> </tr> <tr> <td>Model:</td> <td>BLOCK 56</td> <td>Page:</td> <td>2 of 2</td> </tr> <tr> <td>Lot #:</td> <td></td> <td>Date:</td> <td>07-08-2021</td> </tr> <tr> <td>Elevation:</td> <td>B / UNIT10BLK282</td> <td>Designer:</td> <td>Andrew Conway</td> </tr> <tr> <td></td> <td></td> <td>Sales Rep:</td> <td>Mario DiCano</td> </tr> </table>	Lumber Yard:	TAMARACK LUMBER	Job Track:	51012	Builder:	ROYAL PINE HOMES	PlanLog:	203502	Project:	CENTREFIELD	Layout ID:	413115	Location:	RICHMOND HILL	Ref #		Model:	BLOCK 56	Page:	2 of 2	Lot #:		Date:	07-08-2021	Elevation:	B / UNIT10BLK282	Designer:	Andrew Conway			Sales Rep:	Mario DiCano
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Roof Trusses

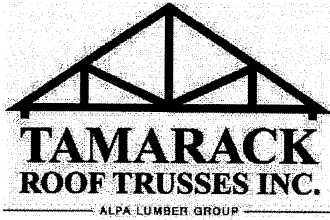
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
TOTAL # TRUSS= 33		TOTAL BFT OF ALL TRUSSES= 2212.5					BFT.	TOTAL WEIGHT OF ALL TRSSES 3578.55 LBS			

HARDWARE

QTY	TYPE	MODEL	LENGTH
4	Hardware	LJS26DS	
14	Hardware	H2.5T	
2	Hardware	LGT3	

TOTAL NUMBER OF ITEMS= 20

<p>CITY OF RICHMOND HILL BUILDING DIVISION</p> <p>09/14/2021</p> <p>RECEIVED</p> <p>Per: <u>danielle.devitt</u></p>



DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 56
 Lot #:
 Elevation: B / UNIT9BLK282

Job Track: 51012
 PlanLog: 203502
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 Date: 07-08-2021
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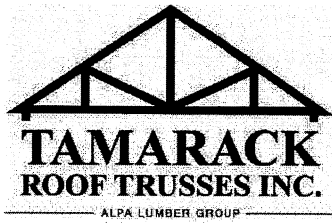
Roof Trusses

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	2	T10G GABLE	6 /12	22-08-08	8-01-04	2 x 4	1-05-00	1-02-00 8-01-04	243.75 153.67		
	1 2-ply	T101 Half Hip Girder	6 /12	19-05-08	4-01-04	2 x 4 2 x 6	1-03-08	1-02-00 4-01-04	182.72 116.00		
	1	T102 Half Hip	6 /12	19-05-08	5-01-04	2 x 4	1-03-08	1-02-00 5-01-04	79.56 50.67		
	1	T103 Half Hip	6 /12	19-05-08	6-01-04	2 x 4	1-03-08	1-02-00 6-01-04	86.12 54.83		
	1	T104 Half Hip	6 /12	19-05-08	7-01-04	2 x 4	1-03-08	1-02-00 7-01-04	86.52 54.00		
	1	T104X Half Hip	6 /12	19-05-08	7-01-04	2 x 4	1-03-08	1-02-00 7-01-04	88.21 54.67		
	3	T105 Half Hip	6 /12	19-05-08	8-01-04	2 x 4	1-03-08	1-02-00 8-01-04	258.51 163.00		
	5	T105X Piggyback Base	6 /12	19-05-08	8-01-04	2 x 4	1-03-08	1-02-00 8-01-04	439.32 275.00		
	1	T106 Half Hip	6 /12	19-05-08	9-01-04	2 x 4	1-03-08	1-02-00 9-01-04	90.51 57.00		
	1	T106X Half Hip	6 /12	19-05-08	9-01-04	2 x 4	1-03-08	1-02-00 9-01-04	92.67 58.17		
	1 2-ply	T112 Half Hip Girder	6 /12	20-10-08	6-01-04	2 x 4 2 x 6		5-08 6-01-04	215.22 127.67		
	1 2-ply	T113 Flat	0 /12	9-01-08	1-06-00	2 x 4		1-06-00 1-06-00	81.18 40.33		
	1	T114 Monopitch	6 /12	9-01-08	5-06-00	2 x 4		1-02-00 5-06-00	41.45 26.50		
	5	T115 Monopitch	6 /12	9-10-08	6-01-04	2 x 4	1-03-08	1-02-00 6-01-04	217.09 137.50		

CITY OF RICHMOND HILL
 BUILDING DIVISION

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Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 56
 Lot #:
 Elevation: B / UNIT9BLK282

Job Track: 51012
 PlanLog: 203502
 Layout ID: 413116
 Ref #
 Page: 2 of 3
 Date: 07-08-2021
 Designer: Andrew Conway
 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 2-ply	T116 Flat Girder	0 /12	9-10-08	1-06-00	2 x 4 2 x 6		1-06-00 1-06-00	78.66 50.00		
	2	T128 Hip Girder	6 /12	9-06-00	3-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	80.58 51.67		
	2	PB101 Piggyback	6 /12	5-07-00	2-00-00	2 x 4		2-00-00	32.19 22.67		
	4	PB102 Piggyback	6 /12	5-07-00	2-09-08	2 x 4		2-09-08	58.98 40.00		
	2	PB103G GABLE	6 /12	8-10-00	2-09-08	2 x 4		2-09-08	51.18 35.33		
	7	J01 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	117.56 74.67		
	5	J03 Jack-Open	4 /12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		
	4	J13 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 1-01	1-02-00 2-01-08	29.29 18.67		
	1	J14 Jack-Open	6 /12	2-00-00	3-01-08	2 x 4	1-03-08 1-10-15	1-02-00 2-02-00	9.87 6.00		
	1	J15 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 3-11-09	1-02-00 2-01-08	11.74 7.33		
	1	J16 Jack-Open	6 /12	3-10-15	3-01-08	2 x 4	1-03-08 1-11-09	1-02-00 3-01-08	14.29 8.67		
	3	J17 Jack-Open	6 /12	1-10-15	2-01-08	2 x 4	1-03-08 1-11-09	1-02-00 2-01-08	28.88 18.00		
	5	J18 Jack-Open	6 /12	3-10-08	3-01-04	2 x 4	1-03-08	1-02-00 3-01-04	59.82 36.67		

CITY OF RICHMOND HILL
 BUILDING DIVISION

09/14/2021

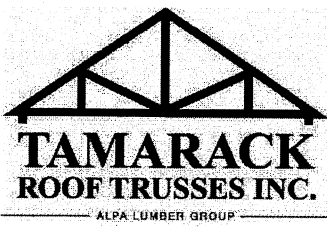
RECEIVED
 Per: danielle.devitt

TOTAL # TRUSS= 67

TOTAL BFT OF ALL TRUSSES= 1772.02

BFT.

TOTAL WEIGHT OF ALL TRSSES 2805.68 LBS

DELIVERY SHIPLIST		
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: BLOCK 56 Lot #: Elevation: B / UNIT9BLK282	Job Track: 51012 PlanLog: 203502 Layout ID: 413116 Ref # Page: 3 of 3 Date: 07-08-2021 Designer: Andrew Conway Sales Rep: Mario DiCano

HARDWARE

QTY	TYPE	MODEL	LENGTH
6	Hardware	LUS24	
2	Hardware	HGUS26-2	

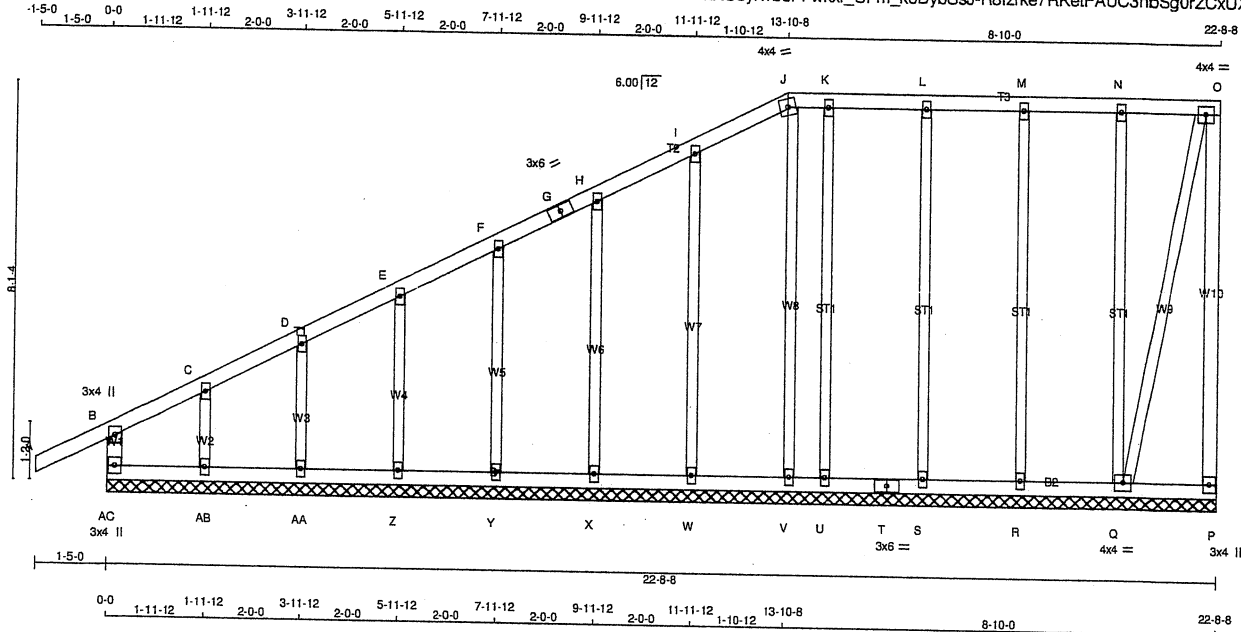
TOTAL NUMBER OF ITEMS= 8

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JOB NAME 412868	TRUSS NAME T10G	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 10:22:39 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-R8Izrke7RKetFAUC3nbSg0rZCxUXPq?LTSBv8z0Tve



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
AC- B	2x4	DRY	No.2	SPF	
A - G	2x4	DRY	No.2	SPF	
G - J	2x4	DRY	No.2	SPF	
J - O	2x4	DRY	No.2	SPF	
P - O	2x4	DRY	No.2	SPF	
AC- T	2x4	DRY	No.2	SPF	
T - P	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT	2-0-0	OC.			

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD LC1	MAX	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. (PLF)	CS1 (LC)	UNBRAC LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM	TO		FR-TO	
AC-B	-271 / 0	0.0	0.0	0.03 (1)	Q-N	-200 / 0
A-B	0 / 30	-91.8	-91.8	0.14 (1)	R-M	-182 / 0
B-C	-21 / 0	-91.8	-91.8	0.14 (1)	S-L	-190 / 0
C-D	0 / 10	-91.8	-91.8	0.05 (1)	U-K	-149 / 0
D-E	0 / 9	-91.8	-91.8	0.05 (1)	V-J	-95 / 0
E-F	0 / 14	-91.8	-91.8	0.04 (1)	AB-C	-118 / 0
F-G	0 / 16	-91.8	-91.8	0.04 (1)	AA-D	-196 / 0
G-H	0 / 16	-91.8	-91.8	0.04 (1)	Z-E	-179 / 0
H-I	0 / 19	-91.8	-91.8	0.05 (1)	Y-F	-183 / 0
I-J	0 / 13	-91.8	-91.8	0.05 (1)	X-H	-180 / 0
J-K	0 / 20	-91.8	-91.8	0.03 (1)	W-I	-200 / 0
K-L	0 / 20	-91.8	-91.8	0.05 (1)	Q-O	-79 / 0
L-M	0 / 20	-91.8	-91.8	0.05 (1)		
M-N	0 / 20	-91.8	-91.8	0.05 (1)		
N-O	0 / 20	-91.8	-91.8	0.05 (1)		
P-O	0 / 0	0.0	0.0	0.00 (1)		
AC-AB	0 / 0	-18.5	-18.5	0.02 (4)		
AB-AA	-4 / 0	-18.5	-18.5	0.02 (4)		
AA-Z	-9 / 0	-18.5	-18.5	0.01 (4)		
Z-Y	-12 / 0	-18.5	-18.5	0.01 (4)		
Y-X	-14 / 0	-18.5	-18.5	0.01 (4)		
X-W	-16 / 0	-18.5	-18.5	0.02 (4)		
W-V	-18 / 0	-18.5	-18.5	0.02 (4)		
V-U	-20 / 0	-18.5	-18.5	0.02 (4)		
U-T	-20 / 0	-18.5	-18.5	0.01 (4)		
T-S	-20 / 0	-18.5	-18.5	0.02 (4)		
S-R	-20 / 0	-18.5	-18.5	0.02 (4)		
R-Q	-20 / 0	-18.5	-18.5	0.02 (4)		
Q-P	0 / 0	-18.5	-18.5	0.02 (4)		

TOTAL WEIGHT = 4 X 122 = 488 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.14/1.00 (A-B:1), BC=0.02/1.00 (Q-R:4), WB=0.25/1.00 (N-Q:1), SS=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 373 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.59 (J) (INPUT = 0.90)
JSI METAL= 0.08 (I) (INPUT = 1.00)



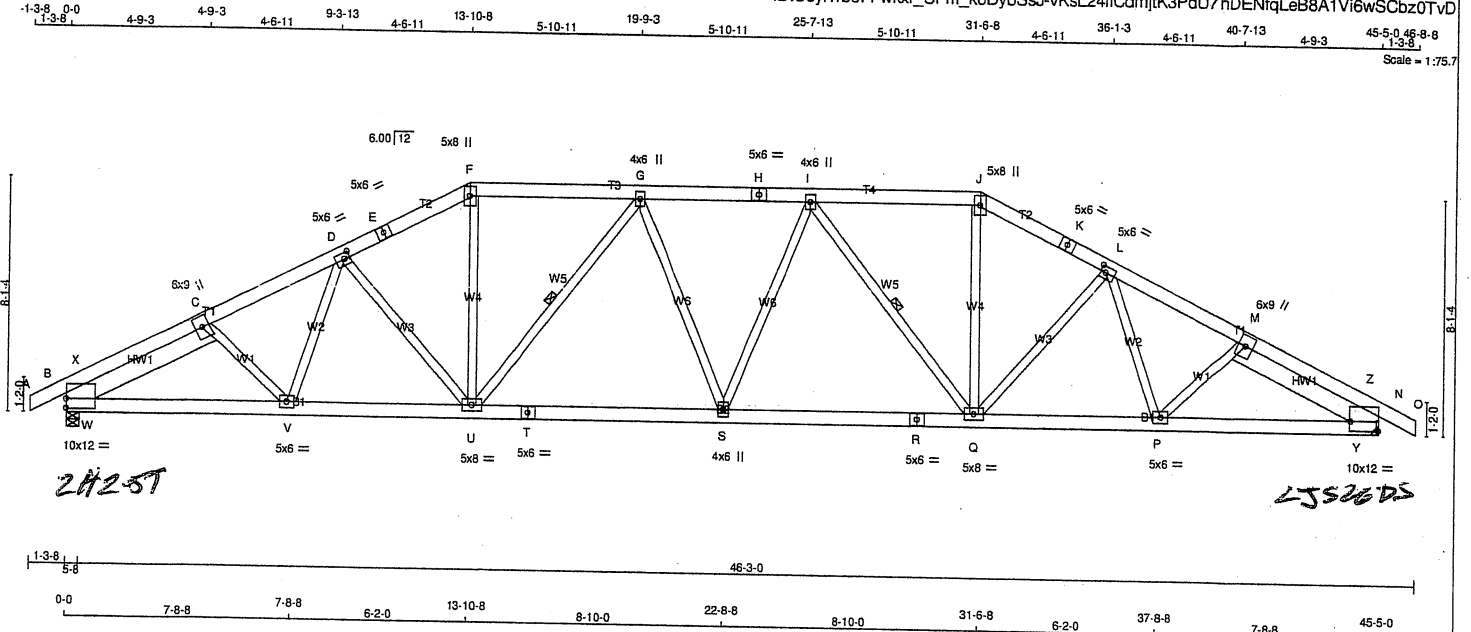
Structural component only
DWG# T-2121161

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JOB NAME 412868	TRUSS NAME T11	QUANTITY 15	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
TRUSS DESC.					

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 10:22:40 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - E	2x6	DRY	No.2	SPF		
F - H	2x6	DRY	No.2	SPF		
I - J	2x6	DRY	No.2	SPF		
K - O	2x6	DRY	No.2	SPF		
P - R	2x6	DRY	No.2	SPF		
S - T	2x6	DRY	No.2	SPF		
U - V	2x6	DRY	No.2	SPF		
W - X	2x6	DRY	No.2	SPF		
Y - Z	2x6	DRY	No.2	SPF		

REINFORCING MEMBERS	SIZE	DRY	LUMBER	DESCR.
HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF

ALL WEBS	SIZE	DRY	LUMBER	DESCR.
DRY: SEASONED LUMBER.	2x4	DRY	No.2	SPF

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMBMW1m	MT20	10.0	12.0	4.00	
C	TMBWW-t	MT20	6.0	9.0		
D	TMBWW-t	MT20	5.0	6.0	2.50	2.25
E, H, K	TS-t	MT20	5.0	6.0		
F	TTW-p	MT20	5.0	8.0		
G	TMWW-t	MT20	4.0	6.0		
I	TMWW-t	MT20	4.0	6.0		
J	TTW-p	MT20	5.0	8.0		
L	TMWW-t	MT20	5.0	6.0	2.50	2.25
M	TMWW-t	MT20	6.0	9.0		
N	TMBMW1m	MT20	10.0	12.0	4.00	Edge
P	BMWW-t	MT20	5.0	6.0		
Q	BMWW-t	MT20	5.0	8.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW-t	MT20	4.0	6.0		
T	BS-t	MT20	5.0	6.0		
U	BMWW-t	MT20	5.0	8.0		
V	BMWW-t	MT20	5.0	6.0		

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
B	3675	0	3709	195
N	3675	0	3709	0

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

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 1082 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1082 LBS. FACTORED UPLIFT

PROVIDE FOR 195 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS	1ST CASE	MAX. MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW
B	2713	1634 / 0
N	2713	1634 / 0

HORIZONTAL REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
B	0 / 0	0 / 0	625 / 0	0 / 0
N	0 / 0	59 / -1073	625 / 0	0 / 0

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

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

LOADING
TOTAL LOAD CASES: (18)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORZ. LOAD (PLF)	MAX. FACTORED LENGTH (FT)
FR-TO	A-B	0 / 1	-115.2	-115.2	0.09 (2)
	B-X	-4338 / 1145	-115.2	-115.2	0.18 (2)
	X-C	-2853 / 891	-115.2	-115.2	0.15 (2)
	C-D	-5520 / 1704	-115.2	-115.2	0.33 (2)
	D-E	-5000 / 1604	-115.2	-115.2	0.29 (2)
	E-F	-5000 / 1604	-115.2	-115.2	0.29 (2)
	F-G	-4482 / 1504	-115.2	-115.2	0.36 (1)
	G-H	-5228 / 1649	-115.2	-115.2	0.41 (1)
	H-I	-5228 / 1649	-115.2	-115.2	0.41 (1)
	I-J	-4482 / 1504	-115.2	-115.2	0.36 (1)
	J-K	-5000 / 1604	-115.2	-115.2	0.29 (3)
	K-L	-5000 / 1604	-115.2	-115.2	0.29 (3)
	L-M	-5520 / 1705	-115.2	-115.2	0.33 (3)
	M-Z	-2853 / 893	-115.2	-115.2	0.15 (3)
	Z-N	-4338 / 1148	-115.2	-115.2	0.18 (3)
	N-O	0 / 1	-115.2	-115.2	0.09 (3)
	B-W	-856 / 2550	-39.5	-39.5	0.33 (1)
	W-V	-1532 / 4864	-39.5	-39.5	0.69 (1)
	V-U	-1432 / 4893	-39.5	-39.5	0.71 (1)
	U-T	-1381 / 5160	-39.5	-39.5	0.76 (1)
	T-S	-1381 / 5160	-39.5	-39.5	0.76 (1)
	S-R	-1327 / 5160	-39.5	-39.5	0.76 (1)
	R-Q	-1327 / 5160	-39.5	-39.5	0.76 (1)
	Q-P	-1237 / 4893	-39.5	-39.5	0.71 (1)
	P-Y	-1338 / 4864	-39.5	-39.5	0.69 (1)
	Y-N	-864 / 2550	-39.5	-39.5	0.33 (1)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 33.4 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 57.3 PSF

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR, EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.51")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL) = L/180 (3.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

CSI: TC=0.41/1.00 (G-I-1), BC=0.76/1.00 (S-U-1), WB=0.65/1.00 (G-U-3), SS=0.24/1.00 (I-J-2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMBINATION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (T) (INPUT = 0.90)
JSI METAL= 0.92 (T) (INPUT = 1.00)



Structural component only
DWG# T-2121162

JOB NAME 412868	TRUSS NAME T11	QUANTITY 15	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 10:22:40 2021 Page 2
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TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (31-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe} , BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.



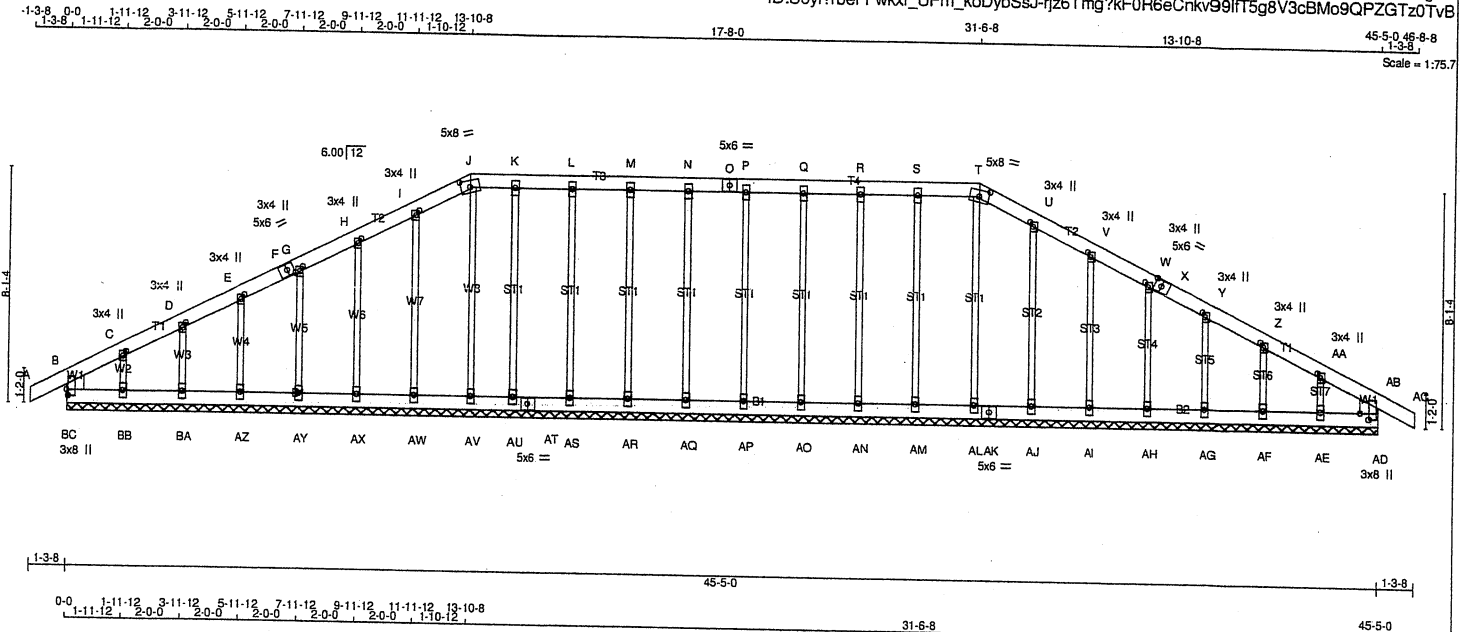
Structural component only
DWG# T-2121162 *ML*

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

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Per: danielle.devitt



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
BC - B	2x8	DRY No.2	SPF
A - F	2x6	DRY No.2	SPF
F - O	2x6	DRY No.2	SPF
J - O	2x6	DRY No.2	SPF
O - T	2x6	DRY No.2	SPF
T - X	2x6	DRY No.2	SPF
X - AC	2x6	DRY No.2	SPF
AD - AB	2x8	DRY No.2	SPF
BC - AT	2x6	DRY No.2	SPF
AT - AK	2x6	DRY No.2	SPF
AK - AD	2x6	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
ALL GABLE WEBS	2x3	DRY No.2	SPF
DRY: SEASONED LUMBER.			

GABLE STUDS SPACED AT 2'-0" O.C.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B, AB, AD, BC					
C, D, E, G, H, I, U, V, W, Y, Z, AA					
C TMW+w	MT20	3.0	4.0	2.00	1.25
F TS-t	MT20	5.0	6.0	2.50	2.75
J TTW-m	MT20	5.0	8.0	2.75	4.00
K, L, M, N, P, Q, R, S					
K TMW+w	MT20	3.0	6.0		
O TS-t	MT20	5.0	6.0		
T TTW-m	MT20	5.0	8.0	2.75	4.00
X TS-t	MT20	5.0	6.0	2.50	2.75
AD TBMV1+p	MT20	3.0	8.0	2.50	3.75
AE, AF, AG, AH, AI, AJ, AL, AM, AN, AO, AP, AQ, AR, AS, AU, AV, AW, AX, AY, AZ, BA, BB					
AE BMV1+w	MT20	3.0	6.0		
AK BS-t	MT20	5.0	6.0		
AT BS-t	MT20	5.0	6.0		
BC TBMV1+p	MT20	3.0	8.0	2.50	0.50

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX FACTORED (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (PLF)
FR-TO	BC-B	-260 / 0	0.0	0.0	0.02 (1)	7.81	AL-T	-186 / 0	0.21 (1)
BC-B	A-B	0 / 29	-91.8	-91.8	0.06 (1)	10.00	AM-S	-190 / 0	0.21 (1)
B-C	B-C	-50 / 0	-91.8	-91.8	0.05 (1)	6.25	AN-R	-183 / 0	0.21 (1)
C-D	C-D	-24 / 0	-91.8	-91.8	0.02 (1)	6.25	AO-Q	-183 / 0	0.21 (1)
D-E	D-E	-19 / 0	-91.8	-91.8	0.02 (1)	6.25	AP-P	-183 / 0	0.21 (1)
E-F	E-F	-13 / 0	-91.8	-91.8	0.02 (1)	6.25	AQ-N	-183 / 0	0.21 (1)
F-G	F-G	-13 / 0	-91.8	-91.8	0.02 (1)	6.25	AR-M	-184 / 0	0.21 (1)
G-H	G-H	-9 / 0	-91.8	-91.8	0.02 (1)	10.00	AS-L	-184 / 0	0.21 (1)
H-I	H-I	-5 / 0	-91.8	-91.8	0.02 (1)	10.00	AU-K	-163 / 0	0.18 (1)
I-J	I-J	-3 / 0	-91.8	-91.8	0.02 (1)	10.00	AJ-U	-183 / 0	0.14 (1)
J-K	J-K	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AI-V	-182 / 0	0.09 (1)
K-L	K-L	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AH-W	-182 / 0	0.06 (1)
L-M	L-M	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AG-Y	-180 / 0	0.04 (1)
M-N	M-N	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AF-Z	-188 / 0	0.03 (1)
N-O	N-O	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AE-AA	-137 / 0	0.02 (1)
O-P	O-P	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AV-J	-159 / 0	0.18 (1)
P-Q	P-Q	0 / 0	-91.8	-91.8	0.02 (1)	10.00	BB-C	-137 / 0	0.02 (1)
Q-R	Q-R	0 / 0	-91.8	-91.8	0.02 (1)	10.00	BA-D	-188 / 0	0.03 (1)
R-S	R-S	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AZ-E	-180 / 0	0.04 (1)
S-T	S-T	0 / 0	-91.8	-91.8	0.02 (1)	10.00	AY-G	-181 / 0	0.06 (1)
T-U	T-U	-2 / 0	-91.8	-91.8	0.02 (1)	10.00	AX-H	-183 / 0	0.10 (1)
U-V	U-V	-5 / 0	-91.8	-91.8	0.02 (1)	10.00	AW-I	-184 / 0	0.14 (1)
V-W	V-W	-9 / 0	-91.8	-91.8	0.02 (1)	10.00			
W-X	W-X	-14 / 0	-91.8	-91.8	0.02 (1)	6.25			
X-Y	X-Y	-14 / 0	-91.8	-91.8	0.02 (1)	6.25			
Y-Z	Y-Z	-20 / 0	-91.8	-91.8	0.02 (1)	6.25			
Z-AA	Z-AA	-24 / 0	-91.8	-91.8	0.02 (1)	6.25			
AA-AB	AA-AB	-51 / 0	-91.8	-91.8	0.05 (1)	6.25			
AB-AC	AB-AC	0 / 29	-91.8	-91.8	0.06 (1)	10.00			
AD-AB	AD-AB	-260 / 0	0.0	0.0	0.02 (1)	7.81			
BC-BB	BC-BB	0 / 33	-18.5	-18.5	0.03 (1)	10.00			
BB-BA	BB-BA	0 / 24	-18.5	-18.5	0.01 (1)	10.00			
BA-AZ	BA-AZ	0 / 17	-18.5	-18.5	0.01 (4)	10.00			
AZ-AY	AZ-AY	0 / 12	-18.5	-18.5	0.01 (4)	10.00			
AY-AX	AY-AX	0 / 8	-18.5	-18.5	0.01 (4)	10.00			
AX-AW	AX-AW	0 / 5	-18.5	-18.5	0.01 (4)	10.00			
AW-AV	AW-AV	0 / 2	-18.5	-18.5	0.01 (4)	10.00			
AV-AU	AV-AU	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AU-AT	AU-AT	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AT-AS	AT-AS	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AS-AR	AS-AR	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AR-AQ	AR-AQ	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AQ-AP	AQ-AP	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AP-AO	AP-AO	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AO-AN	AO-AN	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AN-AM	AN-AM	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AM-AL	AM-AL	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
AL-AK	AL-AK	0 / 2	-18.5	-18.5	0.01 (4)	10.00			
AK-AJ	AK-AJ	0 / 2	-18.5	-18.5	0.01 (4)	10.00			
AJ-AI	AJ-AI	0 / 5	-18.5	-18.5	0.01 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.06/1.00 (AB-AC:1), BC=0.03/1.00 (AD-AE:1), WB=0.21/1.00 (S-AM:1), SSI=0.07/1.00 (AB-AC:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

CITY OF RICHMOND HILL

BUILDING DEPARTMENT

09/14/2021

RECEIVED

Per: danielle.devitt



Structural component only

DWG# T-2121163

JOB NAME 412868	TRUSS NAME T11G	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 10:22:42 2021 Page 2
 ID:U6yi?rbeFFwxf Ufm koDvbSsJ-riz6Tmq?kF0R6eCnkV99lft5g8V3cBMo9QPZGTz0TvB

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO					
AI-AH	0 / 8	-18.5 -18.5	0.01 (4)	10.00			
AH-AG	0 / 12	-18.5 -18.5	0.01 (4)	10.00			
AG-AF	0 / 17	-18.5 -18.5	0.01 (4)	10.00			
AF-AE	0 / 25	-18.5 -18.5	0.01 (1)	10.00			
AE-AD	0 / 33	-18.5 -18.5	0.03 (1)	10.00			



Structural component only
 DWG# T-2121163 *me*

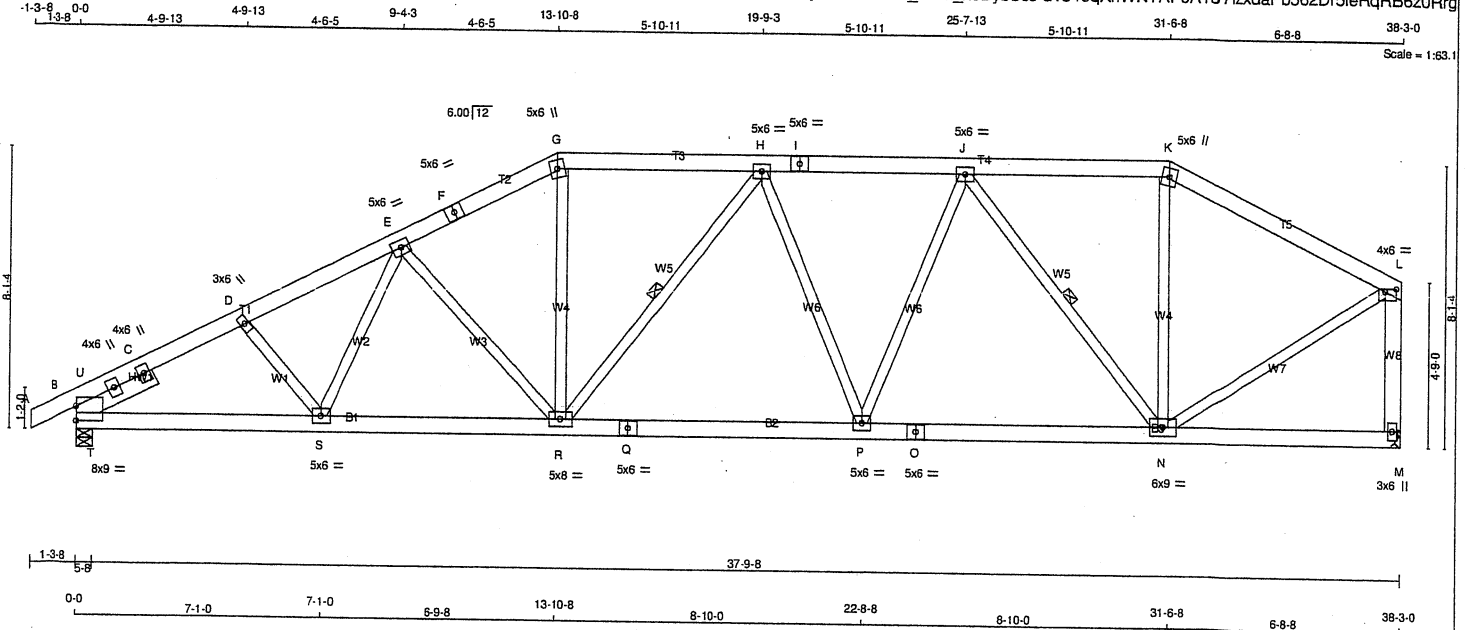


JOB NAME 413139	TRUSS NAME T11A	QUANTITY 8	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 M/Tek Industries, Inc. Thu Jul 1 12:42:59 2021 Page 1

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LUMBER	N.L.G.A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - F	2x6 DRY	No.2	SPF		
F - G	2x6 DRY	No.2	SPF		
G - I	2x6 DRY	No.2	SPF		
I - K	2x6 DRY	No.2	SPF		
K - L	2x6 DRY	No.2	SPF		
M - L	2x6 DRY	No.2	SPF		
B - Q	2x6 DRY	No.2	SPF		
Q - O	2x6 DRY	No.2	SPF		
O - M	2x6 DRY	No.2	SPF		

REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMBMR1-I	MT20	8.0	9.0	5.00	
B	RT-t	MT20	4.0	6.0		
B	RT-t	MT20	4.0	6.0		
D	TMW-w	MT20	3.0	6.0		
E, H, J	TMW-w	MT20	5.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TTW+m	MT20	5.0	6.0		
I	TS-t	MT20	5.0	6.0		
K	TTW+m	MT20	5.0	6.0		
L	TMW-w	MT20	4.0	6.0	1.00	3.75
M	BMV1+p	MT20	3.0	6.0		
N	BMVWW-t	MT20	6.0	9.0		
O	BS-t	MT20	5.0	6.0		
P	BMVWW-t	MT20	5.0	6.0		
Q	BS-t	MT20	5.0	6.0		
R	BMVWW-t	MT20	5.0	8.0		
S	BMVWW-t	MT20	5.0	6.0		

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	IN-SX	IN-SX
B	2237	0	5-8	5-8
M	2109	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS	1ST CASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
B	1579	1050 / 0	0 / 0
M	1491	979 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF H-R, J-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)	WEBS	MAX. FACTORED	MAX	CS1 (LC)
MEMB.	FORCE (LBS)	FROM	TO				MEMB.	FORCE (LBS)		
FR-TO							FR-TO			
A-B	0 / 0	-91.8	-91.8	0.06 (1)	10.00		D-S	0 / 69	0.02 (4)	
B-U	-2908 / 0	-91.8	-91.8	0.05 (1)	4.91		S-E	0 / 65	0.02 (4)	
U-C	-2227 / 0	-91.8	-91.8	0.40 (1)	5.00		E-R	-550 / 0	0.36 (1)	
C-D	-2227 / 0	-91.8	-91.8	0.40 (1)	5.00		R-G	0 / 854	0.14 (1)	
D-E	-3092 / 0	-91.8	-91.8	0.23 (1)	4.89		H-P	-332 / 0	0.15 (1)	
E-F	-2766 / 0	-91.8	-91.8	0.17 (1)	4.89		P-J	0 / 506	0.33 (1)	
F-G	-2766 / 0	-91.8	-91.8	0.17 (1)	4.89		J-N	-1328 / 0	0.08 (1)	
G-H	-2465 / 0	-91.8	-91.8	0.20 (1)	5.04		N-K	0 / 252	0.04 (4)	
H-I	-2543 / 0	-91.8	-91.8	0.19 (1)	5.04		N-L	0 / 1836	0.30 (1)	
I-J	-2543 / 0	-91.8	-91.8	0.18 (1)	6.07		T-U	0 / 2337	0.00 (1)	
J-K	-1563 / 0	-91.8	-91.8	0.18 (1)	5.89		T-C	-2249 / 0	0.17 (1)	
K-L	-1744 / 0	-91.8	-91.8	0.28 (1)	5.89					
M-L	-2060 / 0	0.0	0.0	0.44 (1)	7.06					
B-T	0 / 1311	-18.5	-18.5	0.32 (1)	10.00					
T-S	0 / 2770	-18.5	-18.5	0.49 (1)	10.00					
S-R	0 / 2810	-18.5	-18.5	0.41 (1)	10.00					
R-Q	0 / 2664	-18.5	-18.5	0.39 (1)	10.00					
Q-P	0 / 2664	-18.5	-18.5	0.39 (1)	10.00					
P-O	0 / 2361	-18.5	-18.5	0.35 (1)	10.00					
O-N	0 / 2361	-18.5	-18.5	0.35 (1)	10.00					
N-M	0 / 0	-18.5	-18.5	0.12 (4)	10.00					

TOTAL WEIGHT = 8 X 238 = 1900 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.27")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.27")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

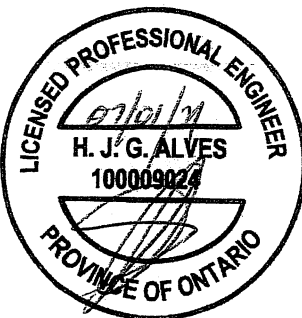
CSI: TC=0.44/1.00 (L-M:1), BC=0.49/1.00 (S-T:1), WB=0.60/1.00 (J-N:1), SS=0.31/1.00 (B-T:1)

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

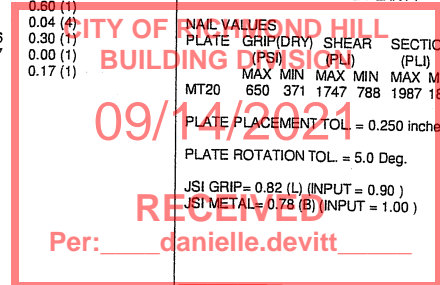
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

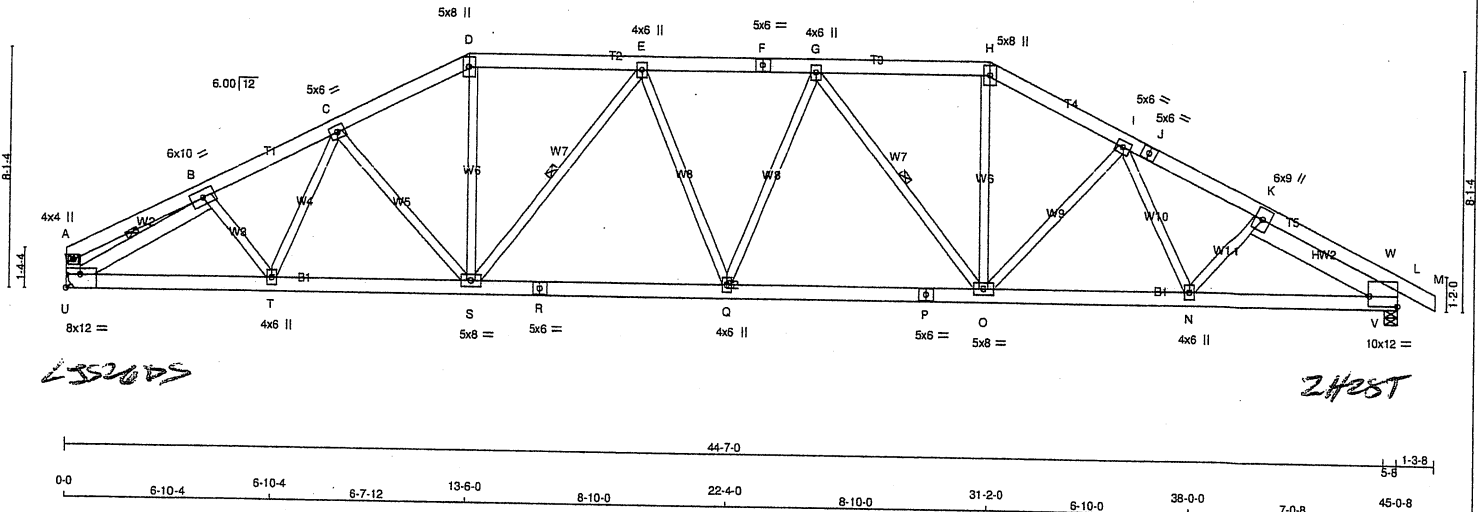
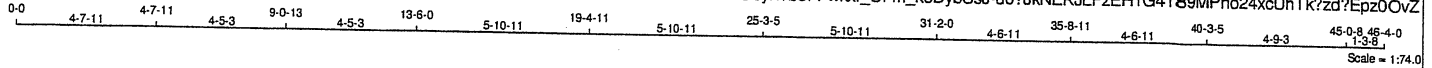


Structural component only
DWG# T-2121237



JOB NAME 413139	TRUSS NAME T11B	QUANTITY 8	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 16:03:38 2021 Page 1
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LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - M	2x6	DRY	No.2	SPF
U - A	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - P	2x6	DRY	No.2	SPF
P - L	2x6	DRY	No.2	SPF

REINFORCING MEMBERS	HW2	2x8 DRY	No.2	SPF
ALL WEBS EXCEPT	U - B	2x6 DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	4.0	4.0		
B	TMWW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	5.0	6.0		
D	TTW+p	MT20	5.0	8.0		
E	TMWW-t	MT20	4.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW-t	MT20	4.0	6.0		
H	TTW+p	MT20	5.0	8.0		
I	TMWW-t	MT20	5.0	6.0		
J	TS-t	MT20	5.0	6.0		
K	TMWW-t	MT20	6.0	9.0		
L	TMBMW1-t	MT20	10.0	12.0	4.00	Edge
N, Q, T						
N	BMWW-t	MT20	4.0	6.0		
O	BMWW-t	MT20	5.0	8.0		
P	BS-t	MT20	5.0	6.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW-t	MT20	5.0	8.0		
U	BMWW-t	MT20	8.0	12.0	5.50	Edge

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	3485	0	0	0
U	3485	0	3487	-196
L	3646	0	3690	0

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

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1004 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1065 LBS FACTORED UPLIFT

PROVIDE FOR 196 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

	1ST CASE	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED	2582	1506 / 0	473 / 0	0 / 0	0 / -1007	604 / 0
U	2582	1506 / 0	473 / 0	0 / 0	59 / -1059	620 / 0
L	2692	1628 / 0	473 / 0	0 / 0	59 / -1059	620 / 0

HORIZONTAL REACTIONS	U	0 / 0	0 / 0	0 / 0	120 / -140	0 / 0	0 / 0
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BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.56 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (18)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC2)	MAX. FACTORED VERT. LOAD (LC3)	MAX. FACTORED VERT. LOAD (LC4)	MAX. FACTORED VERT. LOAD (LC5)	MAX. FACTORED VERT. LOAD (LC6)	MAX. FACTORED VERT. LOAD (LC7)	MAX. FACTORED VERT. LOAD (LC8)	MAX. FACTORED VERT. LOAD (LC9)	MAX. FACTORED VERT. LOAD (LC10)	MAX. FACTORED VERT. LOAD (LC11)	MAX. FACTORED VERT. LOAD (LC12)	MAX. FACTORED VERT. LOAD (LC13)	MAX. FACTORED VERT. LOAD (LC14)	MAX. FACTORED VERT. LOAD (LC15)	MAX. FACTORED VERT. LOAD (LC16)	MAX. FACTORED VERT. LOAD (LC17)	MAX. FACTORED VERT. LOAD (LC18)
FR-TO																					
A-B		-15 / 90		-115.2	-115.2	0.18 (2)	6.25	B-T		-48 / 520		0.08 (3)									
B-C		-5244 / 1613		-115.2	-115.2	0.29 (2)	3.66	T-C		-193 / 181		0.07 (10)									
C-D		-4868 / 1551		-115.2	-115.2	0.27 (2)	3.78	C-S		-695 / 340		0.45 (2)									
D-E		-4364 / 1458		-115.2	-115.2	0.36 (1)	3.87	S-D		-455 / 1675		0.36 (13)									
E-F		-5141 / 1615		-115.2	-115.2	0.40 (1)	3.56	S-E		-1471 / 495		0.66 (3)									
F-G		-5141 / 1615		-115.2	-115.2	0.40 (1)	3.56	E-Q		-142 / 477		0.14 (9)									
G-H		-4431 / 1478		-115.2	-115.2	0.36 (1)	3.85	Q-G		-185 / 424		0.18 (10)									
H-I		-4943 / 1574		-115.2	-115.2	0.29 (3)	3.75	G-O		-1409 / 476		0.63 (2)									
I-J		-5473 / 1687		-115.2	-115.2	0.32 (3)	3.56	O-H		-464 / 1703		0.37 (14)									
J-K		-5473 / 1687		-115.2	-115.2	0.32 (3)	3.56	H-K		-813 / 384		0.53 (3)									
K-W		-2810 / 889		-115.2	-115.2	0.15 (3)	4.88	I-N		-117 / 259		0.04 (9)									
W-L		-4259 / 1142		-115.2	-115.2	0.18 (3)	4.08	N-K		-31 / 366		0.06 (2)									
L-M		0 / 1		-115.2	-115.2	0.09 (3)	10.00	U-B		-5485 / 1539		0.54 (1)									
U-A		-267 / 147		0.0	0.0	0.02 (13)	7.81	B-W		-2931 / 816		0.49 (1)									
U-T		-1416 / 4506		-39.5	-39.5	0.66 (1)	6.25	V-W		-377 / 1904		0.00 (1)									
T-S		-1357 / 4690		-39.5	-39.5	0.69 (1)	6.25														
S-R		-1339 / 5063		-39.5	-39.5	0.74 (1)	6.25														
R-Q		-1339 / 5063		-39.5	-39.5	0.74 (1)	6.25														
Q-P		-1292 / 5085		-39.5	-39.5	0.75 (1)	6.25														
P-O		-1292 / 5085		-39.5	-39.5	0.75 (1)	6.25														
O-N		-1220 / 4842		-39.5	-39.5	0.71 (1)	6.25														
N-V		-1311 / 4828		-39.5	-39.5	0.68 (1)	6.25														
V-L		-660 / 2510		-39.5	-39.5	0.30 (3)	6.25														

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
DL	=	6.0	PSF	
BOT CH.	LL	=	10.5	PSF
DL	=	7.4	PSF	
TOTAL LOAD	=	57.3	PSF	

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF CBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR = EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (1.50")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.24")
ALLOWABLE DEFL.(TL) = $L/180$ (3.00")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.34")

CSI: TC=0.40/1.00 (E-G:1), BC=0.75/1.00 (O-Q:1), WB=0.66/1.00 (E-S:3), SS=0.24/1.00 (D-E:3)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMBINATION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (B) (INPUT = 0.90)
JSI METAL = 0.93 (B) (INPUT = 1.00)



Structural component only
DWG# T-2121238

JOB NAME 413139	TRUSS NAME T11B	QUANTITY 8	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 16:03:38 2021 Page 2
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TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.



Structural component only
DWG# T-2121238 *mn*

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

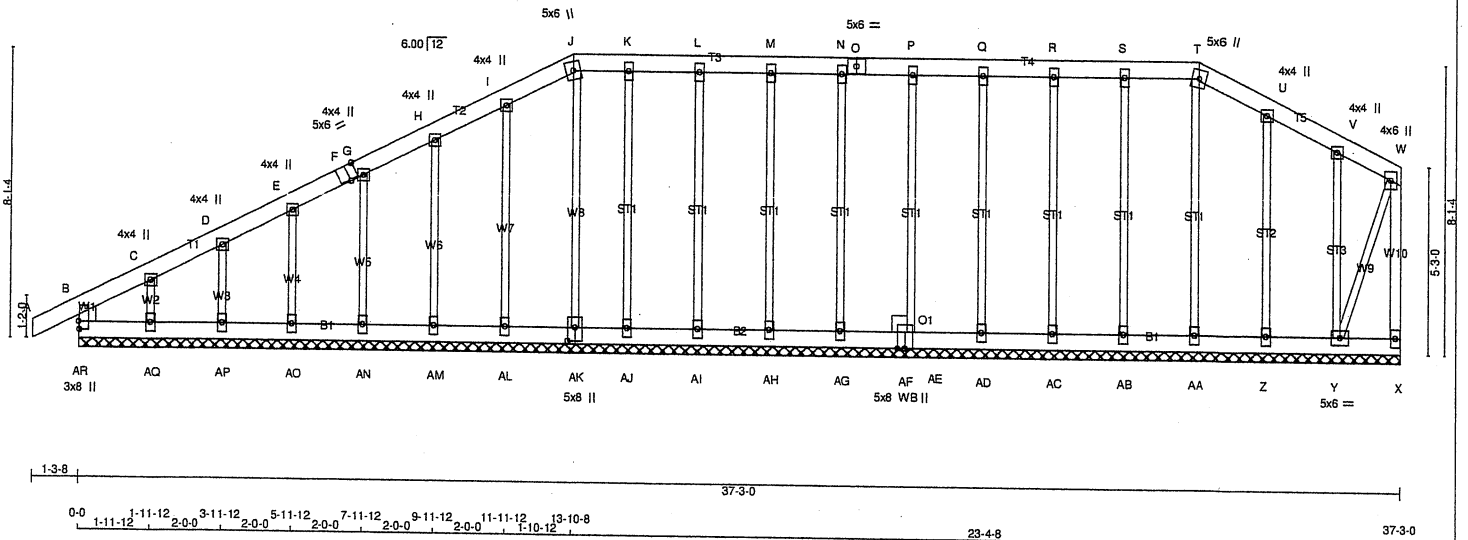
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Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T11GB	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:26 2021 Page 1
ID:hEKUVWZApjnyW9leD6V_jMya4z_-TzZhcHWpNGM3nYmce4L6BDxp6plE3qzXISnPrAz0S5B

1-3-8 0-0 1-11-12 3-11-12 5-11-12 7-11-12 9-11-12 11-11-12 13-10-8 17-8-0 31-6-8 5-8-8 37-3-0
1-3-8 0-0 1-11-12 3-11-12 5-11-12 7-11-12 9-11-12 11-11-12 13-10-8 23-4-8 37-3-0
Scale = 1:61.5



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
AR - B	2x6 DRY	No.2	SPF
A - F	2x6 DRY	No.2	SPF
F - J	2x6 DRY	No.2	SPF
J - O	2x6 DRY	No.2	SPF
O - T	2x6 DRY	No.2	SPF
T - W	2x6 DRY	No.2	SPF
X - W	2x4 DRY	No.2	SPF
AR - AK	2x6 DRY	No.2	SPF
AK - AF	2x6 DRY	No.2	SPF
AF - X	2x6 DRY	No.2	SPF
ALL WEBS	2x3 DRY	No.2	SPF
ALL GABLE WEBS	2x3 DRY	No.2	SPF
DRY: SEASONED LUMBER.			
GABLE STUDS SPACED AT 2'-0" O.C.			

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B, AE, AF, AR				
C, D, E, G, H, I, U, V				
C TMW+w	MT20	4.0	4.0	
F TS-t	MT20	5.0	6.0	Edge 2.75
J TTW+m	MT20	5.0	6.0	
K, L, M, N, P, Q, R, S				
K TMW+w	MT20	3.0	6.0	
O TS-t	MT20	5.0	6.0	
T TTW+m	MT20	5.0	6.0	
W TMW+w	MT20	4.0	6.0	
X BMV1+p	MT20	3.0	6.0	
Y BMVW1-t	MT20	5.0	6.0	
Z, AA, AB, AC, AD, AG, AH, AI, AJ, AL, AM, AN, AO, AP, AQ				
Z BMW1+w	MT20	3.0	6.0	
AE BSW1+l	MT20	5.0	8.0	
AK BSW1+l	MT20	5.0	8.0	4.50 2.50
AR TMBMV1+p	MT20	3.0	8.0	2.75 0.25

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (7)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
AR-B	-255 / 0	0.0	0.0 0.02 (1)	AA-T	-170 / 0	0.19 (1)	
A-B	0 / 29	-91.8	-91.8 0.06 (1)	AB-S	-206 / 0	0.23 (1)	
B-C	-18 / 0	-91.8	-91.8 0.06 (1)	AC-R	-183 / 0	0.21 (1)	
C-D	0 / 14	-91.8	-91.8 0.02 (1)	AD-Q	-183 / 0	0.21 (1)	
D-E	0 / 16	-91.8	-91.8 0.02 (1)	AE-P	-184 / 0	0.21 (1)	
E-F	0 / 23	-91.8	-91.8 0.02 (1)	AG-N	-183 / 0	0.21 (1)	
F-G	0 / 23	-91.8	-91.8 0.02 (1)	AH-M	-184 / 0	0.21 (1)	
G-H	0 / 27	-91.8	-91.8 0.02 (1)	AI-L	-186 / 0	0.21 (1)	
H-I	0 / 31	-91.8	-91.8 0.02 (1)	AJ-K	-178 / 0	0.20 (1)	
I-J	0 / 27	-91.8	-91.8 0.02 (1)	Z-U	-206 / 0	0.16 (1)	
J-K	0 / 33	-91.8	-91.8 0.02 (1)	Y-V	-173 / 0	0.09 (1)	
K-L	0 / 33	-91.8	-91.8 0.02 (1)	AK-J	-146 / 0	0.16 (1)	
L-M	0 / 33	-91.8	-91.8 0.02 (1)	AQ-C	-122 / 0	0.02 (1)	
M-N	0 / 33	-91.8	-91.8 0.02 (1)	AP-D	-193 / 0	0.03 (1)	
N-O	0 / 33	-91.8	-91.8 0.02 (1)	AO-E	-179 / 0	0.04 (1)	
O-P	0 / 33	-91.8	-91.8 0.02 (1)	AN-G	-181 / 0	0.06 (1)	
P-Q	0 / 33	-91.8	-91.8 0.02 (1)	AM-H	-182 / 0	0.09 (1)	
Q-R	0 / 33	-91.8	-91.8 0.03 (1)	AL-I	-198 / 0	0.15 (1)	
R-S	0 / 33	-91.8	-91.8 0.03 (1)	Y-W	-68 / 0	0.03 (1)	
S-T	0 / 33	-91.8	-91.8 0.03 (1)				
T-U	0 / 26	-91.8	-91.8 0.03 (1)				
U-V	0 / 34	-91.8	-91.8 0.03 (1)				
V-W	0 / 32	-91.8	-91.8 0.02 (1)				
X-W	0 / 9	0.0	0.0 0.00 (1)				

AR-AQ	0 / 0	-18.5	-18.5 0.01 (4)	10.00
AQ-AP	-8 / 0	-18.5	-18.5 0.01 (4)	10.00
AP-AO	-15 / 0	-18.5	-18.5 0.01 (4)	6.25
AO-AN	-20 / 0	-18.5	-18.5 0.01 (4)	6.25
AN-AM	-24 / 0	-18.5	-18.5 0.01 (4)	6.25
AM-AL	-28 / 0	-18.5	-18.5 0.01 (4)	6.25
AL-AK	-31 / 0	-18.5	-18.5 0.01 (4)	6.25
AK-AJ	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AJ-AI	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AI-AH	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AH-AG	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AG-AF	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AF-AE	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AE-AD	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AD-AC	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AC-AB	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AB-AA	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AA-Z	-30 / 0	-18.5	-18.5 0.01 (4)	6.25
Z-Y	-27 / 0	-18.5	-18.5 0.01 (4)	6.25
Y-X	0 / 0	-18.5	-18.5 0.01 (4)	10.00

TOTAL WEIGHT = 2 X 238 = 475 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.06/1.00 (A-B:1), BC=0.01/1.00 (AK-AL:4), WB=0.23/1.00 (S-AB:1), SS=0.07/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.38 (Y) (INPUT = 0.90)

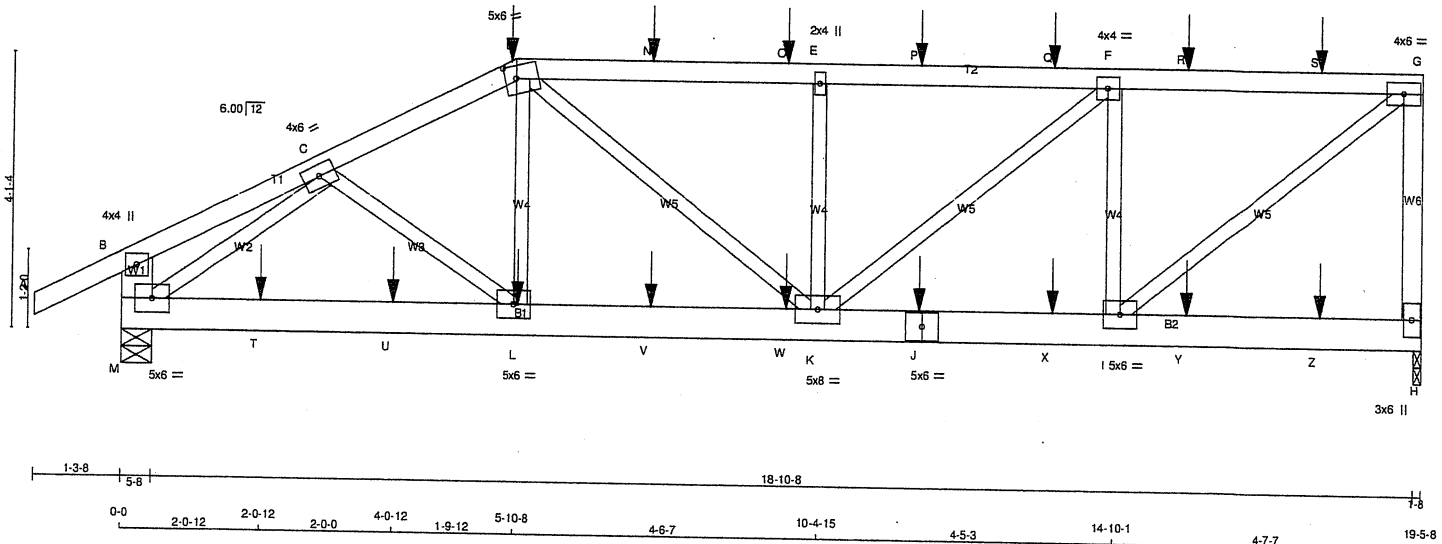
JSI METAL = 0.97 (AR) (INPUT = 1.00)

CITY OF BURLINGTON
BUILDING DEPARTMENT
09/14/2021
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Per: danielle.devitt



Structural component only
DWG# T-2121205

JOB NAME 412865	TRUSS NAME T101	QUANTITY 2	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:27 2021 Page 1	
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JOB NAME 412865	TRUSS NAME T101	QUANTITY 2	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:27 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	6.0		
I	BMWW-t	MT20	5.0	6.0		
J	BS-t	MT20	5.0	6.0		
K	BMWWW-t	MT20	5.0	8.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMVW1-t	MT20	5.0	6.0		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
X	13-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Y	15-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Z	17-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2121206 *mn*

**CITY OF RICHMOND HILL
BUILDING DIVISION**

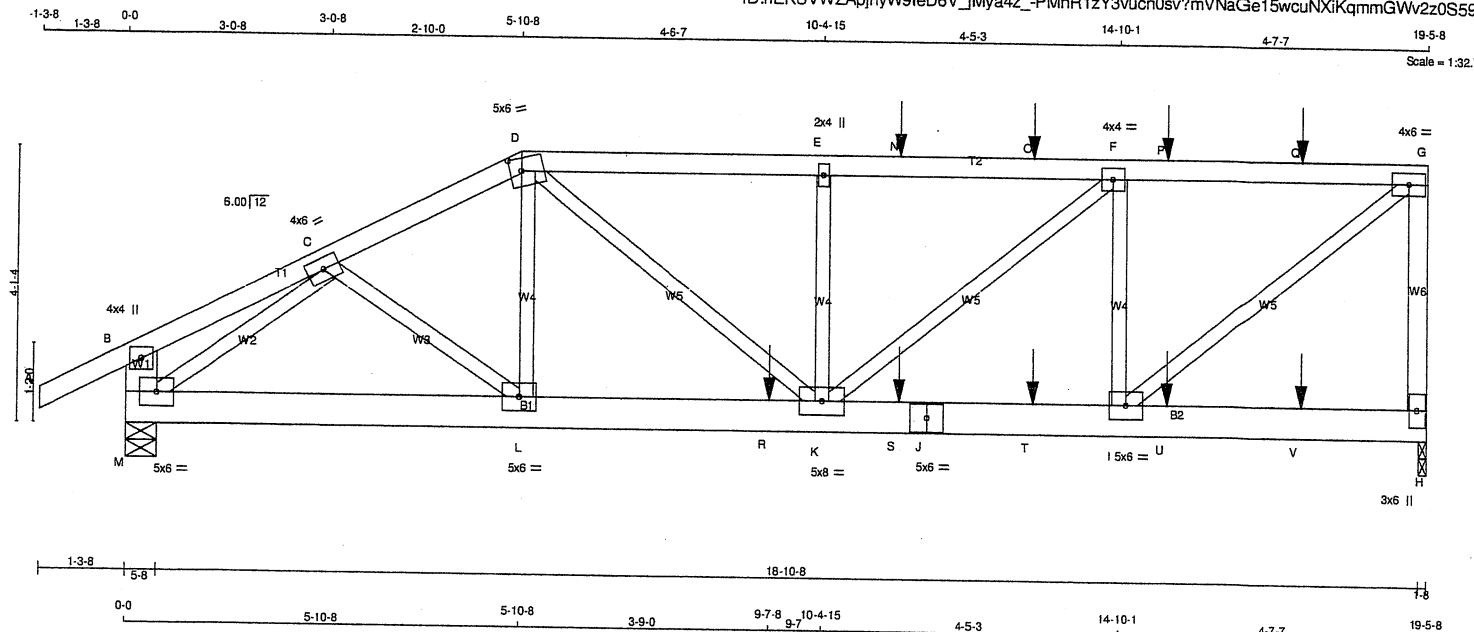
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T101Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:28 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
H - G	2x4	DRY	No.2	SPF	
M - B	2x6	DRY	No.2	SPF	
M - J	2x6	DRY	No.2	SPF	
J - H	2x6	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-D 1	12	TOP
D-G 1	12	SIDE(0.0)
G-H 1	12	TOP
M-B 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
M-J 2	12	SIDE(0.0)
J-H 2	12	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
H	2170	0	2170	0	1-8	1-8
M	2037	0	2037	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LOASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
H	1531	1022 / 0	0 / 0	0 / 0	0 / 0	509 / 0	0 / 0
M	1434	977 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.66 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 28	-91.8 -91.8	0.07 (1)	10.00	C-L	0 / 295	0.04 (1)
B-C	0 / 9	-91.8 -91.8	0.06 (1)	10.00	L-D	0 / 176	0.02 (4)
C-D	-2873 / 0	-91.8 -91.8	0.08 (1)	5.35	M-C	-2920 / 0	0.35 (1)
D-E	-3565 / 0	-91.8 -91.8	0.19 (1)	4.80	I-G	0 / 2975	0.37 (1)
E-N	-3565 / 0	-91.8 -91.8	0.30 (1)	4.66	D-K	0 / 1296	0.16 (1)
N-O	-3565 / 0	-91.8 -91.8	0.30 (1)	4.66	I-F	-1812 / 0	0.23 (1)
O-F	-3565 / 0	-91.8 -91.8	0.30 (1)	4.66	K-E	-529 / 0	0.07 (1)
F-P	-2315 / 0	-91.8 -91.8	0.27 (1)	5.56	K-F	0 / 1635	0.20 (1)
P-Q	-2315 / 0	-91.8 -91.8	0.27 (1)	5.56			
Q-G	-2315 / 0	-91.8 -91.8	0.27 (1)	5.56			
H-G	-2095 / 0	0.0 0.0	0.26 (1)	7.65			
M-B	-241 / 0	0.0 0.0	0.01 (1)	7.81			
M-L	0 / 2322	-18.5 -18.5	0.22 (1)	10.00			
L-R	0 / 2564	-18.5 -18.5	0.41 (1)	10.00			
R-K	0 / 2564	-18.5 -18.5	0.41 (1)	10.00			
K-S	0 / 2315	-18.5 -18.5	0.25 (1)	10.00			
S-J	0 / 2315	-18.5 -18.5	0.25 (1)	10.00			
J-T	0 / 2315	-18.5 -18.5	0.25 (1)	10.00			
T-I	0 / 2315	-18.5 -18.5	0.25 (1)	10.00			
I-U	0 / 0	-18.5 -18.5	0.04 (4)	10.00			
U-V	0 / 0	-18.5 -18.5	0.04 (4)	10.00			
V-H	0 / 0	-18.5 -18.5	0.04 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
N	11-6-12	-76	-76	---	FRONT	VERT	---	C1
O	13-6-12	-76	-76	---	FRONT	VERT	---	C1
P	15-6-12	-76	-76	---	FRONT	VERT	---	C1
Q	17-6-12	-76	-76	---	FRONT	VERT	---	C1
R	9-7-8	-974	-974	---	FRONT	VERT	---	C1
S	11-6-12	-21	-21	---	FRONT	VERT	---	C1
T	13-6-12	-21	-21	---	FRONT	VERT	---	C1
U	15-6-12	-21	-21	---	FRONT	VERT	---	C1
V	17-6-12	-21	-21	---	FRONT	VERT	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.30/1.00 (E-F:1), BC=0.41/1.00 (K-L:1), WB=0.37/1.00 (G-I:1), SSI=0.40/1.00 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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	MAX MIN
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.88 (G) (INPUT = 0.90)
JSI METAL = 0.94 (G) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

09/14/2021

RE: **ROYAL PINE HOMES**
Per: **danielle.devitt**



Structural component only
DWG# T-212107

JOB NAME 412865	TRUSS NAME T101Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:28 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	6.0		
I	BMWW-t	MT20	5.0	6.0		
J	BS-t	MT20	5.0	6.0		
K	BMWWW-t	MT20	5.0	8.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMVW1-t	MT20	5.0	6.0		



Structural component only
DWG# T-2121207 *m*

**CITY OF RICHMOND HILL
BUILDING DIVISION**

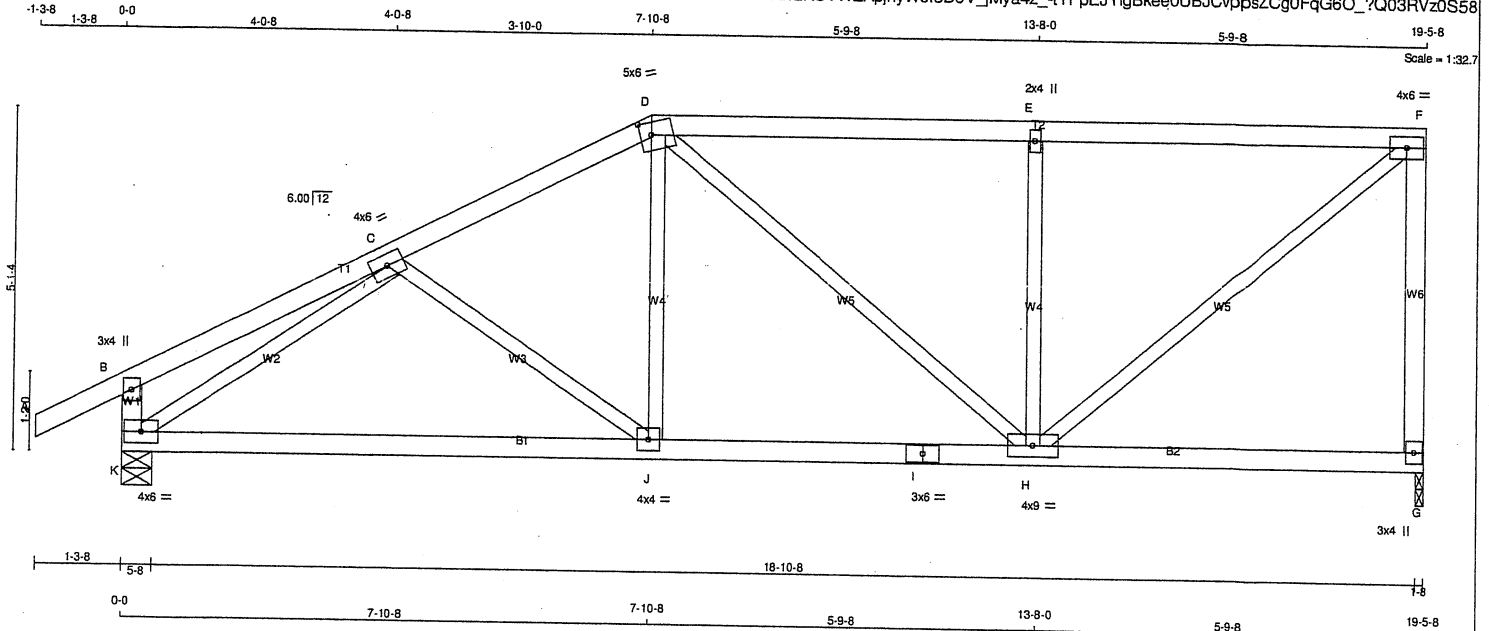
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T102	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:29 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
K - B	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMVW-t	MT20	4.0	6.0		
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMVW+w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVWW-t	MT20	4.0	9.0		
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	4.0	4.0		
K	BMVW1-t	MT20	4.0	6.0		

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
G	1073	0	1073	0
K	1197	0	1197	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0
K	844	567 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-91.8 -91.8	0.12 (1)	10.00	C-J	-182 / 2	0.07 (1)
B-C	0 / 18	-91.8 -91.8	0.21 (1)	10.00	J-D	0 / 253	0.06 (4)
C-D	-1207 / 0	-91.8 -91.8	0.24 (1)	5.54	D-H	-94 / 0	0.10 (1)
D-E	-996 / 0	-91.8 -91.8	0.55 (1)	5.39	H-E	-658 / 0	0.25 (1)
E-F	-996 / 0	-91.8 -91.8	0.56 (1)	5.39	H-F	0 / 1291	0.29 (1)
G-F	-1026 / 0	0.0 0.0	0.45 (1)	7.74	K-C	-1491 / 0	0.57 (1)
K-B	-266 / 0	0.0 0.0	0.03 (1)	7.81			
K-J	0 / 1212	-18.5 -18.5	0.34 (4)	10.00			
J-I	0 / 1068	-18.5 -18.5	0.34 (4)	10.00			
I-H	0 / 1068	-18.5 -18.5	0.34 (4)	10.00			
H-G	0 / 0	-18.5 -18.5	0.13 (4)	10.00			

TOTAL WEIGHT = 3 X 80 = 239 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.58/1.00 (E-F:1), BC=0.34/1.00 (H-J:4),
WB=0.57/1.00 (C-K:1), SSI=0.28/1.00 (E-F:1)

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

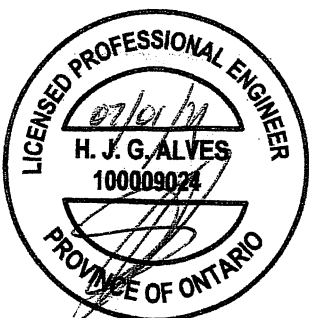
COMPANION LIVE LOAD FACTOR = 1.00

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

CITY OF KNOX AND HILL
BUILDING DEPARTMENT

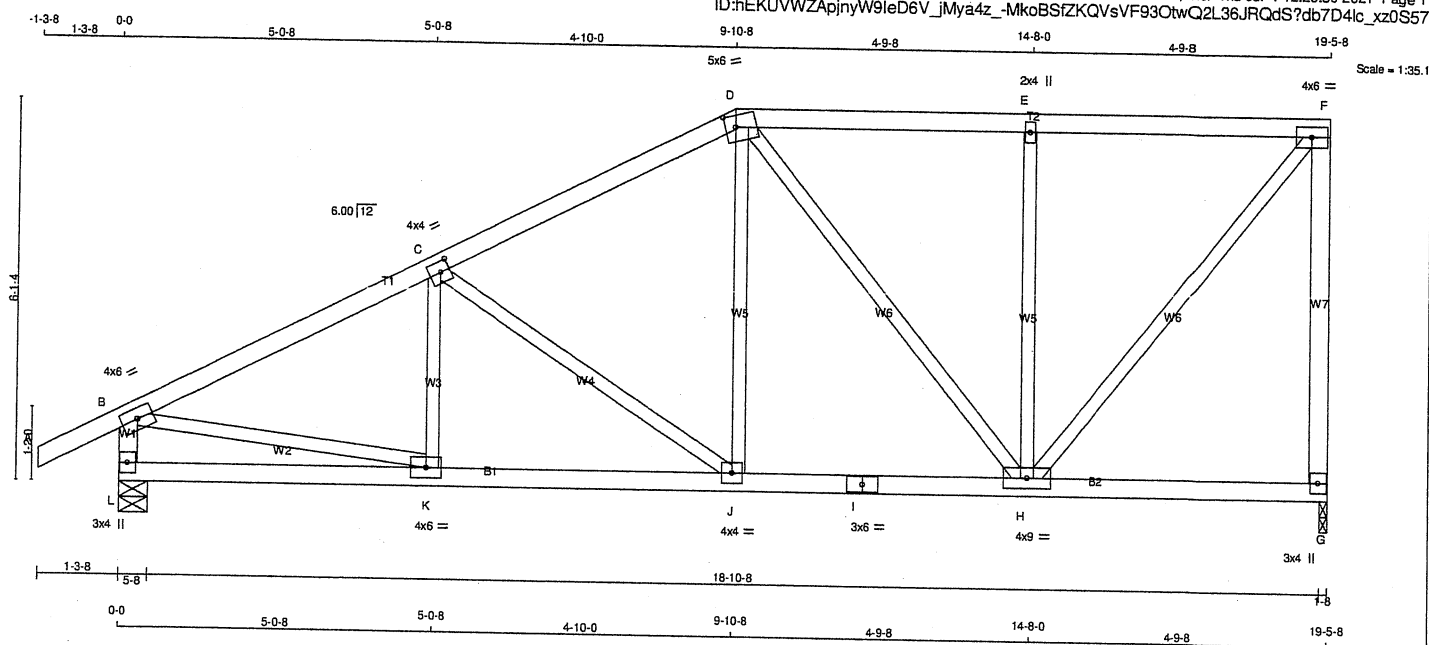
09/14/2021

Per: danielle.devitt



Structural component only
DWG# T-2121208

JOB NAME 412865	TRUSS NAME T103	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:30 2021 Page 1	



LUMBER

N. L. G. A. RULES

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0		
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TTWV-m	MT20	5.0	6.0	2.25	2.00
F	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVWV-t	MT20	4.0	9.0		
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	4.0	4.0		
K	BMVW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
G	1073	0	1073	0	1-8	1-8
L	1197	0	1197	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0
L	844	567 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.17 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-91.8 -91.8	0.12 (1)	K-C	-118 / 43	0.03 (1)	
B-C	-1400 / 0	-91.8 -91.8	0.31 (1)	C-J	-454 / 0	0.28 (1)	
C-D	-1030 / 0	-91.8 -91.8	0.29 (1)	J-D	0 / 343	0.08 (1)	
D-E	-720 / 0	-91.8 -91.8	0.27 (1)	D-H	-292 / 0	0.32 (1)	
E-F	-720 / 0	-91.8 -91.8	0.27 (1)	H-E	-543 / 0	0.32 (1)	
G-F	-1035 / 0	0.0 0.0	0.75 (1)	H-F	0 / 1126	0.25 (1)	
L-B	-1157 / 0	0.0 0.0	0.12 (1)	B-K	0 / 1291	0.29 (1)	
L-K	0 / 0	-18.5 -18.5	0.10 (4)				
K-J	0 / 1273	-18.5 -18.5	0.25 (1)				
J-I	0 / 905	-18.5 -18.5	0.19 (1)				
I-H	0 / 905	-18.5 -18.5	0.19 (1)				
H-G	0 / 0	-18.5 -18.5	0.10 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.75/1.00 (F-G:1), BC=0.25/1.00 (J-K:1),
WB=0.32/1.00 (E-H:1), SSI=0.21/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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



Structural component only
DWG# T-2121209

CITY OF KESWICK HILL BUILDING DEPARTMENT

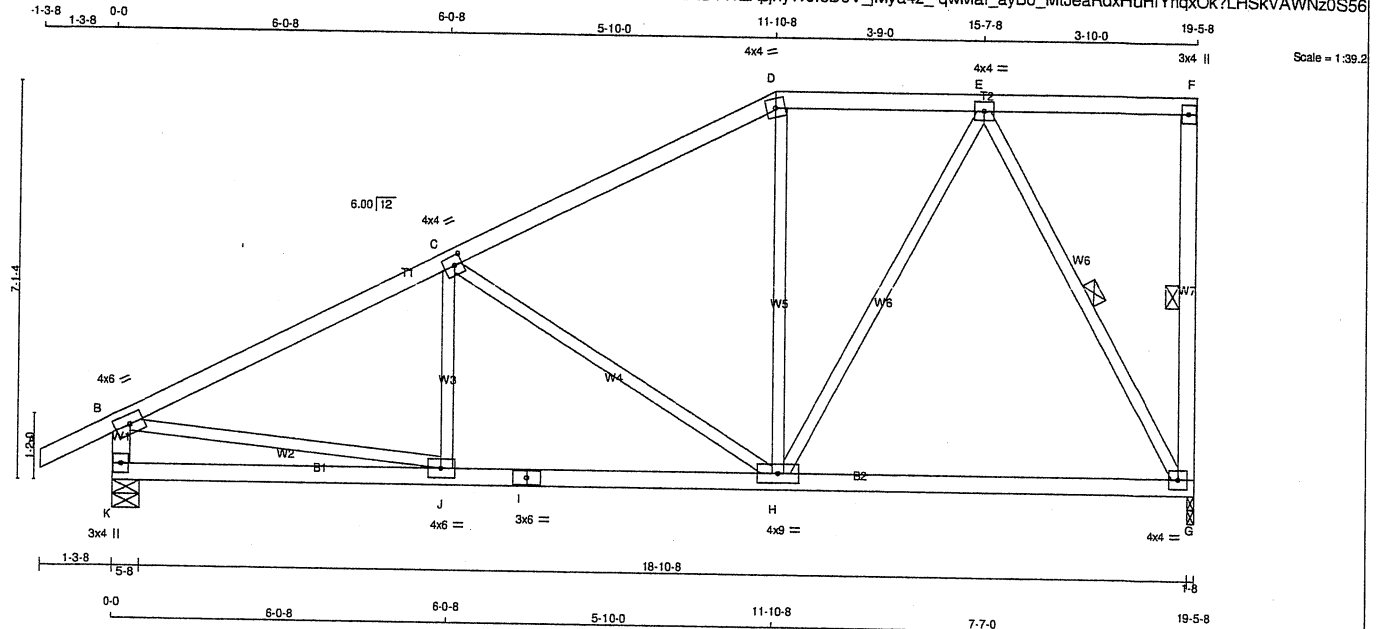
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T104	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:31 2021 Page 1
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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER		DESCR
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
G	1073	0	1073	0	0	1-8	1-8		
K	1197	0	1197	0	0	5-8	5-8		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0		
K	844	567 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING		TOTAL LOAD CASES: (4)		CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 28	-91.8	-91.8 0.12 (1)	10.00	J-C	-70 / 66	0.02 (4)
B-C	-1384 / 0	-91.8	-91.8 0.45 (1)	4.99	C-H	-629 / 0	0.61 (1)
C-D	-855 / 0	-91.8	-91.8 0.42 (1)	6.02	H-D	0 / 69	0.02 (4)
D-E	-738 / 0	-91.8	-91.8 0.17 (1)	6.25	H-E	0 / 512	0.12 (1)
E-F	0 / 0	-91.8	-91.8 0.22 (1)	10.00	E-G	-1012 / 0	0.41 (1)
G-F	-134 / 0	0.0	0.0 0.03 (1)	6.25	B-J	0 / 1276	0.29 (1)
K-B	-1148 / 0	0.0	0.0 0.12 (1)	7.42			
K-J	0 / 0	-18.5	-18.5 0.14 (4)	10.00			
J-I	0 / 1264	-18.5	-18.5 0.33 (1)	10.00			
I-H	0 / 1264	-18.5	-18.5 0.33 (1)	10.00			
H-G	0 / 496	-18.5	-18.5 0.26 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.45/1.00 (B-C:1), BC=0.33/1.00 (H-J:1), WB=0.61/1.00 (C-H:1), SS=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.37 (I) (INPUT = 1.00)

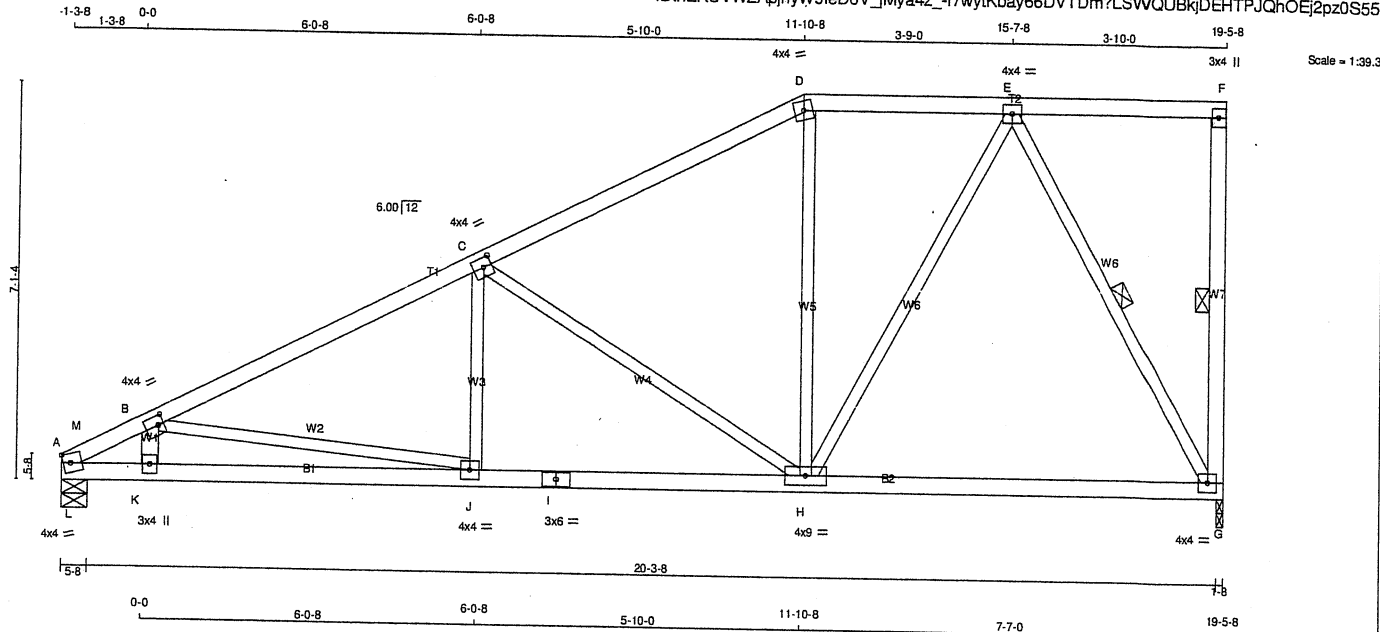
Per: danielle.devitt



Structural component only
DWG# T-2121210

JOB NAME 412865	TRUSS NAME T104X	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:32 2021 Page 1
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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
K - B	2x4	DRY	No.2
A - I	2x4	DRY	No.2
I - G	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBM1-m	MT20	4.0	4.0		Edge
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TTW-m	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	TMV+p	MT20	3.0	4.0		
G	BMVW1-t	MT20	4.0	4.0		
H	BMVW1-t	MT20	4.0	9.0		
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	4.0	4.0		
K	BMV+p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
A	1151	0	1151	0
G	1151	0	1151	0

UNFACTORED REACTIONS

JT	1ST LOASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	814	534 / 0	0 / 0	0 / 0	0 / 0	0 / 0	280 / 0	0 / 0
G	814	534 / 0	0 / 0	0 / 0	0 / 0	0 / 0	280 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-M	-2504 / 0	-91.8 -91.8	0.16 (1)	J-C	0 / 169	0.05 (4)	
M-B	-2072 / 0	-91.8 -91.8	0.17 (1)	C-H	-846 / 0	0.82 (1)	
B-C	-1693 / 0	-91.8 -91.8	0.44 (1)	H-D	0 / 84	0.03 (4)	
C-D	-947 / 0	-91.8 -91.8	0.40 (1)	H-E	0 / 601	0.14 (1)	
D-E	-823 / 0	-91.8 -91.8	0.17 (1)	E-G	-1101 / 0	0.44 (1)	
E-F	0 / 0	-91.8 -91.8	0.22 (1)	B-J	-335 / 0	0.21 (1)	
G-F	-134 / 0	0.0 0.0	0.03 (1)	L-M	0 / 721	0.00 (1)	
K-B	-100 / 62	0.0 0.0	0.02 (4)				
A-L	0 / 1862	-18.5 -18.5	0.48 (1)				
L-K	0 / 1862	-18.5 -18.5	0.48 (1)				
K-J	0 / 1862	-18.5 -18.5	0.42 (1)				
J-I	0 / 1531	-18.5 -18.5	0.37 (1)				
I-H	0 / 1531	-18.5 -18.5	0.37 (1)				
H-G	0 / 540	-18.5 -18.5	0.27 (4)				

TOTAL WEIGHT = 88 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.70")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.70")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.44/1.00 (B-C:1), BC=0.48/1.00 (A-L:1), WB=0.82/1.00 (C-H:1), SSI=0.44/1.00 (A-L: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.

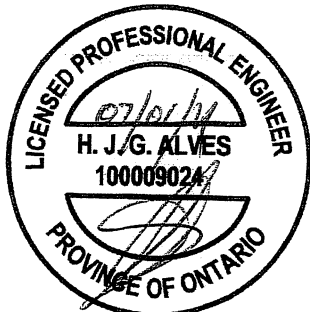
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PL)
(PSI) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.82 (A) (INPUT = 0.90)
JSI METAL= 0.70 (A) (INPUT = 1.00)

CITY OF LONDON HILL
BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt

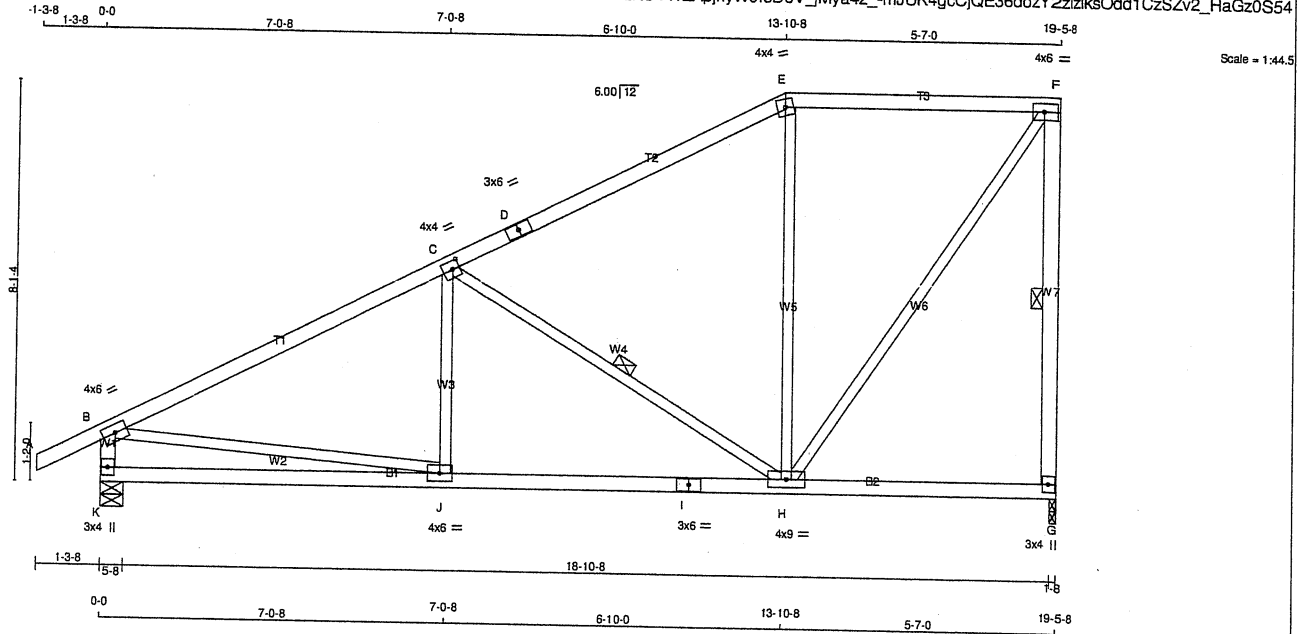


Structural component only
DWG# T-2121211

JOB NAME 412865	TRUSS NAME T105	QUANTITY 11	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

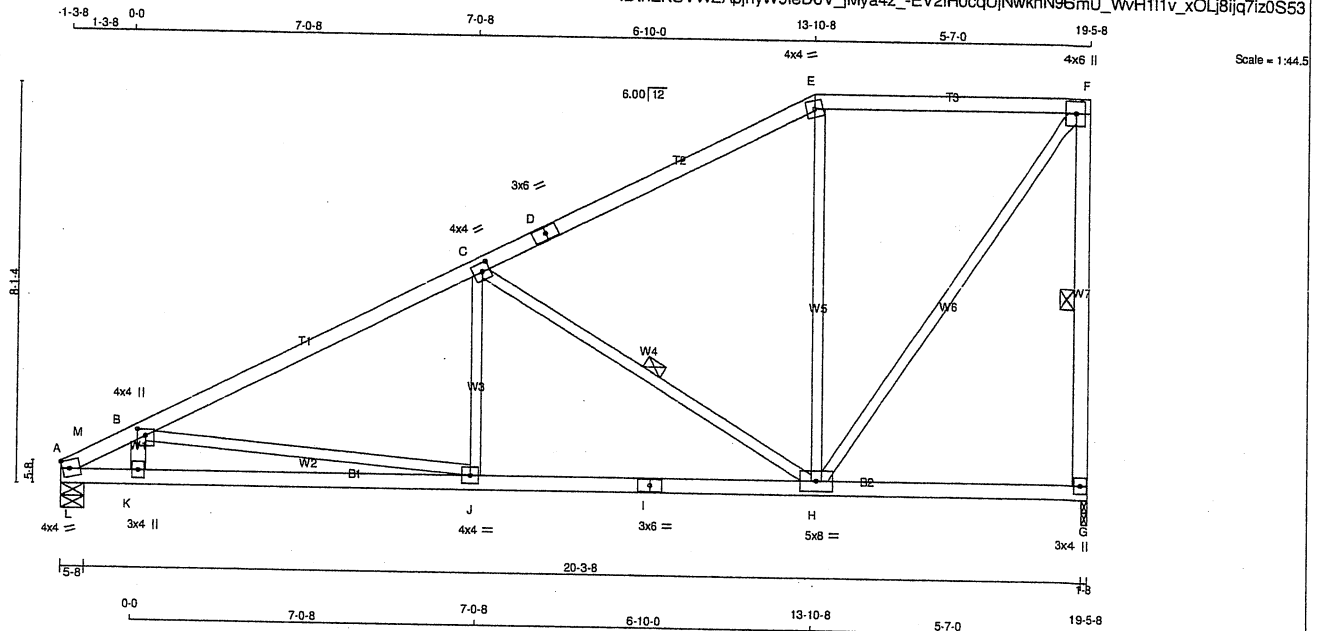
Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:33 2021 Page 1
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JOB NAME 412865	TRUSS NAME T105X	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:34 2021 Page 1
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LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
K - B	2x4	DRY	No.2	SPF	
A - I	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBM1-m	MT20	4.0	4.0		Edge
B	TMVW+p	MT20	4.0	4.0	1.50	2.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TS-t	MT20	3.0	6.0		
E	TTW-m	MT20	4.0	4.0		
F	TMVW+p	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVW-t	MT20	5.0	8.0		
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	4.0	4.0		
K	BMV+p	MT20	3.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
G	1151	0	1151	0	1-8	1-8
A	1151	0	1151	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LOASE	MAX./MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
G	814	534 / 0	0 / 0	0 / 0	280 / 0	0 / 0
A	814	534 / 0	0 / 0	0 / 0	280 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.13 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-G, C-H.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		VERT. LOAD	LC1	MAX	MAX. UNBRAC	MEMB.	WEBS	
	MAX. FACTORED	FORCE (LBS)						MAX. FACTORED	FORCE (LBS)
FR-TO									
A-M	-2641 / 0	-91.8	-91.8	0.17 (1)	4.13	J-C	0 / 214	0.06 (4)	
M-B	-2142 / 0	-91.8	-91.8	0.25 (1)	4.42	C-H	-1010 / 0	0.46 (1)	
B-C	-1610 / 0	-91.8	-91.8	0.60 (1)	4.49	H-E	-196 / 15	0.25 (1)	
C-D	-706 / 0	-91.8	-91.8	0.55 (1)	6.18	H-F	0 / 1045	0.24 (1)	
D-E	-706 / 0	-91.8	-91.8	0.55 (1)	6.18	B-J	-496 / 0	0.46 (1)	
E-F	-600 / 0	-91.8	-91.8	0.37 (1)	6.25	L-M	0 / 845	0.00 (1)	
G-F	-1111 / 0	0.0	0.0	0.33 (1)	6.01				
K-B	-112 / 75	0.0	0.0	0.02 (4)	7.81				
A-L	0 / 1950	-18.5	-18.5	0.53 (1)	10.00				
L-K	0 / 1950	-18.5	-18.5	0.53 (1)	10.00				
K-J	0 / 1950	-18.5	-18.5	0.45 (1)	10.00				
J-I	0 / 1457	-18.5	-18.5	0.37 (1)	10.00				
I-H	0 / 1457	-18.5	-18.5	0.37 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.70")
CALCULATED VERT. DEFL.(LL)= L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.70")
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.60/1.00 (B-C:1), BC=0.53/1.00 (A-L:1), WB=0.46/1.00 (C-H:1), SSI=0.52/1.00 (A-L: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.

CITY OF CALHOUN AND HILL
BUILDING DEPARTMENT

09/14/2021

RECEIVED

Per: danielle.devitt

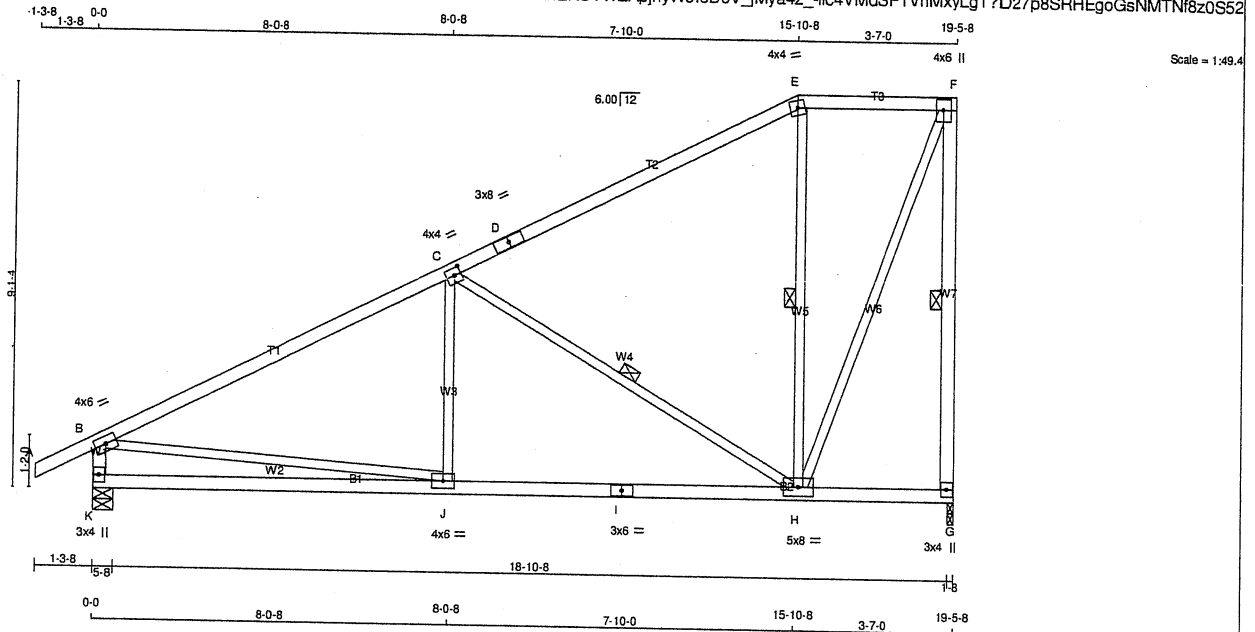


Structural component only
DWG# T-2121213

JOB NAME 412865	TRUSS NAME T106	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MTek Industries, Inc. Thu Jul 1 12:26:35 2021 Page 1
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Scale = 1/48.4

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
K - B	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	6.0	
C	TMVW-t	MT20	4.0	4.0	2.00 1.75
D	TS-t	MT20	3.0	8.0	
E	TTW-m	MT20	4.0	4.0	
F	TMVW+p	MT20	4.0	6.0	
G	BMV1+p	MT20	3.0	4.0	
H	BMVWW-t	MT20	5.0	8.0	
I	BS-t	MT20	3.0	6.0	
J	BMVW-t	MT20	4.0	6.0	
K	BMV1+p	MT20	3.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
G	1073	0	1073	0	0	1-8	1-8		
K	1197	0	1197	0	0	5-8	5-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0		
K	844	567 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.15 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 28	-91.8	-91.8 0.12 (1)	J-C	0 / 149	10.00	0.05 (4)
B-C	-1311 / 0	-91.8	-91.8 0.86 (1)	C-H	-1000 / 0	4.15	0.61 (1)
C-D	-439 / 0	-91.8	-91.8 0.77 (1)	H-E	-255 / 0	6.25	0.14 (1)
D-E	-439 / 0	-91.8	-91.8 0.77 (1)	H-F	0 / 961	6.25	0.22 (1)
E-F	-353 / 0	-91.8	-91.8 0.15 (1)	B-J	0 / 1214	6.13	0.27 (1)
G-F	-1057 / 0	0.0	0.0 0.41 (1)			6.13	
K-B	-1136 / 0	0.0	0.0 0.11 (1)			7.45	
K-J	0 / 0	-18.5	-18.5 0.30 (4)			10.00	
J-I	0 / 1208	-18.5	-18.5 0.40 (4)			10.00	
I-H	0 / 1208	-18.5	-18.5 0.40 (4)			10.00	
H-G	0 / 0	-18.5	-18.5 0.15 (4)			10.00	

TOTAL WEIGHT = 3 X 91 = 272 lb
(M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL)= L/999 (0.14")

CSI: TC=0.86/1.00 (B-C:1), BC=0.40/1.00 (H-J:4), WB=0.61/1.00 (C-H:1), SSI=0.32/1.00 (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.

CITY OF FRANKLIN AND HILL
BUILDING DEPARTMENT

09/14/2021

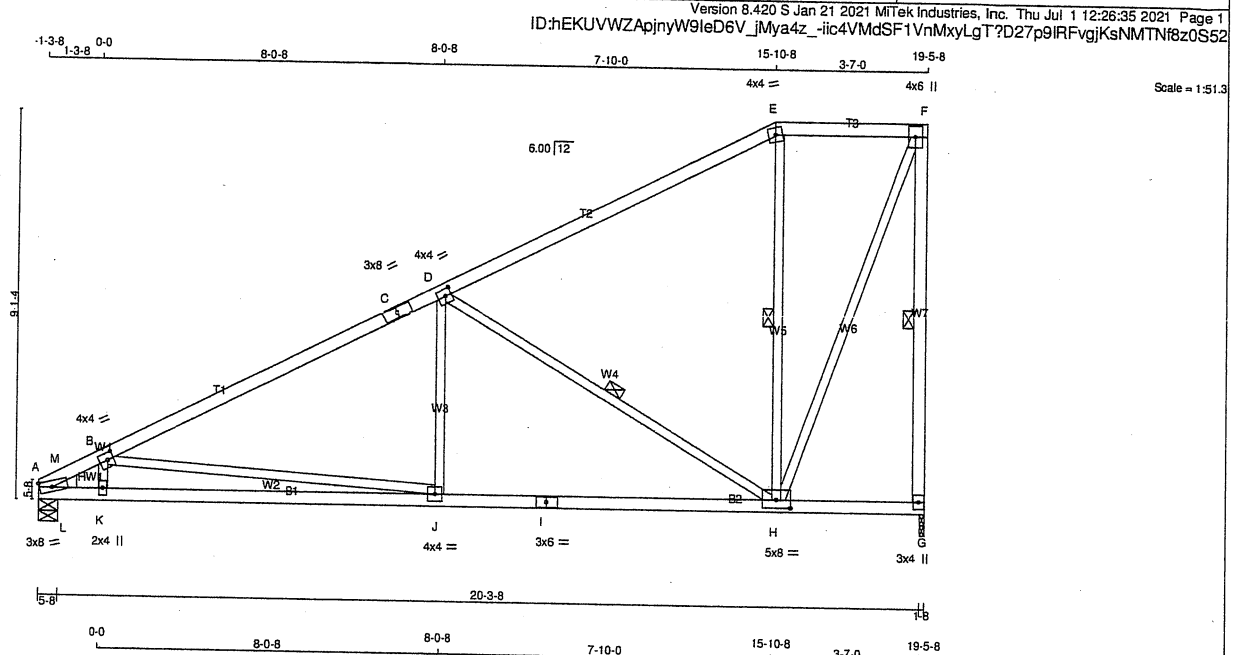
RESIDENTIAL

Per: danielle.devitt



Structural component only
DWG# T-2121214

JOB NAME 412865	TRUSS NAME T106X	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
A - I	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table in inches)					
JT TYPE	PLATES	W	LEN	Y	X
A	TBMH1-m	MT20	3.0	8.0	1.75 Edge
B	TMWW-t	MT20	4.0	4.0	2.00 1.75
C	TS-t	MT20	3.0	8.0	
D	TMWW-t	MT20	4.0	4.0	2.00 1.75
E	TTW-m	MT20	4.0	4.0	
F	TMWW-p	MT20	4.0	6.0	
G	BMV1-p	MT20	3.0	4.0	
H	BMWWW-t	MT20	5.0	8.0	2.25 4.00
I	BS-t	MT20	3.0	6.0	
J	BMWW-t	MT20	4.0	4.0	
K	BMW-w	MT20	2.0	4.0	

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		HEEL WEDGE	
JT	VERT	HORZ	DOWN	UP	IN-SX	IN-SX	IN-SX	IN-SX	WEDGE
G	1151	0	1151	0	0	1-8	1-8		
A	1151	0	1151	0	0	5-8	5-8	2x4 L	

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
G	814	534 / 0	0 / 0	0 / 0	0 / 0	280 / 0	0 / 0	
A	814	534 / 0	0 / 0	0 / 0	0 / 0	280 / 0	0 / 0	

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

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	MAX. UNBRACED LENGTH (LBS)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (LBS)	MAX. UNBRACED LENGTH (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-M	-2452 / 0	-91.8	-91.8 0.15 (1)	4.28	J-D	0 / 254	0.07 (4)
M-B	-2188 / 0	-91.8	-91.8 0.34 (1)	4.27	D-H	-1163 / 0	0.71 (1)
B-C	-1519 / 0	-91.8	-91.8 0.77 (1)	4.24	H-E	-250 / 0	0.13 (1)
C-D	-1519 / 0	-91.8	-91.8 0.77 (1)	4.24	H-F	0 / 1044	0.23 (1)
D-E	-468 / 0	-91.8	-91.8 0.72 (1)	6.25	K-B	-171 / 94	0.03 (4)
E-F	-383 / 0	-91.8	-91.8 0.15 (1)	6.25	B-J	-674 / 0	0.93 (1)
G-F	-1134 / 0	0.0	0.0 0.44 (1)	5.97	L-M	0 / 486	0.00 (1)
A-L	0 / 2047	-18.5	-18.5 0.55 (1)	10.00			
L-K	0 / 2047	-18.5	-18.5 0.55 (1)	10.00			
K-J	0 / 2047	-18.5	-18.5 0.51 (1)	10.00			
J-I	0 / 1377	-18.5	-18.5 0.40 (1)	10.00			
I-H	0 / 1377	-18.5	-18.5 0.40 (1)	10.00			
H-G	0 / 0	-18.5	-18.5 0.16 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC08 2015

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.70")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.70")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.77/1.00 (B-D:1), 8C=0.55/1.00 (A-L:1), WB=0.93/1.00 (B-J:1), SSI=0.31/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

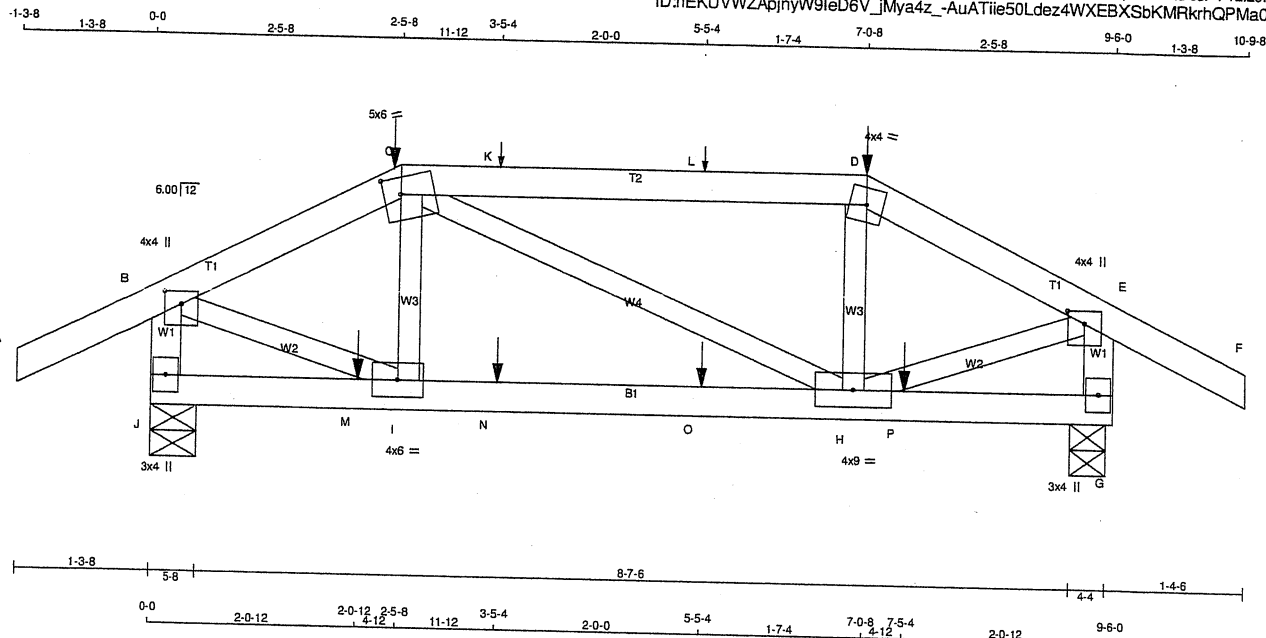
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Structural component only
DWG# T-2121215

JOB NAME 412865	TRUSS NAME T107	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S-Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:36 2021 Page 1
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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
J - B	2x4	DRY	No.2
G - E	2x4	DRY	No.2
J - G	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.50	2.00
C	TTWW-m	MT20	5.0	6.0	2.00	2.00
D	TTWW-m	MT20	4.0	4.0		
E	TMVW+p	MT20	4.0	4.0	1.50	2.00
G	BMV1+p	MT20	3.0	4.0		
H	BMVWW-t	MT20	4.0	9.0		
I	BMVWW-t	MT20	4.0	6.0		
J	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UP
J	762	0	0	0
G	762	0	0	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
J	535	373 / 0	0 / 0	0 / 0	162 / 0	0 / 0
G	535	373 / 0	0 / 0	0 / 0	162 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-91.8 -91.8	0.13 (1)	I-C	-126 / 22	0.02 (1)	
B-C	-678 / 0	-91.8 -91.8	0.11 (1)	C-H	0 / 0	0.00 (1)	
C-K	-598 / 0	-91.8 -91.8	0.37 (1)	H-D	-127 / 21	0.02 (1)	
K-L	-598 / 0	-91.8 -91.8	0.37 (1)	B-I	0 / 638	0.16 (1)	
L-D	-598 / 0	-91.8 -91.8	0.37 (1)	H-E	0 / 638	0.16 (1)	
D-E	-677 / 0	-91.8 -91.8	0.11 (1)				
E-F	0 / 28	-91.8 -91.8	0.13 (1)				
J-B	-745 / 0	0.0 0.0	0.08 (1)				
G-E	-744 / 0	0.0 0.0	0.08 (1)				
J-M	0 / 0	-18.5 -18.5	0.06 (4)				
M-I	0 / 0	-18.5 -18.5	0.06 (4)				
I-N	0 / 599	-18.5 -18.5	0.15 (1)				
N-O	0 / 599	-18.5 -18.5	0.15 (1)				
O-H	0 / 599	-18.5 -18.5	0.15 (1)				
H-P	0 / 0	-18.5 -18.5	0.06 (4)				
P-G	0 / 0	-18.5 -18.5	0.06 (4)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-5-8	-74	-74		FRONT	VERT	TOTAL
D	7-0-8	-74	-74		FRONT	VERT	TOTAL
K	3-5-4	1	1		FRONT	VERT	TOTAL
L	5-5-4	1	1		FRONT	VERT	TOTAL
M	2-0-12	-3	-3		FRONT	VERT	TOTAL
N	3-5-4	-1	-1		FRONT	VERT	TOTAL
O	5-5-4	-1	-1		FRONT	VERT	TOTAL
P	7-5-4	-3	-3		FRONT	VERT	TOTAL

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.37/1.00 (C-D:1), BC=0.15/1.00 (H-I:1), WB=0.16/1.00 (B-I:1), SS=0.18/1.00 (C-D:1)

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

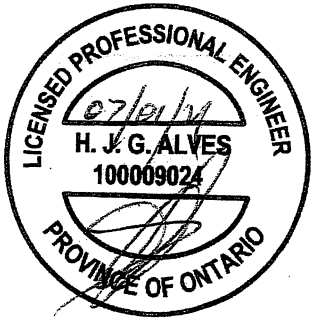
COMPANION LIVE LOAD FACTOR = 1.00

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

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BUILDING DEPARTMENT

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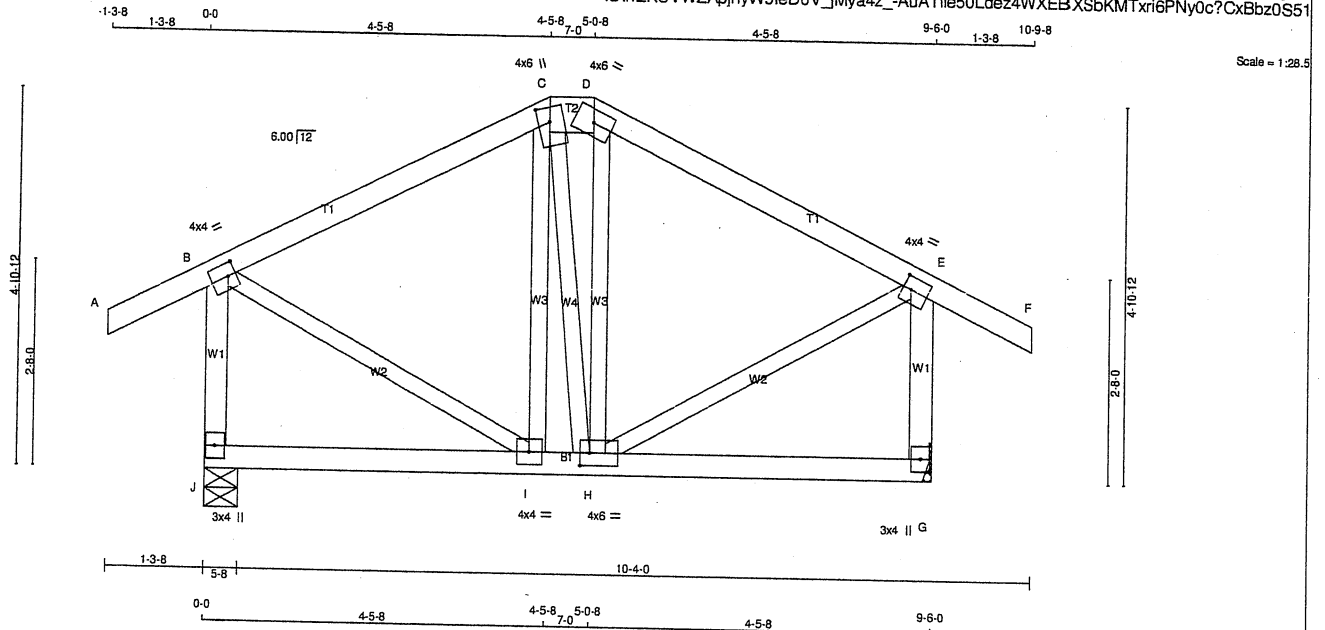
Per: danielle.devitt



Structural component only
DWG# T-2121216

JOB NAME 412865	TRUSS NAME T108	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:36 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - D	2x6	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
J - B	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	
J - G	2x4	DRY	No.2	SPF	

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

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25	
C	TTWW+m	MT20	4.0	6.0	2.25	1.75	
D	TTWW-h	MT20	4.0	6.0			
E	TMVW-t	MT20	4.0	4.0	2.00	1.25	
G	BMV1+p	MT20	3.0	4.0			
H	BMVWW-t	MT20	4.0	6.0	2.00	1.50	
I	BMVWW-t	MT20	4.0	4.0			
J	BMV1+p	MT20	3.0	4.0			

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

FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	UPLIFT
J	648	0	0
G	648	0	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE
J	456	312 / 0	0 / 0
G	456	312 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED MAX. CSI (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)
FR-TO			FROM	TO	LENGTH	FR-TO		
A-B	0 / 28	-91.8	-91.8	0.12 (1)	10.00	I-C	-88 / 7	0.03 (1)
B-C	-309 / 0	-91.8	-91.8	0.23 (1)	6.25	H-D	-96 / 7	0.03 (1)
C-D	-278 / 0	-91.8	-91.8	0.00 (1)	6.25	B-I	0 / 315	0.07 (1)
D-E	-307 / 0	-91.8	-91.8	0.23 (1)	6.25	H-E	0 / 314	0.07 (1)
E-F	0 / 28	-91.8	-91.8	0.12 (1)	10.00	C-H	-7 / 0	0.00 (1)
J-B	-615 / 0	0.0	0.0	0.09 (1)	7.81			
G-E	-614 / 0	0.0	0.0	0.09 (1)	7.81			
J-I	0 / 0	-18.5	-18.5	0.08 (4)	10.00			
I-H	0 / 279	-18.5	-18.5	0.10 (4)	10.00			
H-G	0 / 0	-18.5	-18.5	0.08 (4)	10.00			

TOTAL WEIGHT = 2 X 50 = 99 lb [M/F]

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.23/1.00 (B-C:1), BC=0.10/1.00 (H-I:4), WB=0.07/1.00 (B-I:1), SS=0.14/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

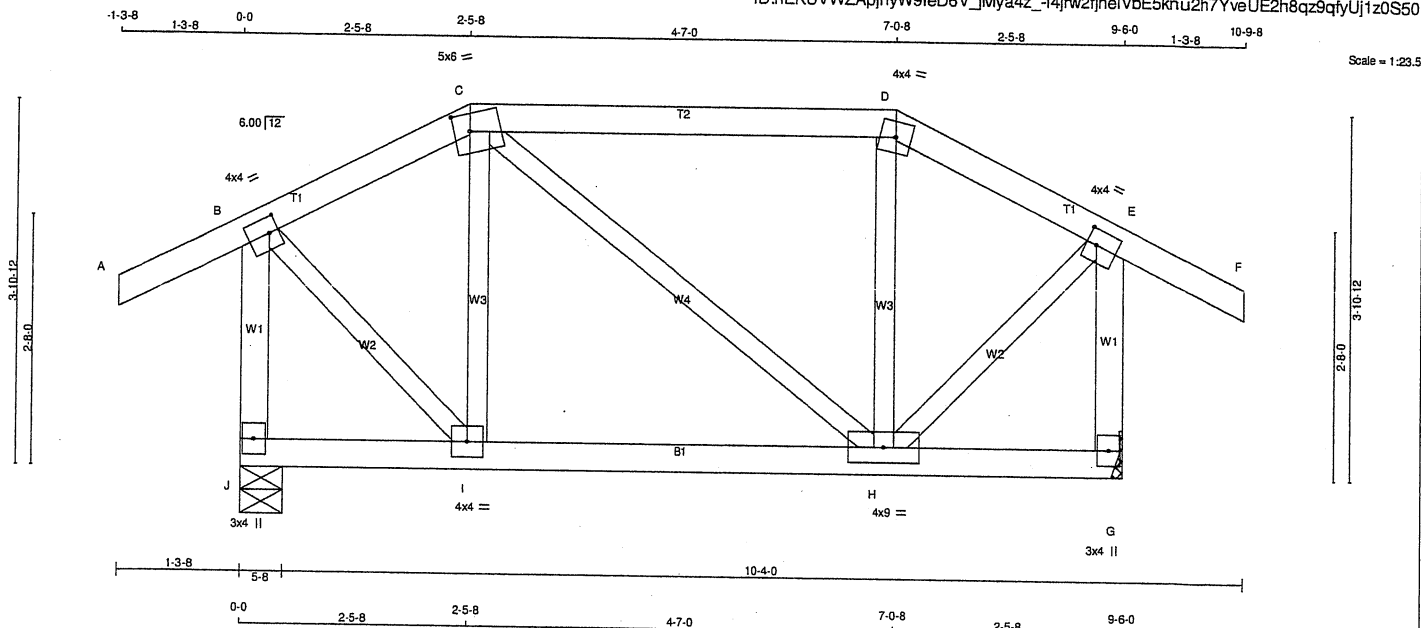


Structural component only
DWG# T-2121217

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Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T109	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:37 2021 Page 1
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LUMBER

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW-m	MT20	5.0	6.0	2.25	2.00
D	TTW-m	MT20	4.0	4.0		
E	TMW-t	MT20	4.0	4.0	2.00	1.25
G	BMV1-p	MT20	3.0	4.0		
H	BMVWW-t	MT20	4.0	9.0		
I	BMVWW-t	MT20	4.0	4.0		
J	BMV1-p	MT20	3.0	4.0		

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN
J	648	0	648
G	648	0	648

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED
J	456
G	456

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO	A-B	0 / 28	-91.8	-91.8	0.12 (1)	10.00			
	B-C	-311 / 0	-91.8	-91.8	0.07 (1)	6.25			
	C-D	-272 / 0	-91.8	-91.8	0.25 (1)	6.25			
	D-E	-311 / 0	-91.8	-91.8	0.07 (1)	6.25			
	E-F	0 / 28	-91.8	-91.8	0.12 (1)	10.00			
	J-B	-633 / 0	0.0	0.0	0.09 (1)	7.81			
	G-E	-632 / 0	0.0	0.0	0.09 (1)	7.81			
	J-I	0 / 0	-18.5	-18.5	0.06 (4)	10.00			
	I-H	0 / 273	-18.5	-18.5	0.08 (4)	10.00			
	H-G	0 / 0	-18.5	-18.5	0.06 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	DL
	25.6	6.0
BOT CH.	LL	DL
	0.0	7.4

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

TOTAL WEIGHT = 46 lb

[M][F]

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.32")

CALCULATED VERT. DEFL.(LL) = L/999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.32")

CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.25/1.00 (C-D:1), BC=0.08/1.00 (H-I:4), WB=0.09/1.00 (B-I:1), SS=0.16/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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



Structural component only
DWG# T-2121218

CITY OF BURLINGTON

BUILDING DEPARTMENT

09/14/2021

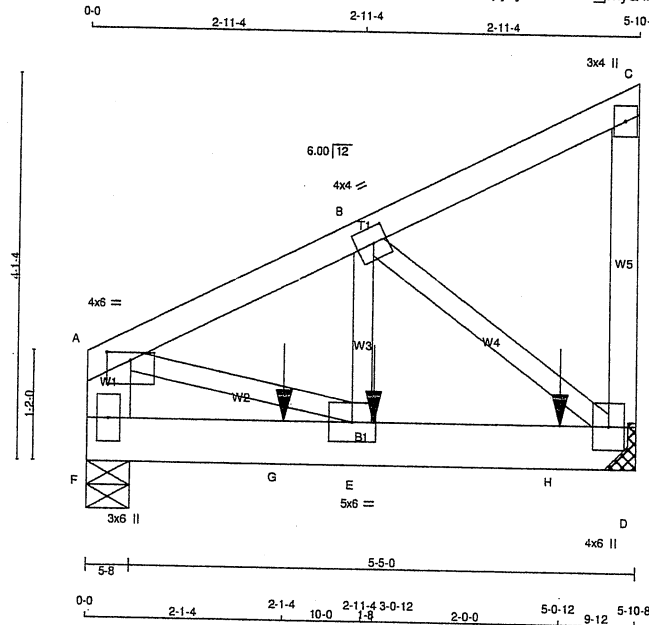
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Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T110	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:38 2021 Page 1
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Scale = 1:23.4



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

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-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 NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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

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

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG DOWN	REQD BRG UPLIFT
JT	VERT	HORZ	DOWN	UPLIFT
D	1408	0	1408	0
F	1130	0	1130	0

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

UNFACTORED REACTIONS

	1ST LOOSE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	989	688 / 0	0 / 0	0 / 0	0 / 0	301 / 0	0 / 0
F	794	550 / 0	0 / 0	0 / 0	0 / 0	244 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LO)	MAX. CS1 (LC)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. CS1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-1250 / 0	-91.8	-91.8	0.06 (1)	E-B	0 / 1106	0.14 (1)
B-C	-11 / 0	-91.8	-91.8	0.05 (1)	B-D	-1419 / 0	0.17 (1)
D-C	-110 / 0	0.0	0.0	0.01 (1)	A-E	0 / 1166	0.14 (1)
F-A	-971 / 0	0.0	0.0	0.03 (1)			
F-G	0 / 0	-18.5	-18.5	0.11 (1)			
G-E	0 / 0	-18.5	-18.5	0.11 (1)			
E-H	0 / 1128	-18.5	-18.5	0.20 (1)			
H-D	0 / 1128	-18.5	-18.5	0.20 (1)			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
E	3-0-12	-441	-441	---	BACK	VERT	TOTAL
G	2-1-4	-441	-441	---	BACK	VERT	TOTAL
H	5-0-12	-443	-443	---	BACK	VERT	TOTAL

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 29 = 58 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.08/1.00 (A-B:1), BC=0.20/1.00 (D-E:1), WB=0.17/1.00 (B-D:1), SS=0.17/1.00 (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

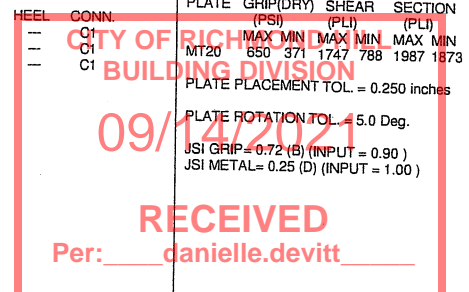
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.72 (B) (INPUT = 0.90)
JSI METAL = 0.25 (D) (INPUT = 1.00)



Structural component only
DWG# T-2121219 112



CONTINUED ON PAGE 2

JOB NAME 412865	TRUSS NAME T110	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:38 2021 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	BMWW-t	MT20	5.0	6.0		
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2121219 *3/11*

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

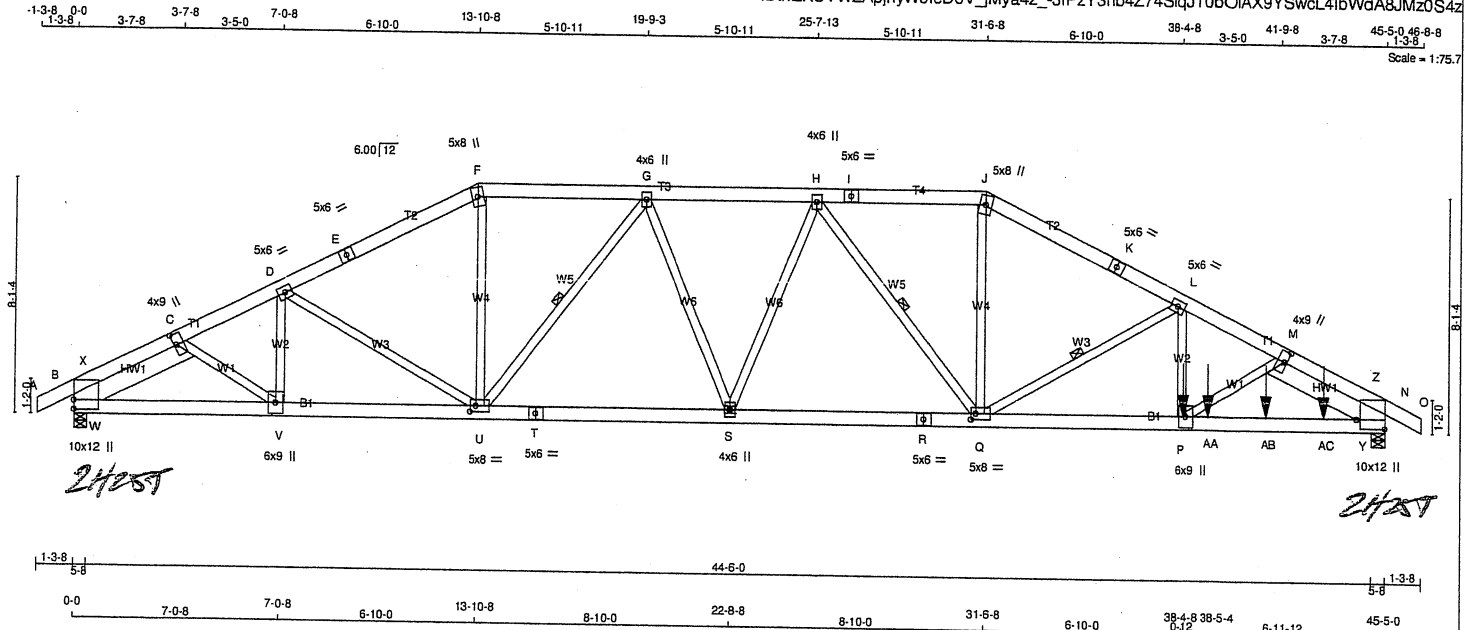
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Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T111	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
TRUSS DESC.					

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:40 2021 Page 1
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LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - E	2x6	DRY	No.2	SPF
E - F	2x6	DRY	No.2	SPF
F - I	2x6	DRY	No.2	SPF
I - J	2x6	DRY	No.2	SPF
J - K	2x6	DRY	No.2	SPF
K - O	2x6	DRY	No.2	SPF
B - T	2x6	DRY	No.2	SPF
T - R	2x6	DRY	No.2	SPF
R - N	2x6	DRY	No.2	SPF

REINFORCING MEMBERS	SIZE	LUMBER	DESCR.
HW1	2x8	DRY	No.2
HW2	2x8	DRY	No.2
ALL WEBS	2x4	DRY	No.2
DRY: SEASONED LUMBER.			

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-E	2	12
E-F	2	12
F-I	2	12
I-J	2	12
J-K	2	12
K-O	2	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
B-T	2	12
T-R	2	12
R-N	2	12
WEBS : (0.122"x3") SPIRAL NAILS		
L-P	2	4
2x4	1	6
D-V	2	4
2x8	2	6

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UP	IN-SX
B	4431	0	4466	193
N	8350	0	8385	0

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 1072 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1072 LBS. FACTORED UPLIFT

PROVIDE FOR 193 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS	1ST LOASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW
B	3247	1991 / 0
N	6011	3847 / 0

HORIZONTAL REACTIONS	1ST LOASE	MAX./MIN. COMPONENT REACTIONS
B	0 / 0	0 / 0
N	0 / 0	0 / 0

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

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 4.01 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 LATERAL BRACE(S) AT 1/2 LENGTH OF G-U, H-Q, L-Q.

LOADING	CHORDS	WEBS
TOTAL LOAD CASES: (18)		
	MAX. FACTORED	MAX. FACTORED
	MEMB. FORCE (LBS)	MEMB. FORCE (LBS)
	FR-TO	FR-TO
	A-B	0 / 1
	B-X	-5083 / 1128
	X-C	-3427 / 876
	C-D	-7034 / 1698
	D-E	-6551 / 1552
	E-F	-6551 / 1552
	F-G	-5873 / 1490
	G-H	-7469 / 1635
	H-I	-7589 / 1490
	I-J	-7589 / 1490
	J-K	-8446 / 1552
	K-L	-8446 / 1552
	L-M	-13359 / 1699
	M-Z	-7226 / 878
	Z-N	-10927 / 1132
	N-O	0 / 1
	B-W	-844 / 3015
	W-V	-1434 / 5645
	V-U	-1531 / 6363
	U-T	-1368 / 7114
	T-S	-1368 / 7114
	S-R	-1314 / 7690
	R-Q	-1314 / 7690
	Q-P	-1338 / 12033
	P-AA	-1243 / 10718
	AA-AB	-1243 / 10718
	AB-AC	-1243 / 10718
	AC-Y	-1243 / 10718
	Y-N	-653 / 6377

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 33.4 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 57.3 PSF

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF CBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.51")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/180 (3.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.19/1.00 (J-L-3), BC=0.64/1.00 (P-Y-1),
WB=0.56/1.00 (L-Q-3), SSI=0.17/1.00 (N-Y-2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.85 (U) (INPUT = 0.90)
JSI METAL = 0.92 (M) (INPUT = 1.00)



Structural component only
DWG# T-2121220 1/2

JOB NAME 412865	TRUSS NAME T111	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MITak Industries, Inc. Thu Jul 1 12:26:40 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1+	MT20	10.0	12.0	3.75	
C	TMWW+	MT20	4.0	9.0	4.50	1.00
D	TMWW+	MT20	5.0	6.0		
E, I, K						
E	TS+	MT20	5.0	6.0		
F	TTW+m	MT20	5.0	8.0		
G	TMWW+	MT20	4.0	6.0		
H	TMWW+	MT20	4.0	6.0		
J	TTW+m	MT20	5.0	8.0		
L	TMWW+	MT20	5.0	6.0		
M	TMWW+	MT20	4.0	9.0	4.50	1.00
N	TMBMW1+	MT20	10.0	12.0	3.75	Edge
P	BMWW+	MT20	6.0	9.0		
Q	BMWW+	MT20	5.0	8.0	2.50	2.00
R	BS+	MT20	5.0	6.0		
S	BMWW+	MT20	4.0	6.0		
T	BS+	MT20	5.0	6.0		
U	BMWW+	MT20	5.0	8.0	2.50	2.50
V	BMWW+	MT20	6.0	9.0		

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

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
P	38-5-4	-2896	-2896	---	BACK	VERT	TOTAL	---	C1
AA	39-3-12	-312	-312	---	BACK	VERT	TOTAL	---	C1
AB	41-3-12	-312	-312	---	BACK	VERT	TOTAL	---	C1
AC	43-3-12	-312	-312	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.2] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpG, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

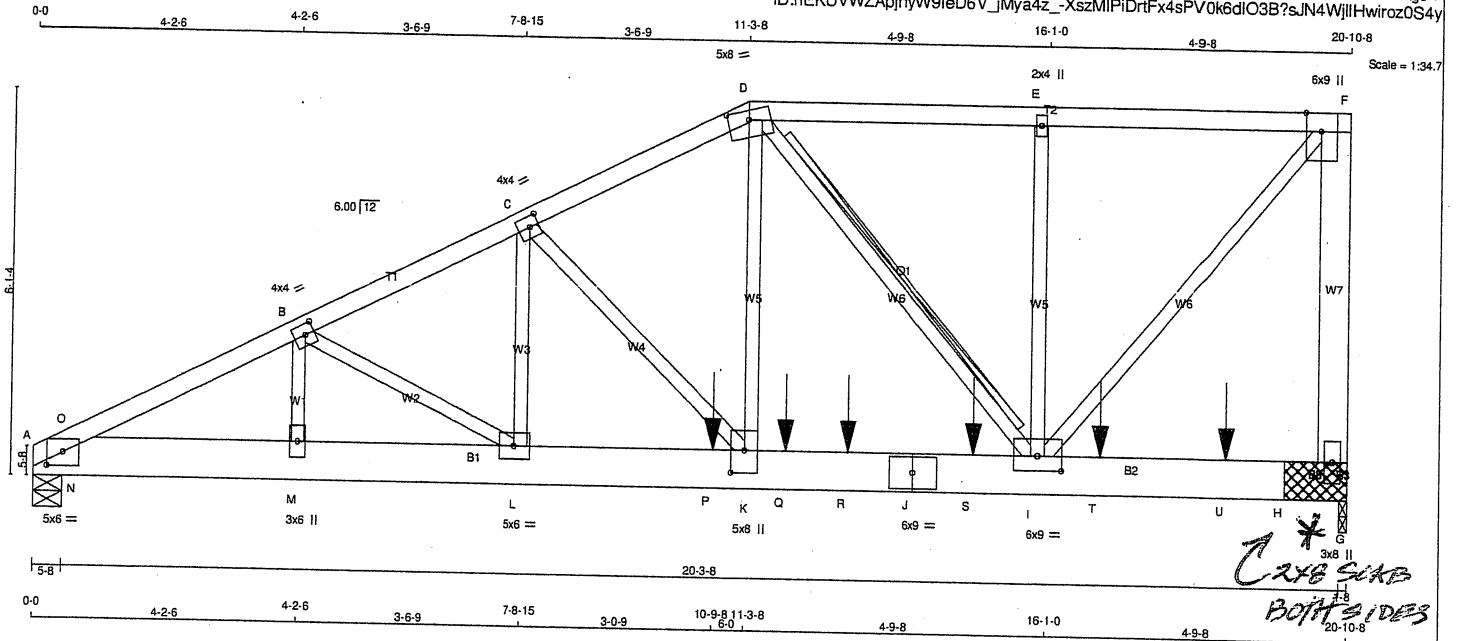


Structural component only
 DWG# T-2121220 *712*



JOB NAME 412865	TRUSS NAME T112	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:41 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF		
D - F	2x4 DRY	No.2	SPF		
G - F	2x6 DRY	No.2	SPF		
A - J	2x8 DRY	No.2	SPF		
J - G	2x8 DRY	No.2	SPF		
ALL WEBS	2x3 DRY	No.2	SPF		
DRY: SEASONED LUMBER.					

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

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

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMB1-I	MT20	5.0	6.0	2.50	3.00
B	TMW-W-I	MT20	4.0	4.0	2.00	1.75
C	TMW-W-I	MT20	4.0	4.0	2.00	1.75

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
A	3006	0	3006	0	5-8	5-8
G	4270	0	4270	0	1-8	1-8 & BLOCK

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
A	2129	1377 / 0	0 / 0	0 / 0	0 / 0	752 / 0	0 / 0
G	3020	1981 / 0	0 / 0	0 / 0	0 / 0	1039 / 0	0 / 0

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

2x8 DRY SPF NO.2 BEARING BLOCK 12" LONG AT JT. G ATTACHED TO FRONT AND BACK SIDE WITH 4 ROWS OF (0.122"x3") SPIRAL NAILS SPACED 3" C.C. 16 NAILS TOTAL.

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 3.86 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.

2x4 DRY SPF NO.2 T-BRACE AT D-I

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

FR-TO	CHORDS			WEBS		
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)
A-O	-5940 / 0	-91.8	-91.8	0.14 (1)	M-B	-169 / 0
O-B	-5967 / 0	-91.8	-91.8	0.20 (1)	B-L	-154 / 0
B-C	-5815 / 0	-91.8	-91.8	0.19 (1)	L-C	0 / 597
C-D	-5141 / 0	-91.8	-91.8	0.18 (1)	C-K	-904 / 0
D-E	-3253 / 0	-91.8	-91.8	0.23 (1)	K-D	0 / 3688
E-F	-3253 / 0	-91.8	-91.8	0.23 (1)	D-I	-2197 / 0
F-G	-3921 / 0	0.0	0.0	0.79 (1)	I-E	-530 / 0
					E-F	0 / 4959
					F-I	-254 / 0
A-N	0 / 5334	-18.5	-18.5	0.36 (1)	N-O	
N-M	0 / 5337	-18.5	-18.5	0.41 (1)		
M-L	0 / 5337	-18.5	-18.5	0.41 (1)		
L-P	0 / 5205	-18.5	-18.5	0.48 (1)		
P-K	0 / 5205	-18.5	-18.5	0.48 (1)		
K-Q	0 / 4653	-18.5	-18.5	0.39 (1)		
Q-R	0 / 4653	-18.5	-18.5	0.39 (1)		
R-J	0 / 4653	-18.5	-18.5	0.39 (1)		
J-S	0 / 4653	-18.5	-18.5	0.39 (1)		
S-I	0 / 4653	-18.5	-18.5	0.39 (1)		
I-T	0 / 0	-18.5	-18.5	0.16 (1)		
T-U	0 / 0	-18.5	-18.5	0.16 (1)		
U-H	0 / 0	-18.5	-18.5	0.16 (1)		
H-G	0 / 0	-18.5	-18.5	0.16 (1)		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
P	10-9-8	-1670	-1670		BACK	VERT	TOTAL		C1
Q	11-11-4	-370	-370		BACK	VERT	TOTAL		C1
R	12-11-4	-370	-370		BACK	VERT	TOTAL		C1
S	14-11-4	-370	-370		BACK	VERT	TOTAL		C1
T	16-11-4	-370	-370		BACK	VERT	TOTAL		C1
U	18-11-4	-370	-370		BACK	VERT	TOTAL		C1

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.70")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.70")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.79/1.00 (F-G:1), BC=0.48/1.00 (K-L:1), WB=0.61/1.00 (F-I:1), SS=0.61/1.00 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.88 (I) (INPUT = 0.90)
JSI METAL = 0.76 (I) (INPUT = 1.00)

Per: danielle.devitt



Structural component only
DWG# T-2121221

CONTINUED ON PAGE 2

JOB NAME 412865	TRUSS NAME T112	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 12:26:41 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	TTWW-m	MT20	5.0	8.0	1.75	4.00
E	TMW+w	MT20	2.0	4.0		
F	TMVW+p	MT20	6.0	9.0	Edge	
G	BMV1+p	MT20	3.0	8.0		
I	BMVWW-t	MT20	6.0	9.0	2.75	4.50
J	BS-t	MT20	6.0	9.0		
K	BMVW+t	MT20	5.0	8.0	4.25	2.50
L	BMVW-t	MT20	5.0	6.0		
M	BMV+w	MT20	3.0	6.0		

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

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2121221 *m*

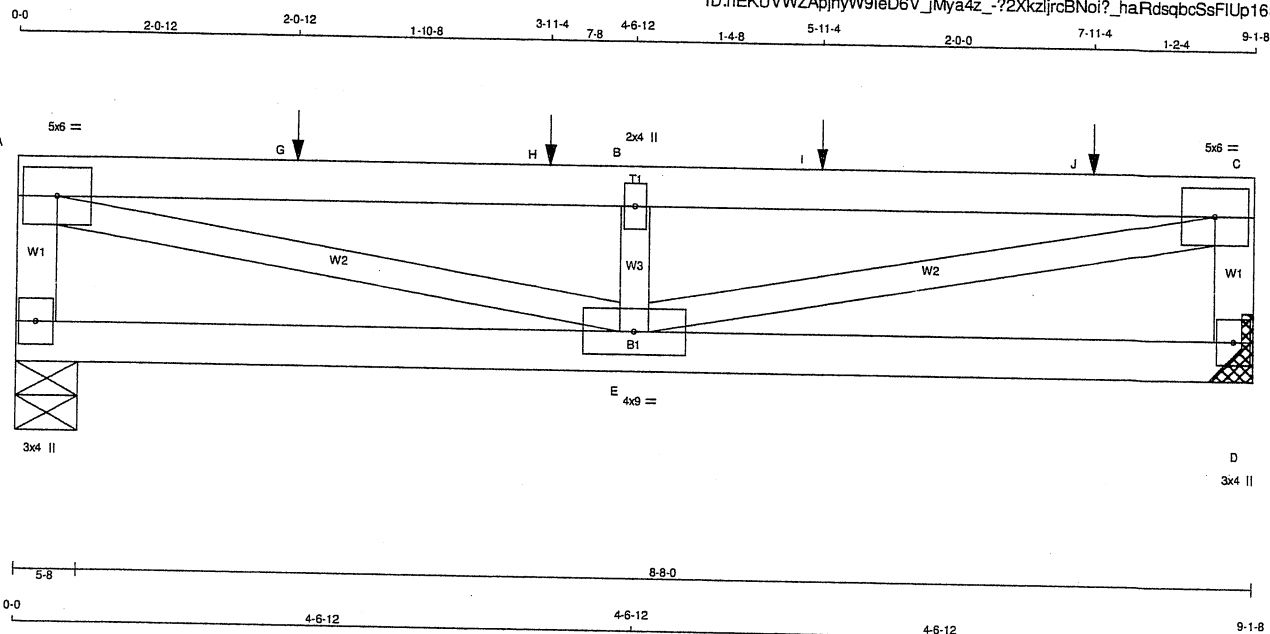
**CITY OF RICHMOND HILL
BUILDING DIVISION**

09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T113	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.420 S Jan 21 2021 MTek Industries, Inc. Thu Jul 1 12:26:42 2021 Page 1 ID:hEKUVWZApinyW9leD6V_jMya4z_-?2XkzjrcBNol?_haRdsqbcSsFIUp16u_xfFOEz0S4x	



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

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

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

CHORDS #ROWS SURFACE SPACING (IN) LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS
F - A 1 12 TOP
A - C 1 12 TOP
C - D 1 12 TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS
F - D 1 12 SIDE (14.0)
WEBS : (0.122"x3") SPIRAL NAILS
2x3 1 6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	6.0		
B	TMVW-w	MT20	2.0	4.0		
C	TMVW-t	MT20	5.0	6.0		
D	BMV1+p	MT20	3.0	4.0		
E	BMVWW-t	MT20	4.0	9.0		
F	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	1069	0	1069	0	5-8	5-8
D	1236	0	1236	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM. LIVE	WIND	DEAD
F	767	444 / 0	0 / 0	0 / 0	0 / 0	323 / 0
D	883	529 / 0	0 / 0	0 / 0	0 / 0	355 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS		WEBS	
		FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)
FR-TO		FROM	TO	FR-TO	
F-A	-968 / 0	0.0	0.0	0.05 (1)	7.81
A-G	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
G-H	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
H-B	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
B-I	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
I-J	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
J-C	-2718 / 0	-91.8	-91.8	0.40 (1)	5.03
D-C	-1135 / 0	0.0	0.0	0.06 (1)	7.81
F-E	0 / 0	-43.5	-43.5	0.11 (4)	10.00
E-D	0 / 0	-43.5	-43.5	0.11 (4)	10.00

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
G	2-0-12	-131	-131	---	TOP	VERT	TOTAL
H	3-11-4	-208	-208	---	TOP	VERT	TOTAL
I	5-11-4	-208	-208	---	TOP	VERT	TOTAL
J	7-11-4	-208	-208	---	TOP	VERT	TOTAL

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

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

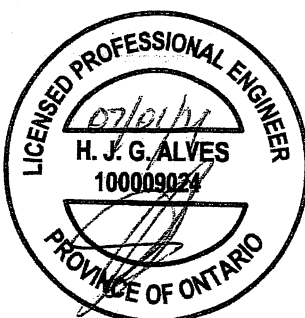
CSI: TC=0.40/1.00 (A-B:1), BC=0.11/1.00 (E-F:4), WB=0.35/1.00 (A-E:1), SSI=0.28/1.00 (A-B:1)

DOL LUMBER 100 NAIL 100 LBS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00
COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP = 0.82 (E) (INPUT = 0.90)
JSI METAL = 0.31 (A) (INPUT = 1.00)



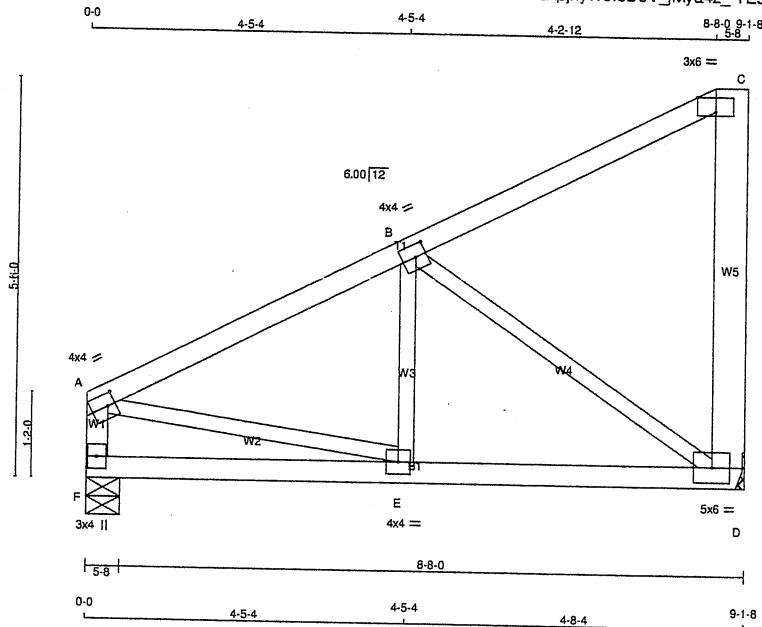
Structural component only
DWG# T-2121222

CITY OF ROYAL PINE HOMES
BUILDING DIVISION
09/14/2021
RECEIVED
Per: daniel

JOB NAME 412865	TRUSS NAME T114	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:43 2021 Page 1
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TOTAL WEIGHT = 41 lb
[M/F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	4.0	2.00	1.25
B	TMVW-t	MT20	4.0	4.0	2.00	1.75
C	TMV-p	MT20	3.0	6.0	Edge	3.00
D	BMVW1-t	MT20	5.0	6.0		
E	BMVW-t	MT20	4.0	4.0		
F	BMV1-p	MT20	3.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
D	503	0	503	0	0	5-8
F	503	0	503	0	0	5-8

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	356	233 / 0	0 / 0	0 / 0	0 / 0	122 / 0	0 / 0
F	356	233 / 0	0 / 0	0 / 0	0 / 0	122 / 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.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO			
A-B	-491 / 0	-91.8	-91.8 0.25 (1)	6.25	E-B	0 / 86
B-C	-22 / 0	-91.8	-91.8 0.24 (1)	6.25	B-D	-551 / 0
D-C	-166 / 0	0.0	0.0 0.07 (1)	7.81	A-E	0 / 469
F-A	-471 / 0	0.0	0.0 0.05 (1)	7.81		
F-E	0 / 0	-18.5	-18.5 0.11 (4)	10.00		
E-D	0 / 460	-18.5	-18.5 0.14 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.30")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.30")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CSI: TC=0.25/1.00 (A-B:1), BC=0.14/1.00 (D-E:4), WB=0.26/1.00 (B-D:1), SSI=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.79 (A) (INPUT = 0.90)
JSI METAL = 0.20 (A) (INPUT = 1.00)



Structural component only
DWG# T-2121223

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

09/14/2021

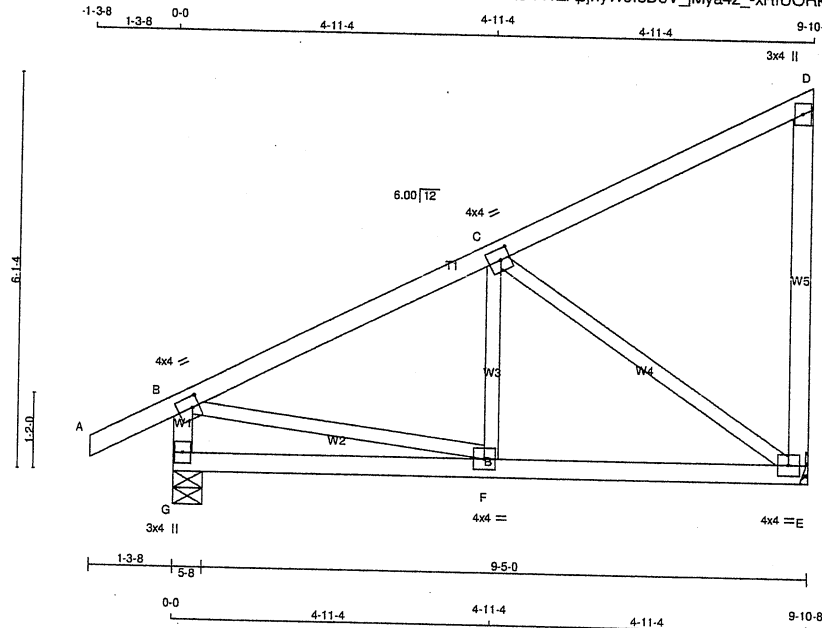
RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T115	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:44 2021 Page 1
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Scale = 1:33.9

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	4.0	2.00 1.25
C	TMVW-t	MT20	4.0	4.0	2.00 1.75
D	TMV+p	MT20	3.0	4.0	
E	BMVW1-t	MT20	4.0	4.0	
F	BMVW-t	MT20	4.0	4.0	
G	BMV1+p	MT20	3.0	4.0	

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	DOWN	BRG	BRG
E	544	0	544	0	0
G	669	0	669	0	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	385	253 / 0	0 / 0	0 / 0	0 / 0	132 / 0	0 / 0
G	471	322 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
A-B	0 / 28	F-C	0 / 97
B-C	-534 / 0	C-E	-602 / 0
C-D	-25 / 0	B-F	0 / 507
E-D	-172 / 0		
G-B	-633 / 0		
G-F	0 / 0		
F-E	0 / 499		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- 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 DEFL.(LL) = L/360 (0.33")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.29/1.00 (B-C:1), BC=0.17/1.00 (E-F:4), WB=0.35/1.00 (C-E:1), SSI=0.20/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MIT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.87 (B) (INPUT = 0.90)
JSI METAL=0.24 (B) (INPUT = 1.00)

CITY OF RICHMOND
BUILDING DIVISION

09/14/2021

RECEIVED

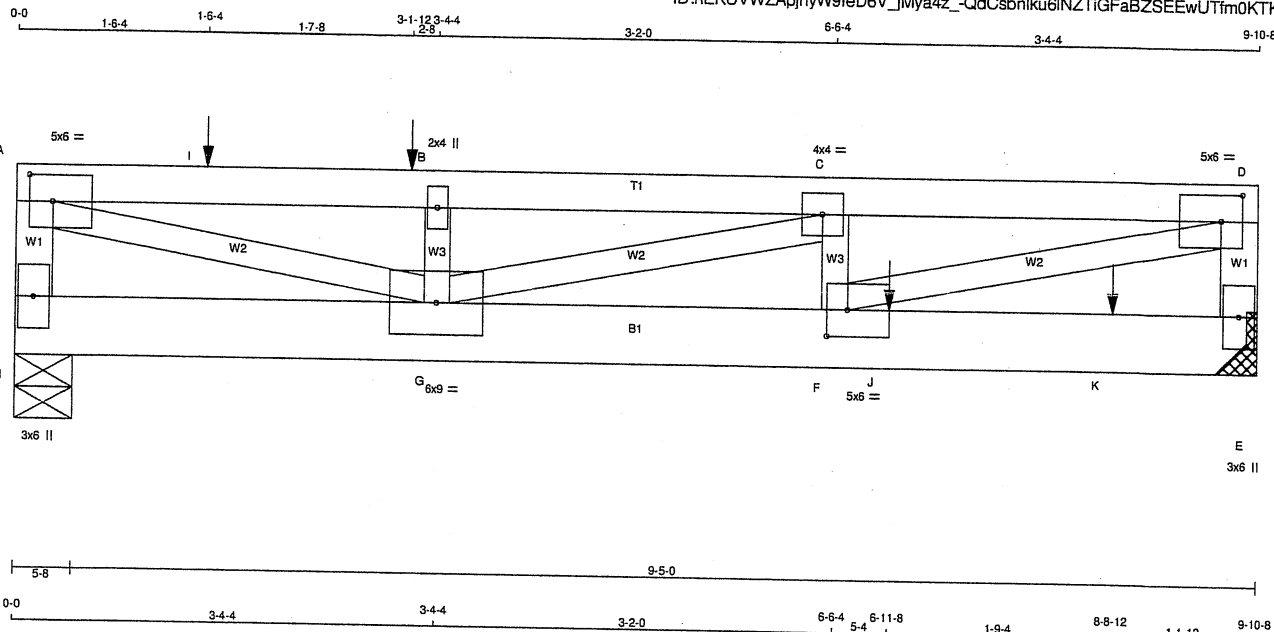
Per: danielle.devitt



Structural component only
DWG# T-2121224

JOB NAME 412865	TRUSS NAME T116	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:45 2021 Page 1
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Scale = 1:17.3

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
H - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - E	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
H - A 1 12		TOP
A - D 1 7		SIDE(183.1)
D - E 1 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H - E 2 12		SIDE(14.0)
WEBS : (0.122"x3") SPIRAL NAILS		
G - B 1 5		SIDE(33.1)
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-1	MT20	5.0	6.0	2.50	2.25
B	TMWV-1	MT20	2.0	4.0		
C	TMWV-1	MT20	4.0	4.0		
D	TMWV-1	MT20	5.0	6.0	2.50	2.00

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
H	2332	0	2332	0
E	2363	0	2363	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
	COMBINED	SNOW
H	1659	1032 / 0
E	1685	1027 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.59 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
H-A	-2094 / 0	0.0	0.0 0.12 (1)	F-D	0 / 5075	0.63 (1)	
A-I	-4644 / 0	-91.8	-91.8 0.63 (1)	A-G	0 / 4898	0.61 (1)	
I-B	-4644 / 0	-91.8	-91.8 0.63 (1)	F-C	-112 / 38	0.01 (1)	
B-C	-4644 / 0	-91.8	-91.8 0.26 (1)	G-B	-1676 / 0	0.13 (1)	
C-D	-4811 / 0	-91.8	-91.8 0.22 (1)	G-C	-178 / 0	0.02 (4)	
E-D	-1794 / 0	0.0	0.0 0.10 (1)				
H-G	0 / 0	-43.5	-43.5 0.20 (1)				
G-F	0 / 4811	-43.5	-43.5 0.52 (1)				
F-J	0 / 0	-43.5	-43.5 0.24 (1)				
J-K	0 / 0	-43.5	-43.5 0.24 (1)				
K-E	0 / 0	-43.5	-43.5 0.24 (1)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	3-1-12	-584	-584		FRONT	VERT	TOTAL
I	1-6-4	-584	-584		FRONT	VERT	TOTAL
J	6-11-8	-869	-869		FRONT	VERT	TOTAL
K	8-8-12	-341	-341		FRONT	VERT	TOTAL

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
DL = 8.0	PSF	
BOT CH.	LL = 0.0	PSF
DL = 7.4	PSF	
TOTAL LOAD = 39.0	PSF	

SPACING = 24.0 IN. C/C

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

*** NON STANDARD GIRDER ***

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.33")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/925 (0.13")

CSI: TC=0.63/1.00 (A-B:1), BC=0.52/1.00 (F-G:1), WB=0.63/1.00 (D-F:1), SSI=0.42/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.87 (A) (INPUT = 0.90)
JSI METAL= 0.55 (D) (INPUT = 1.00)



Structural component only
DWG# T-2121225 1/1

CONTINUED ON PAGE 2

JOB NAME 412865	TRUSS NAME T116	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:45 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
E	BMV1+p	MT20	3.0	6.0		
F	BMWW-t	MT20	5.0	6.0	2.50	2.00
G	BMWW-t	MT20	6.0	9.0		
H	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2121225 *MA*

CITY OF RICHMOND HILL
BUILDING DIVISION

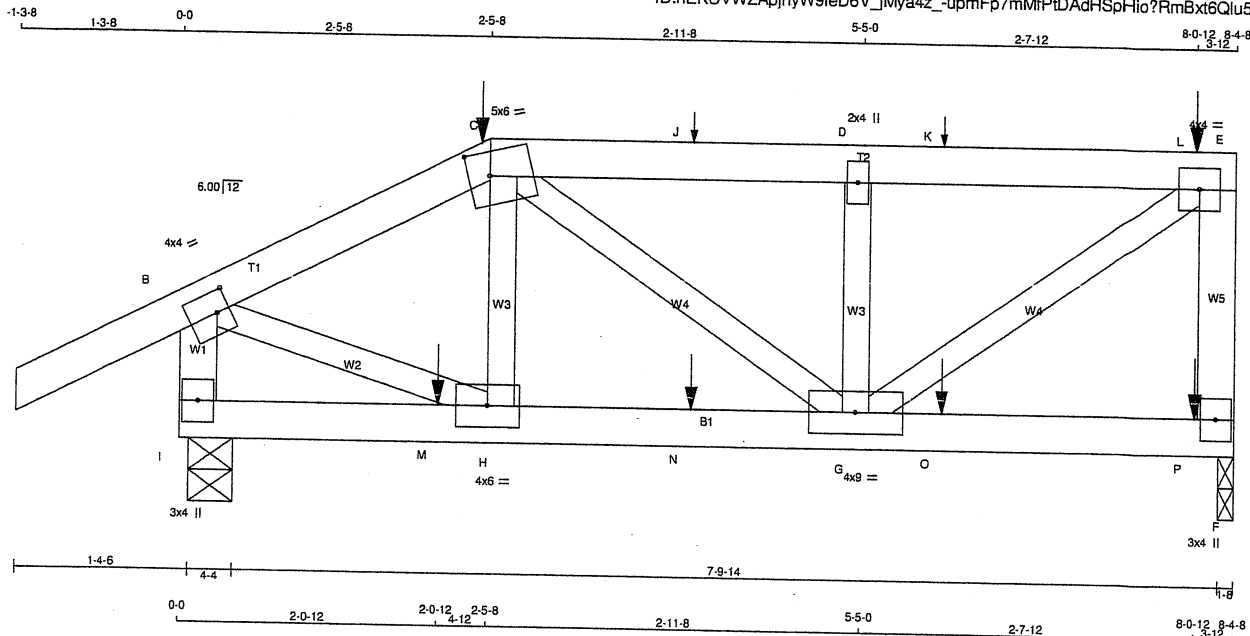
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T117	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:28:46 2021 Page 1
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LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	SPF	
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
I - B	2x4	DRY	No.2	SPF	
I - F	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW-m	MT20	5.0	6.0	2.25	2.00
D	TMVW-w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	BMVWW-t	MT20	4.0	6.0		
I	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	JT	GROSS REACTION	BRG	BRG	IN-SX	IN-SX
F	527	0	527	0	0	1-8	1-8
I	668	0	668	0	0	4-4	4-4

UNFACTORED REACTIONS

1ST LCASE	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	373	245 / 0	0 / 0	0 / 0	0 / 0	128 / 0	0 / 0
I	469	327 / 0	0 / 0	0 / 0	0 / 0	142 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-91.8 -91.8	0.13 (1)	10.00	H-C	-106 / 11	0.02 (1)
B-C	-546 / 0	-91.8 -91.8	0.11 (1)	6.25	C-G	0 / 44	0.01 (1)
C-J	-518 / 0	-91.8 -91.8	0.14 (1)	6.25	G-D	-332 / 0	0.06 (1)
J-D	-518 / 0	-91.8 -91.8	0.14 (1)	6.25	G-E	0 / 633	0.16 (1)
D-K	-518 / 0	-91.8 -91.8	0.14 (1)	6.25	B-H	0 / 515	0.13 (1)
K-L	-518 / 0	-91.8 -91.8	0.14 (1)	6.25			
L-E	-518 / 0	-91.8 -91.8	0.14 (1)	6.25			
F-E	-494 / 0	0.0 0.0	0.07 (1)	7.81			
I-B	-546 / 0	0.0 0.0	0.07 (1)	7.81			
I-M	0 / 0	-18.5 -18.5	0.03 (4)	10.00			
M-H	0 / 0	-18.5 -18.5	0.03 (4)	10.00			
H-N	0 / 483	-18.5 -18.5	0.11 (1)	10.00			
N-G	0 / 483	-18.5 -18.5	0.11 (1)	10.00			
G-O	0 / 0	-18.5 -18.5	0.04 (4)	10.00			
O-P	0 / 0	-18.5 -18.5	0.04 (4)	10.00			
P-F	0 / 0	-18.5 -18.5	0.04 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-5-8	-74	-74		FRONT	VERT	TOTAL		
J	4-0-12	1	1		FRONT	VERT	TOTAL		
K	6-0-12	1	1		FRONT	VERT	TOTAL		
L	8-0-12	-17	-17		FRONT	VERT	TOTAL		
M	2-0-12	-3	-3		FRONT	VERT	TOTAL		
N	4-0-12	-1	-1		FRONT	VERT	TOTAL		
O	6-0-12	-1	-1		FRONT	VERT	TOTAL		
P	8-0-12	-6	-6		FRONT	VERT	TOTAL		

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

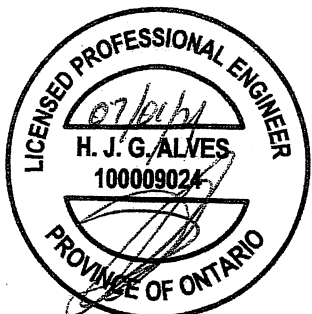
CSI: TC=0.14/1.00 (D-E:1), BC=0.11/1.00 (G-H:1), WB=0.16/1.00 (E-G:1), SSI=0.15/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

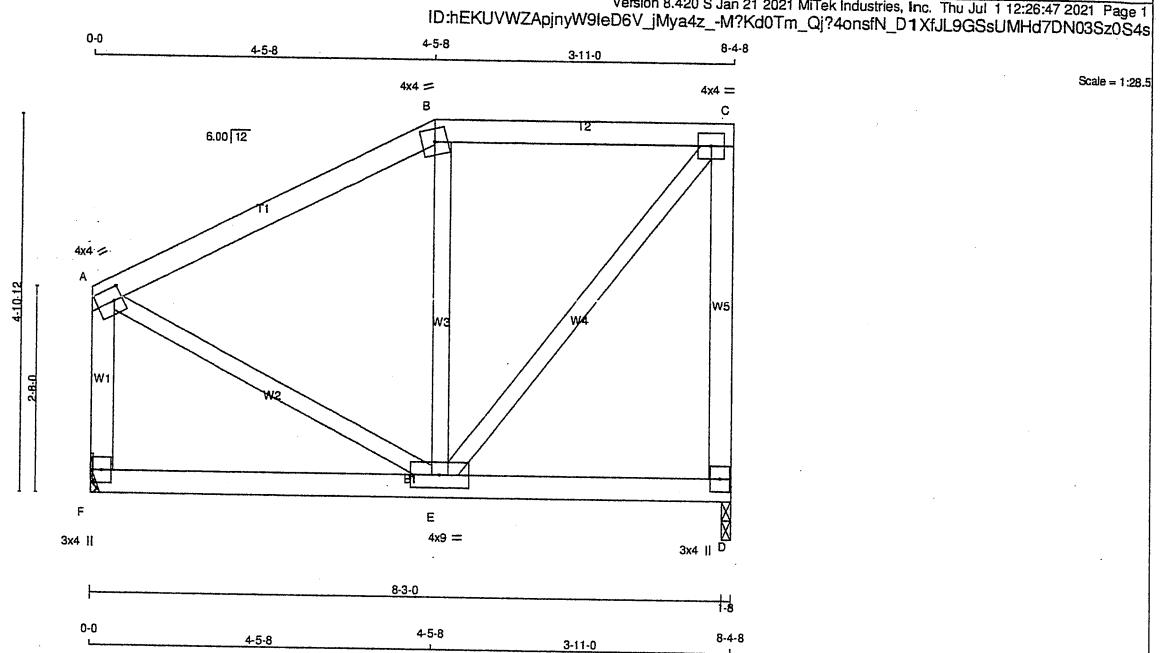
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

CITY OF RICHMOND HILL
BUILDING DEPARTMENT
09/14/2021
RE: [REDACTED]
Per: danielle.devitt



Structural component only
DWG# T-2121226

JOB NAME 412865	TRUSS NAME T118	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - B	2x4	DRY	No.2
B - C	2x4	DRY	No.2
D - C	2x4	DRY	No.2
F - A	2x4	DRY	No.2
F - D	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2
EXCEPT

SPF
SPF
SPF
SPF
SPF
SPF

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-t	MT20	4.0	4.0	2.00 1.25
B	TTW-m	MT20	4.0	4.0	
C	TMVW-t	MT20	4.0	4.0	
D	BMV1+p	MT20	3.0	4.0	
E	BMVWW-t	MT20	4.0	9.0	
F	BMV1+p	MT20	3.0	4.0	

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	BRG	BRG	IN-SX
	VERT	HORZ	DOWN	HORZ	UPLIFT
D	462	0	462	0	0
F	462	0	462	0	0

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

UNFACTORED REACTIONS

JT	1ST LOASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
F	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	-245 / 0	E-B	-275 / 0
B-C	-212 / 0	E-C	0 / 333
D-C	-436 / 0	A-E	0 / 246
F-A	-427 / 0		
F-E	0 / 0		
E-D	0 / 0		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TO=0.23/1.00 (A-B:1), BC=0.09/1.00 (E-F:4), WB=0.10/1.00 (B-E:1), SS=0.14/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

CITY OF RICHMOND HILL
BUILDING DEPT

09/14/2021

Per: danielle.devitt

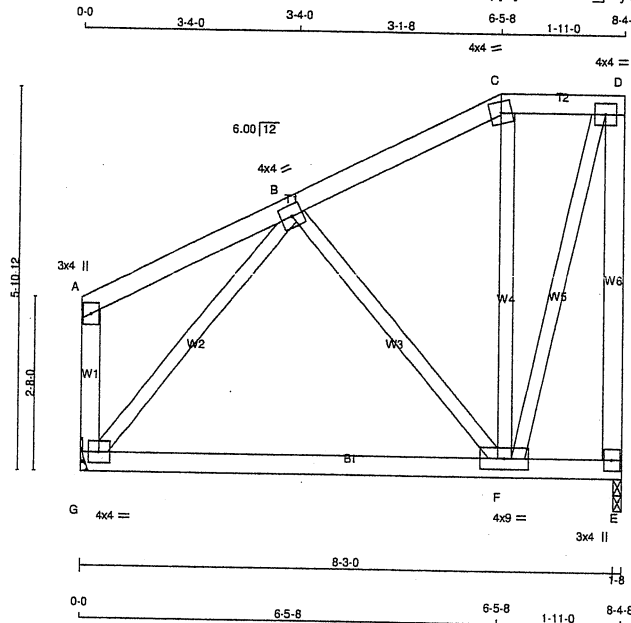


Structural component only
DWG# T-2121227

JOB NAME 412865	TRUSS NAME T119	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:47 2021 Page 1
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Scale = 1:33.8

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

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	3.0	4.0		
B	TMW-t	MT20	4.0	4.0		
C	TTW-m	MT20	4.0	4.0		
D	TMW-t	MT20	4.0	4.0		
E	BMV1+p	MT20	3.0	4.0		
F	BMW-t	MT20	4.0	9.0		
G	BMW1-t	MT20	4.0	4.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
E	462	0	462	0
G	462	0	462	0

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

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
G	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
A-B	0 / 16	-91.8	-91.8	0.16 (1)	10.00	B-F	-175 / 0	0.08 (1)	
B-C	-162 / 0	-91.8	-91.8	0.12 (1)	6.25	F-C	-135 / 0	0.07 (1)	
C-D	-128 / 0	-91.8	-91.8	0.04 (1)	6.25	F-D	0 / 416	0.09 (1)	
E-D	-463 / 0	0.0	0.0	0.32 (1)	7.81	G-B	-385 / 0	0.16 (1)	
G-A	-113 / 0	0.0	0.0	0.02 (1)	7.81				
G-F	0 / 243	-18.5	-18.5	0.19 (4)	10.00				
F-E	0 / 0	-18.5	-18.5	0.18 (4)	10.00				

TOTAL WEIGHT = 45 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.32/1.00 (D-E:1), BC=0.19/1.00 (F-G:4), WB=0.16/1.00 (B-G:1), SSI=0.13/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

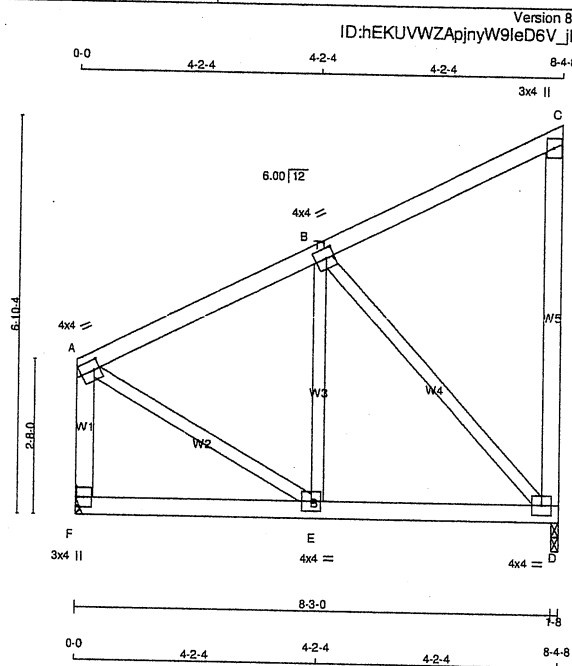
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

CITY OF RICHMOND HILL
BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt



Structural component only
DWG# T-2121228

JOB NAME 412865	TRUSS NAME T120	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	4.0	2.00	1.25
B	TMWW-t	MT20	4.0	4.0	2.00	1.75
C	TMV+p	MT20	3.0	4.0		
D	BMVW1-t	MT20	4.0	4.0		
E	BMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
D	462	0	462	0	1-8	IN-SX
F	462	0	462	0	1-8	MECHANICAL

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

UNFACTORED REACTIONS							
1ST CASE		MAX. / MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
F	326	214 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)				MAX. UNBRACED LENGTH FR-TO	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
		FROM		TO				
		FR-TO	CS1 (LC)	FR-TO	CS1 (LC)			
A-B	-280 / 0	-91.8	-91.8	0.21 (1)	6.25	E-B	-58 / 56	0.02 (4)
B-C	-21 / 0	-91.8	-91.8	0.21 (1)	6.25	B-D	-393 / 0	0.24 (1)
D-C	-145 / 0	0.0	0.0	0.14 (1)	7.81	A-E	0 / 309	0.07 (1)
F-A	-431 / 0	0.0	0.0	0.06 (1)	7.81			
F-E	0 / 0	-18.5	-18.5	0.09 (4)	10.00			
E-D	0 / 269	-18.5	-18.5	0.11 (4)	10.00			

TOTAL WEIGHT = 42 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.21/1.00 (A-B:1), BC=0.11/1.00 (D-E:4), WB=0.24/1.00 (B-D:1), SSI=0.17/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

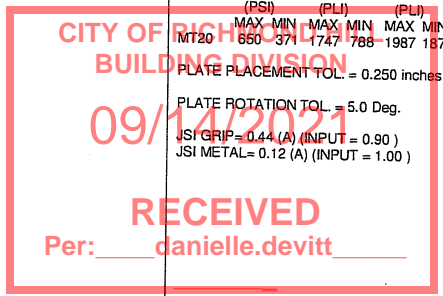
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches

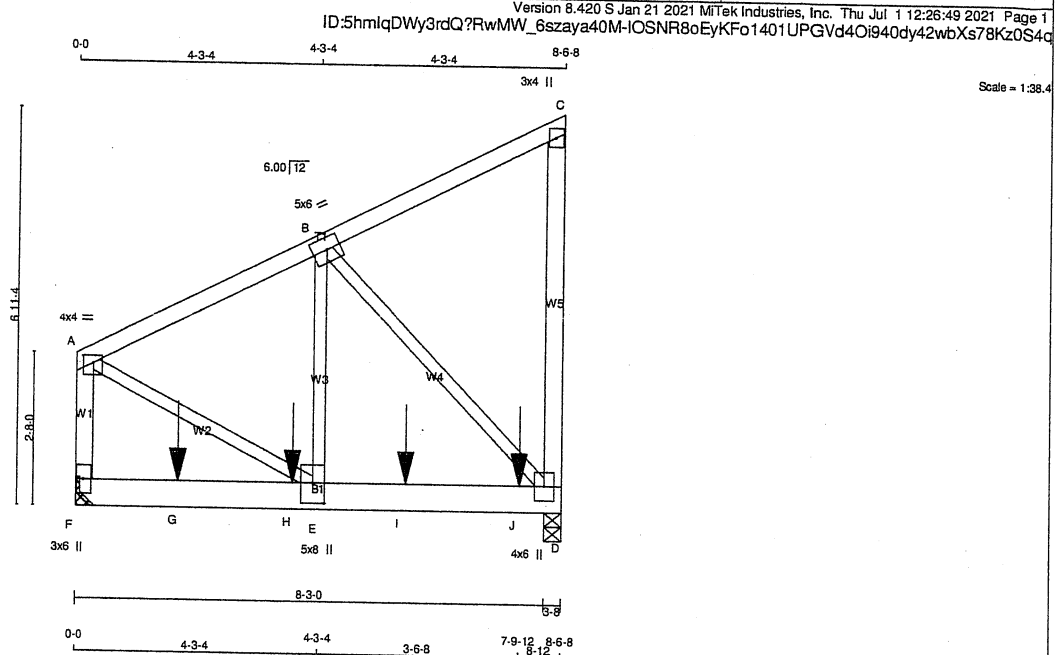
PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP = 0.44 (A) (INPUT = 0.90)
JSI METAL = 0.12 (A) (INPUT = 1.00)



Structural component only
DWG# T-2121229



JOB NAME 412865	TRUSS NAME T121	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



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

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F-A 1	12	TOP
A-C 1	12	TOP
C-D 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F-D 2	6	SIDE(545.9)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	4.0	1.50	2.00
B	TMVW-t	MT20	5.0	6.0		
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT
F	4121	0	4121	0
D	5184	0	5184	0

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	2911	1927 / 0	0 / 0	0 / 0	0 / 0	984 / 0	0 / 0
D	3662	2424 / 0	0 / 0	0 / 0	0 / 0	1238 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
F-A	-3150 / 0	0.0	0.0	0.14 (1)	7.68	A-E	0 / 3284
A-B	-3223 / 0	-91.8	-91.8	0.10 (1)	5.99	E-B	0 / 3972
B-C	-18 / 0	-91.8	-91.8	0.08 (1)	6.25	B-D	-4167 / 0
D-C	-156 / 0	0.0	0.0	0.05 (1)	7.81		
F-G	0 / 0	-18.5	-18.5	0.47 (1)	10.00		
G-H	0 / 0	-18.5	-18.5	0.47 (1)	10.00		
H-E	0 / 0	-18.5	-18.5	0.47 (1)	10.00		
E-I	0 / 2899	-18.5	-18.5	0.59 (1)	10.00		
I-J	0 / 2899	-18.5	-18.5	0.59 (1)	10.00		
J-D	0 / 2899	-18.5	-18.5	0.59 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
G	1-9-12	-1476	-1476	---	BACK	VERT
H	3-9-12	-1476	-1476	---	BACK	VERT
I	5-9-12	-1476	-1476	---	BACK	VERT
J	7-9-12	-1476	-1476	---	BACK	VERT

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 3 X 47 = 141 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.14/1.00 (A-F:1), BC=0.59/1.00 (D-E:1), WB=0.85/1.00 (B-D:1), SSI=0.66/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

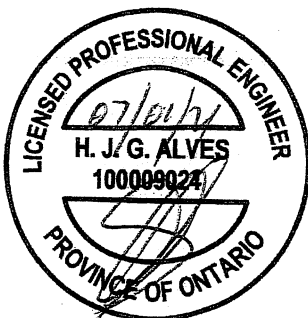
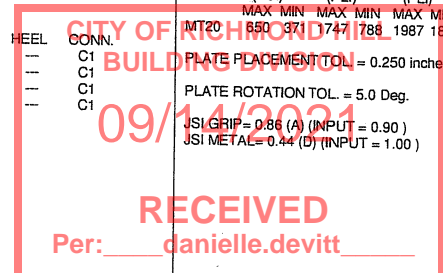
MT20 850 371 747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.86 (A) (INPUT = 0.90)

JSI METAL = 0.44 (D) (INPUT = 1.00)



Structural component only
DWG# T-2121230

JOB NAME 412865	TRUSS NAME T121	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:49 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
E	BMWVH	MT20	5.0	8.0	4.25	2.50
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2121230 *mn*

CITY OF RICHMOND HILL
BUILDING DIVISION

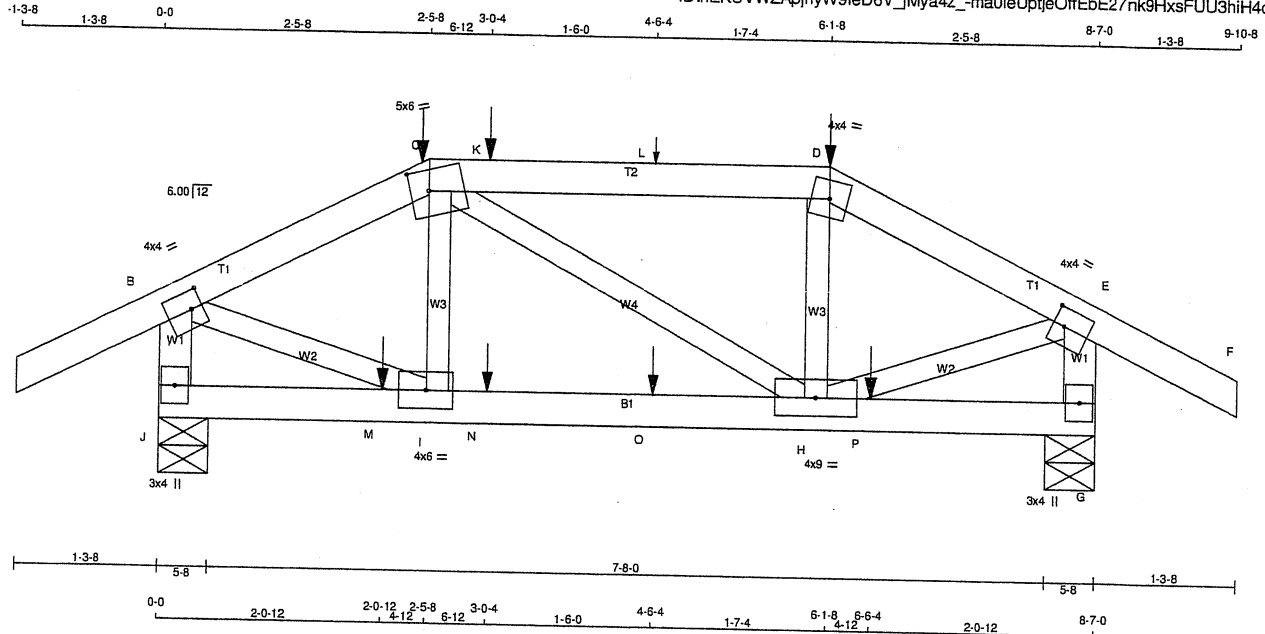
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T122	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:50 2021 Page 1
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
J - B	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	
J - G	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW-m	MT20	5.0	6.0	2.25	2.00
D	TTWW-m	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	4.0	2.00	1.25
G	BMV1+p	MT20	3.0	4.0		
H	BMVW-t	MT20	4.0	9.0		
I	BMVW-t	MT20	4.0	6.0		
J	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
J	720	0	5-8	5-8
G	716	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
J	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	505	354 / 0	0 / 0	0 / 0	0 / 0	151 / 0	0 / 0
G	502	352 / 0	0 / 0	0 / 0	0 / 0	150 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
MEMB.	FORCE (LBS)	FORCE (PLF)	CS1 (LC)	UNBRAC	LENGTH	FR-TO	FORCE (LBS)	CS1 (LC)	
FR-TO		FROM	TO						
A-B	0 / 28	-91.8	-91.8	0.13 (1)	10.00	I-C	-119 / 16	0.02 (1)	
B-C	-617 / 0	-91.8	-91.8	0.11 (1)	6.25	C-H	-6 / 0	0.00 (1)	
C-K	-540 / 0	-91.8	-91.8	0.24 (1)	6.25	H-D	-116 / 17	0.02 (1)	
K-L	-540 / 0	-91.8	-91.8	0.24 (1)	6.25	B-I	0 / 582	0.14 (1)	
L-D	-540 / 0	-91.8	-91.8	0.24 (1)	6.25	H-E	0 / 576	0.14 (1)	
D-E	-611 / 0	-91.8	-91.8	0.11 (1)	6.25				
E-F	0 / 28	-91.8	-91.8	0.13 (1)	10.00				
J-B	-700 / 0	0.0	0.0	0.08 (1)	7.81				
G-E	-695 / 0	0.0	0.0	0.08 (1)	7.81				
J-M	0 / 0	-18.5	-18.5	0.04 (4)	10.00				
M-I	0 / 0	-18.5	-18.5	0.04 (4)	10.00				
I-N	0 / 546	-18.5	-18.5	0.12 (1)	10.00				
N-O	0 / 546	-18.5	-18.5	0.12 (1)	10.00				
O-H	0 / 546	-18.5	-18.5	0.12 (1)	10.00				
H-P	0 / 0	-18.5	-18.5	0.04 (4)	10.00				
P-G	0 / 0	-18.5	-18.5	0.04 (4)	10.00				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-5-8	-74	-74		BACK	VERT	TOTAL		C1
D	6-1-8	-74	-74		BACK	VERT	TOTAL		C1
K	3-0-4	-9	-9		BACK	VERT	TOTAL		C1
L	4-6-4	1	1		BACK	VERT	TOTAL		C1
M	2-0-12	-3	-3		BACK	VERT	TOTAL		C1
N	3-0-4	-1	-1		BACK	VERT	TOTAL		C1
O	4-6-4	-1	-1		BACK	VERT	TOTAL		C1
P	6-6-4	-3	-3		BACK	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.29")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.29")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CS1: TC=0.24/1.00 (C-D:1), BC=0.12/1.00 (H-I:1), WB=0.14/1.00 (B-I:1), SS1=0.15/1.00 (C-D:1)

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

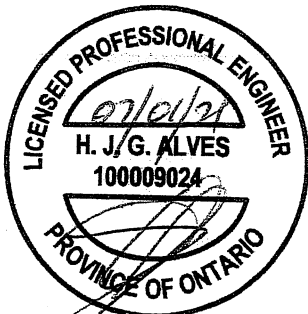
COMPANION LIVE LOAD FACTOR = 1.00

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

CITY OF LEVAND HILL
BUILDING DEPARTMENT

09/14/2021

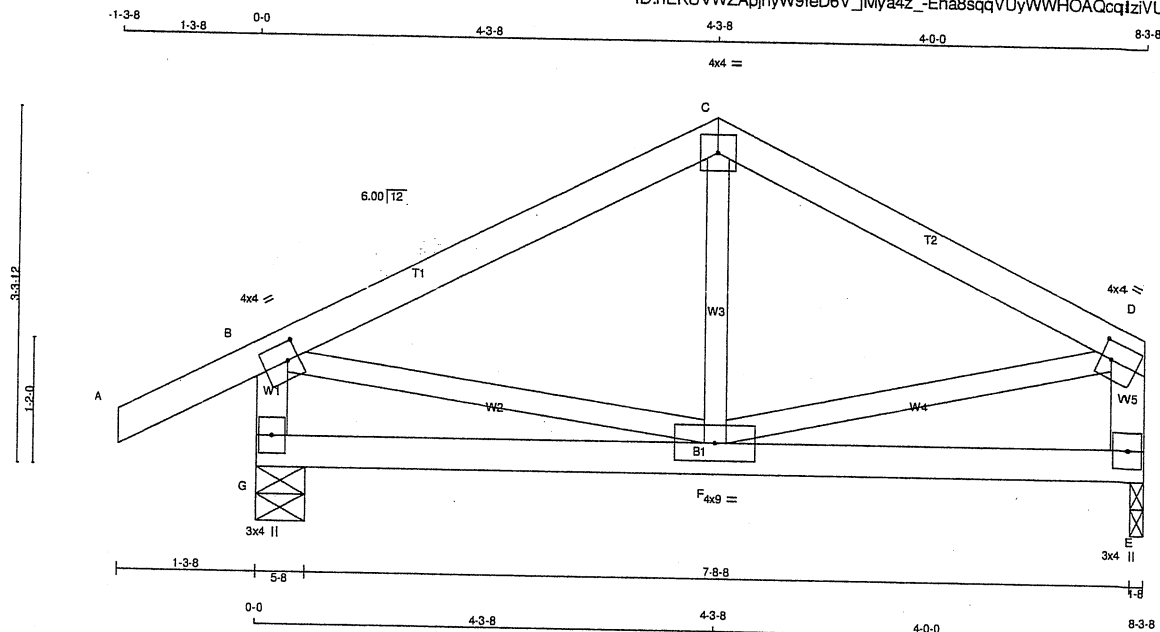
Per: danielle.devitt



Structural component only
DWG# T-2121231

JOB NAME 412865	TRUSS NAME T123	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 12:26:51 2021 Page 1
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Scale = 1/20.4

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00 1.25
C	TTW-p	MT20	4.0	4.0	
D	TMVW-t	MT20	4.0	4.0	2.00 1.25
E	BMV1+p	MT20	3.0	4.0	
F	BMVWW-t	MT20	4.0	9.0	
G	BMV1+p	MT20	3.0	4.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	JT	GROSS REACTION	JT	BRG	JT	BRG
G	582	0	582	0	5-8	5-8	5-8
E	457	0	457	0	1-8	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
G	409	282 / 0	0 / 0	0 / 0	0 / 0
E	323	212 / 0	0 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, 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		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 28	F-C	-54 / 52
B-C	-364 / 0	B-F	0 / 332
C-D	-364 / 0	F-D	0 / 336
G-B	-550 / 0		
E-D	-428 / 0		
G-F	0 / 0		
F-E	0 / 0		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.22/1.00 (B-C:1), BC=0.09/1.00 (F-G:4), WB=0.08/1.00 (D-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)	(PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

USI GRIP = 0.56 (B) (INPUT = 0.90)
USI METAL = 0.17 (B) (INPUT = 1.00)



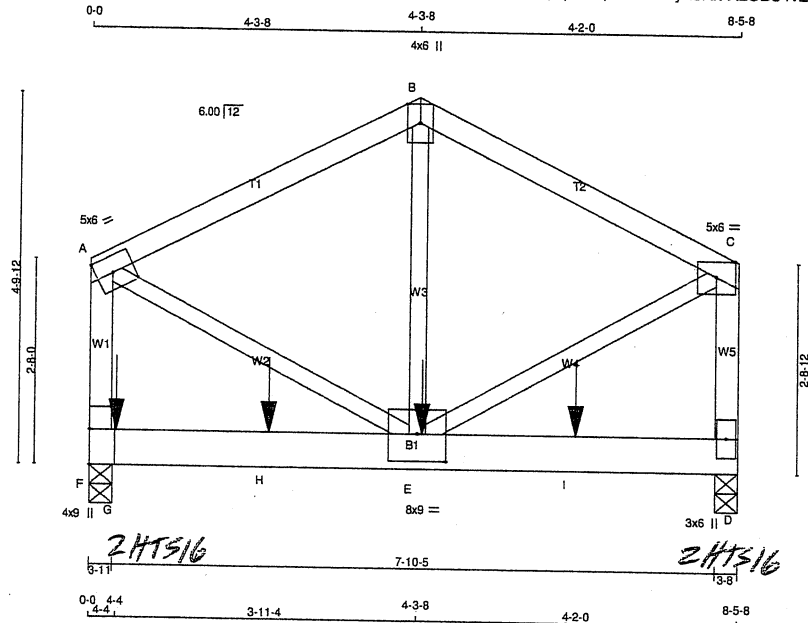
Structural component only
DWG# T-2121232

CITY OF RICHMOND HILL
BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T127	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 15:50:48 2021 Page 1
ID:4yza9PaaQpQ0dqb94LAvFyZ5Xk-RzUD84vLfMfEsy9HzJKb91oF_h9r3VrOyA6FCRz0P5b

Scale = 1:28.5



TOTAL WEIGHT = 3 X 41 = 124 lb [M]

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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-B 1 12	TOP	
B-C 1 12	TOP	
F-A 2 4	SIDE(419.6)	
D-C 1 12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F-D 2 4	SIDE(1383.3)	
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

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

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

FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	JT VERT	DOWN	UP
F 9505	9505	179	3-11
D 6418	6418	0	3-8

PROVIDE ANCHORAGE AT BEARING JOINT F FOR 2751 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 1848 LBS FACTORED UPLIFT

PROVIDE FOR 179 LBS FACTORED HORIZONTAL REACTION AT JOINT F

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM. LIVE WIND DEAD SOIL
F 6997	4224 / 0 1190 / 0 0 / 0 167 / -2729 1584 / 0 0 / 0
D 4724	2852 / 0 803 / 0 0 / 0 117 / -1836 1069 / 0 0 / 0

HORIZONTAL REACTIONS

JT	VERT	DOWN	UP	IN-SX	IN-SX
F	0 / 0	0 / 0	0 / 0	128 / -126	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (18)

CHORDS				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-5261 / 1585	-115.2 -115.2	0.19 (2)	4.89	E-B	-1236 / 4312	0.32 (3)
B-C	-5261 / 1587	-115.2 -115.2	0.18 (3)	4.90	A-E	-1523 / 5326	0.40 (1)
F-A	-5094 / 1494	0.0 0.0	0.22 (1)	6.38	E-C	-1544 / 5396	0.40 (1)
D-C	-5232 / 1532	0.0 0.0	0.23 (1)	6.31			
F-G	-133 / 154	-39.5 -39.5	0.66 (1)	6.25			
G-H	-133 / 154	-39.5 -39.5	0.66 (1)	6.25			
H-E	-133 / 154	-39.5 -39.5	0.66 (1)	6.25			
E-I	-23 / 47	-39.5 -39.5	0.65 (3)	6.25			
I-D	-23 / 47	-39.5 -39.5	0.65 (3)	6.25			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1 MAX	FACE	DIR.	TYPE
E	4-4-4	-2685	-2685	605	FRONT VERT
G	4-4	-2697	-2697	601	FRONT VERT
H	2-4-4	-2685	-2685	605	FRONT VERT
I	6-4-4	-2685	-2685	605	FRONT VERT

CONNECTION REQUIREMENTS

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

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 33.4 PSF
	DL = 6.0 PSF
BOT CH.	LL = 10.5 PSF
	DL = 7.4 PSF
TOTAL LOAD	= 57.3 PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

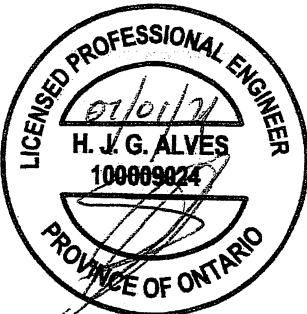
(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/180 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

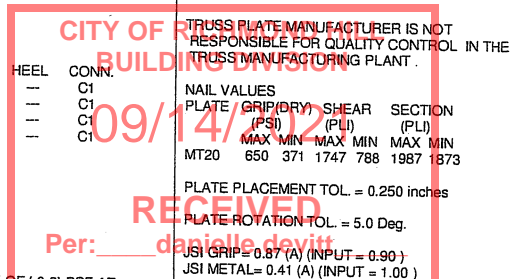
CSI: TC=0.23/1.00 (C-D:1), BC=0.66/1.00 (E-F:1), WB=0.40/1.00 (C-E:1), SSI=0.89/1.00 (E-F:1)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00



Structural component only
DWG# T-2121233 112



CONTINUED ON PAGE 2

JOB NAME 412865	TRUSS NAME T127	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 15:50:49 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	6.0		Edge
B	TTW+p	MT20	4.0	6.0		Edge
C	TMVW-p	MT20	5.0	6.0		Edge
D	BMV1+p	MT20	3.0	6.0		
E	BMVWW-t	MT20	8.0	9.0	4.25	4.50
F	BMV1+t	MT20	4.0	9.0		5.50

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



Structural component only
DWG# T-2121233 *3/1*

CITY OF RICHMOND HILL
BUILDING DIVISION

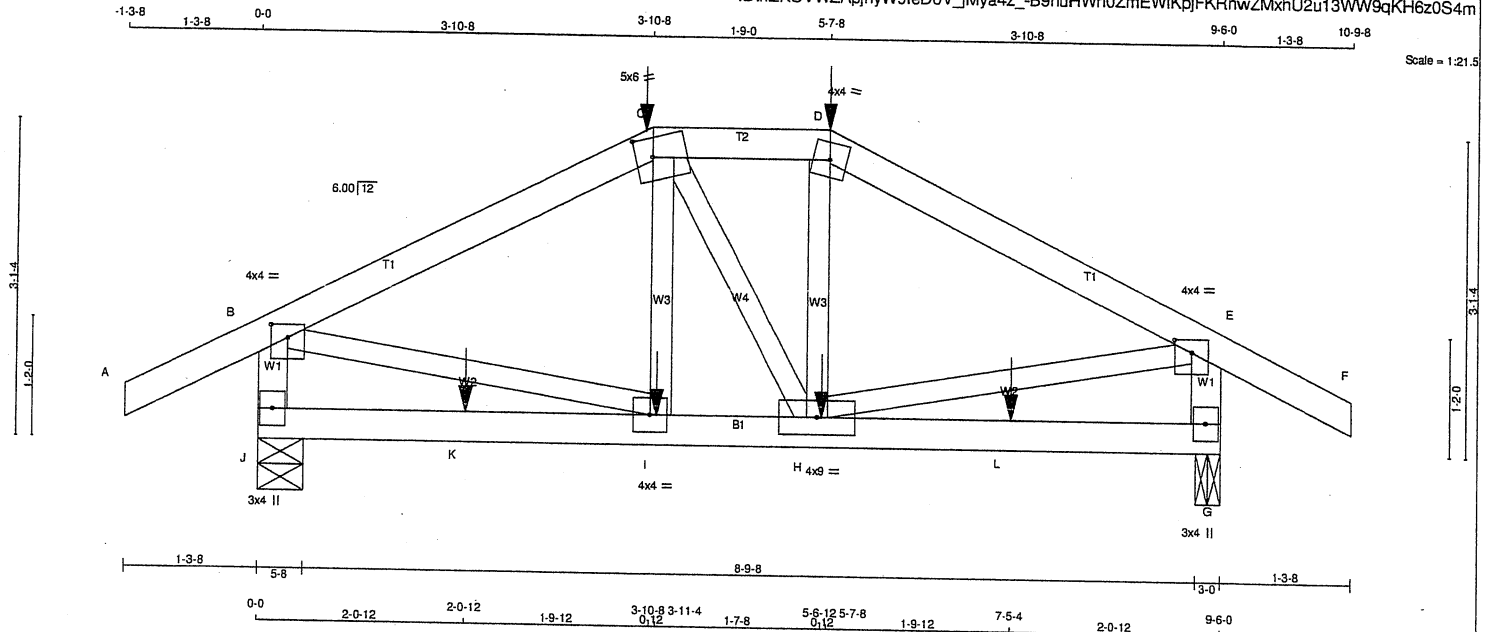
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME T128	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 Mittek Industries, Inc. Thu Jul 1 12:26:53 2021 Page 1
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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
J - B	2x4	DRY	No.2
G - E	2x4	DRY	No.2
J - G	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	4.0	1.50	2.00
C	TTWW-m	MT20	5.0	6.0	2.25	2.00
D	TTWW-m	MT20	4.0	4.0		
E	TMVW-p	MT20	4.0	4.0	1.50	2.00
G	BMV1+p	MT20	3.0	4.0		
H	BMWWW-t	MT20	4.0	9.0		
I	BMWWW-t	MT20	4.0	4.0		
J	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ UPLIFT		
J	921	0	921	0	5-8	5-8
G	920	0	920	0	3-0	3-0

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED		MAX./MIN. COMPONENT REACTIONS				SOIL
	SNOW	LIVE	PERM. LIVE	WIND	DEAD		
J	647	447 / 0	0 / 0	0 / 0	200 / 0	0 / 0	0 / 0
G	647	447 / 0	0 / 0	0 / 0	200 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.07 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)
FR-TO				FR-TO			
A-B	0 / 28	-91.8	-91.8 0.13 (1)	I-C	-100 / 28	0.02 (1)	0.02 (1)
B-C	-905 / 0	-91.8	-91.8 0.28 (1)	C-H	0 / 2	0.00 (4)	0.00 (4)
C-D	-805 / 0	-91.8	-91.8 0.06 (1)	H-D	-100 / 30	0.02 (1)	0.02 (1)
D-E	-907 / 0	-91.8	-91.8 0.28 (1)	B-I	0 / 827	0.20 (1)	0.20 (1)
E-F	0 / 28	-91.8	-91.8 0.13 (1)	H-E	0 / 829	0.21 (1)	0.21 (1)
J-B	-883 / 0	0.0	0.0 0.10 (1)				
G-E	-882 / 0	0.0	0.0 0.10 (1)				
J-K	0 / 0	-18.5	-18.5 0.09 (4)				
K-I	0 / 0	-18.5	-18.5 0.09 (4)				
I-H	0 / 805	-18.5	-18.5 0.17 (1)				
H-L	0 / 0	-18.5	-18.5 0.09 (4)				
L-G	0 / 0	-18.5	-18.5 0.09 (4)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-10-8	-172	-172		BACK	VERT	TOTAL
D	5-7-8	-172	-172		BACK	VERT	TOTAL
H	5-6-12	-10	-10		BACK	VERT	TOTAL
I	3-11-4	-10	-10		BACK	VERT	TOTAL
K	2-0-12	-10	-10		BACK	VERT	TOTAL
L	7-5-4	-10	-10		BACK	VERT	TOTAL

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 40 = 81 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC0 2015

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.28/1.00 (D-E:1), BC=0.17/1.00 (H-I:1),
WB=0.21/1.00 (E-H:1), SSI=0.14/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

CITY OF MISSISSAUGA
BUILDING DEPARTMENT
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

09/14/2021

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.88 (I) (INPUT = 0.90)
JSI METAL = 0.29 (E) (INPUT = 1.00)

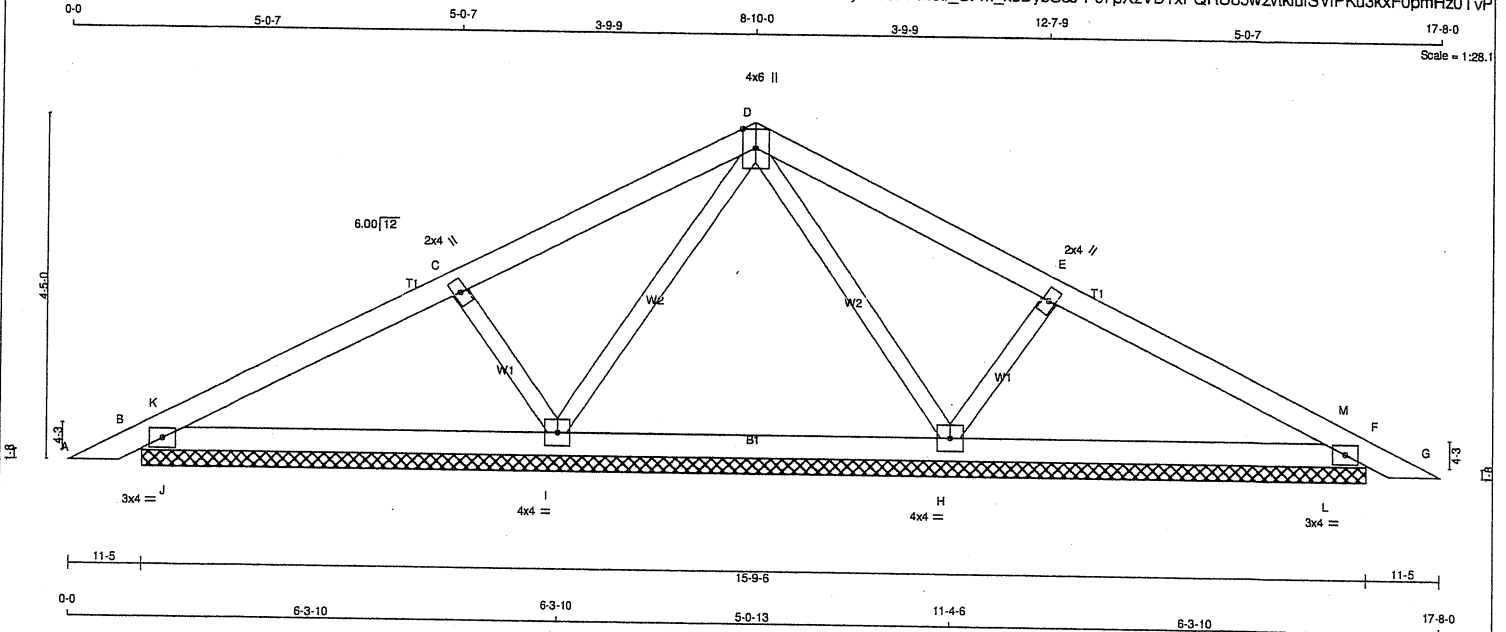
Per: danielle.devitt



Structural component only
DWG# T-2121234

JOB NAME 412868	TRUSS NAME PB06	QUANTITY 18	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 10:22:28 2021 Page 1
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LUMBER				DESCR.	
N. L. G. A. RULES	SIZE	LUMBER		SPF	
CHORDS				SPF	
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
B - F	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TMW+W	MT20	2.0	4.0	
D	TTWW+p	MT20	4.0	6.0	Edge
E	TMW+W	MT20	2.0	4.0	
F	TMB1-I	MT20	3.0	4.0	
H	BMW1-I	MT20	4.0	4.0	
I	BMW1-I	MT20	4.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
B	340	0	340	0	0	15-9-6	15-9-6	15-9-6	15-9-6
F	340	0	340	0	0	15-9-6	15-9-6	15-9-6	15-9-6
H	610	0	610	0	0	15-9-6	15-9-6	15-9-6	15-9-6
I	610	0	610	0	0	15-9-6	15-9-6	15-9-6	15-9-6

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
F	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
H	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0
I	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
A-B	0 / 17	-91.8	-91.8 0.05 (1)	D-H	-197 / 0	10.00	0.07 (1)
B-K	-199 / 0	-91.8	-91.8 0.06 (4)	H-E	-396 / 0	6.25	0.07 (1)
K-C	-143 / 0	-91.8	-91.8 0.23 (1)	I-D	-197 / 0	6.25	0.07 (1)
C-D	0 / 54	-91.8	-91.8 0.24 (1)	C-I	-396 / 0	10.00	0.07 (1)
D-E	0 / 54	-91.8	-91.8 0.24 (1)	J-K	-69 / 58	10.00	0.00 (1)
E-M	-143 / 0	-91.8	-91.8 0.23 (1)	L-M	-69 / 58	6.25	0.00 (1)
M-F	-199 / 0	-91.8	-91.8 0.06 (4)				
F-G	0 / 17	-91.8	-91.8 0.05 (1)				
B-J	0 / 149	-18.5	-18.5 0.08 (1)				
J-I	0 / 149	-18.5	-18.5 0.12 (4)				
I-H	0 / 40	-18.5	-18.5 0.11 (4)				
H-L	0 / 149	-18.5	-18.5 0.12 (4)				
L-F	0 / 149	-18.5	-18.5 0.08 (1)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

CSI: TC=0.24/1.00 (C-D:1), BC=0.12/1.00 (I-J:4), WB=0.07/1.00 (D-H:1), SSI=0.15/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.24 (B) (INPUT = 0.90)
JSI METAL = 0.08 (B) (INPUT = 1.00)



Structural component only
DWG# T-2121149

CITY OF RICHMOND HILL
BUILDING DIVISION

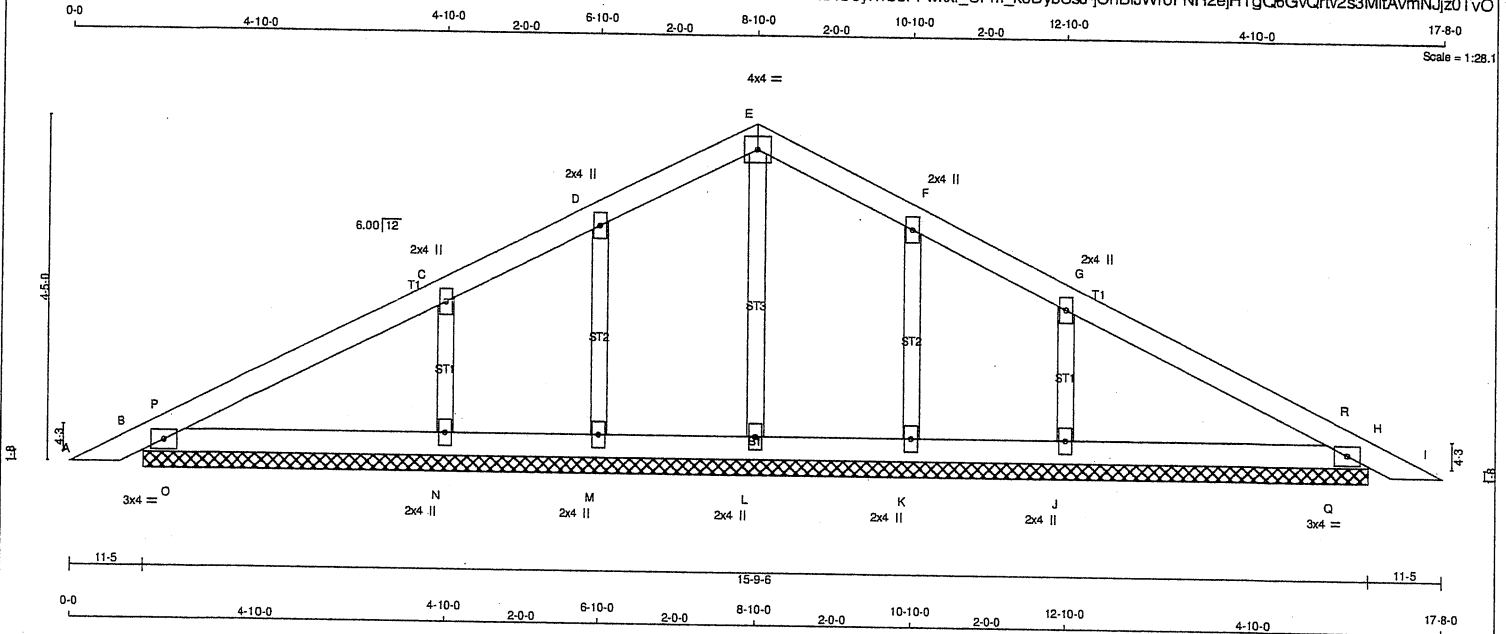
09/14/2021

RECEIVED

Per: danielle.devitt

JOB NAME 412868	TRUSS NAME PB06G	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 10:22:29 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsj-jChBUwroFNH2ejHTgQ6GvQrtv2s3MitAvmNjz0TvO



LUMBER				DESCR.	
N. L. G. A. RULES	SIZE	LUMBER		SPF	
CHORDS				SPF	
A - E	2x4	DRY	No.2	SPF	
E - I	2x4	DRY	No.2	SPF	
B - H	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.				SPF	

GABLE STUDS SPACED AT 2-0-0 OC.

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC1)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 17	-91.8 -91.8	0.05 (1)	L-E	-131 / 0	0.04 (1)	
B-P	-44 / 0	-91.8 -91.8	0.02 (4)	M-D	-160 / 0	0.03 (1)	
P-C	-44 / 0	-91.8 -91.8	0.13 (1)	N-C	-306 / 0	0.05 (1)	
C-D	-60 / 0	-91.8 -91.8	0.13 (1)	K-F	-160 / 0	0.03 (1)	
D-E	-45 / 0	-91.8 -91.8	0.05 (1)	J-G	-306 / 0	0.05 (1)	
E-F	-45 / 0	-91.8 -91.8	0.05 (1)	O-P	-171 / 5	0.00 (1)	
F-G	-60 / 0	-91.8 -91.8	0.13 (1)	Q-R	-171 / 5	0.00 (1)	
G-R	-44 / 0	-91.8 -91.8	0.13 (1)				
R-H	-44 / 0	-91.8 -91.8	0.02 (4)				
H-I	0 / 17	-91.8 -91.8	0.05 (1)				
B-O	0 / 49	-18.5 -18.5	0.10 (1)				
O-N	0 / 49	-18.5 -18.5	0.10 (1)				
N-M	0 / 39	-18.5 -18.5	0.07 (1)				
M-L	0 / 36	-18.5 -18.5	0.02 (4)				
L-K	0 / 36	-18.5 -18.5	0.02 (4)				
K-J	0 / 39	-18.5 -18.5	0.07 (1)				
J-Q	0 / 49	-18.5 -18.5	0.10 (1)				
Q-H	0 / 49	-18.5 -18.5	0.10 (1)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

CSI: TC=0.13/1.00 (G-R:1), BC=0.10/1.00 (H-Q:1), WB=0.05/1.00 (G-J:1), SSI=0.14/1.00 (B-O:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

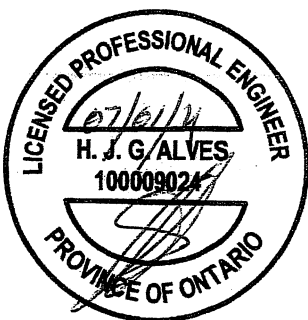
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.21 (B) (INPUT = 0.90)
JSI METAL = 0.18 (G) (INPUT = 1.00)

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0		
C, D, F, G					
C TMW-w	MT20	2.0	4.0		
E TTW-p	MT20	4.0	4.0		
H TMB1-I	MT20	3.0	4.0		
J, K, L, M, N					
J BMW1-w	MT20	2.0	4.0		



Structural component only
DWG# T-2121150

CITY OF RICHMOND HILL
BUILDING DIVISION

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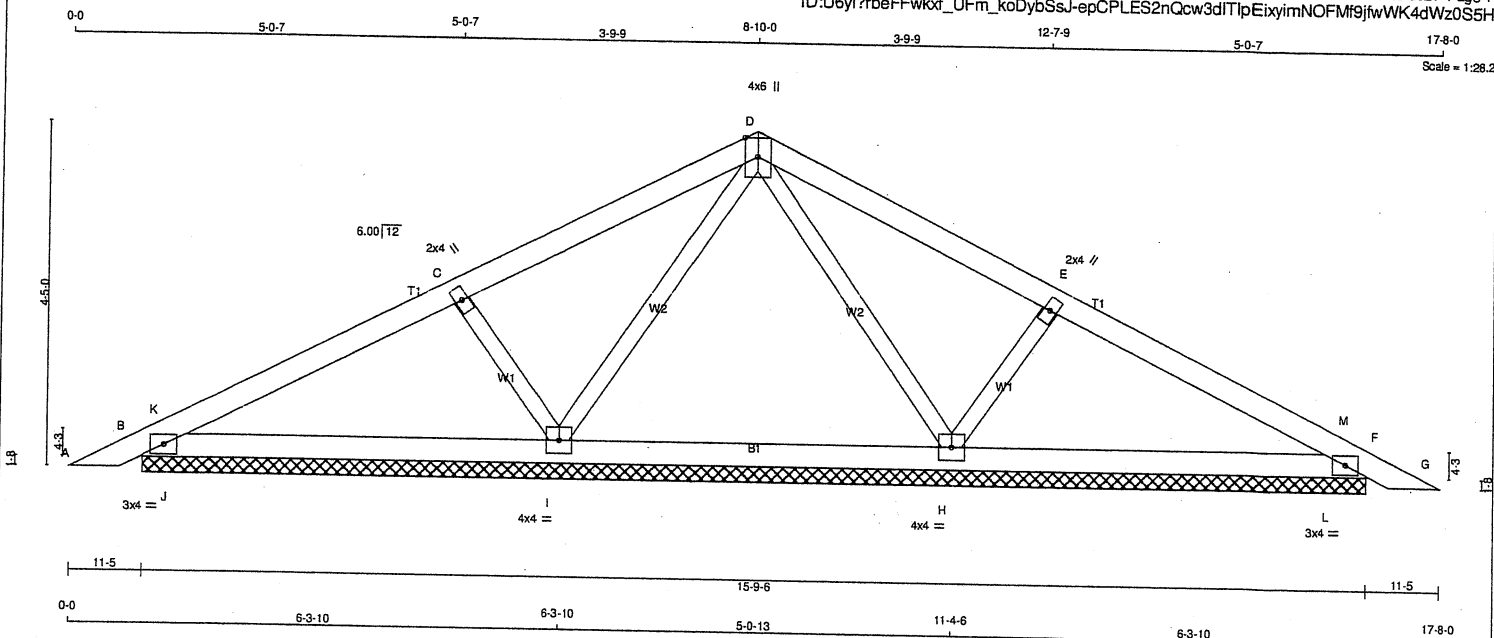
RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME PB06Z	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:20 2021 Page 1
ID:U6yi7rbeFFwxf_UFm_koDybSsJ-epCPLES2nQcw3dITpEixymNOFM9jfwWK4dWz0S5H



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

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

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

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW-w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	6.0	Edge	
E	TMW-w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-t	MT20	4.0	4.0		
I	BMWW1-t	MT20	4.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REORD BRG
	VERT	HORZ	DOWN	HORZ		
B	340	0	340	0	15-9-6	15-9-6
F	340	0	340	0	15-9-6	15-9-6
H	610	0	610	0	15-9-6	15-9-6
I	610	0	610	0	15-9-6	15-9-6

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0
F	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0
H	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0
I	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 17	-91.8	-91.8 0.02 (1)	10.00	D-H	-197 / 0	0.02 (1)
B-K	-199 / 0	-91.8	-91.8 0.02 (4)	6.25	H-E	-396 / 0	0.02 (1)
K-C	-144 / 0	-91.8	-91.8 0.08 (1)	6.25	I-D	-197 / 0	0.02 (1)
C-D	0 / 54	-91.8	-91.8 0.08 (1)	10.00	C-I	-396 / 0	0.02 (1)
D-E	0 / 54	-91.8	-91.8 0.08 (1)	10.00	J-K	-68 / 57	0.00 (1)
E-M	-144 / 0	-91.8	-91.8 0.08 (1)	6.25	L-M	-68 / 57	0.00 (1)
M-F	-199 / 0	-91.8	-91.8 0.02 (4)	6.25			
F-G	0 / 17	-91.8	-91.8 0.02 (1)	10.00			
B-J	0 / 149	-18.5	-18.5 0.03 (1)	10.00			
J-I	0 / 149	-18.5	-18.5 0.04 (4)	10.00			
I-H	0 / 40	-18.5	-18.5 0.04 (4)	10.00			
H-L	0 / 149	-18.5	-18.5 0.04 (4)	10.00			
L-F	0 / 149	-18.5	-18.5 0.03 (1)	10.00			

TOTAL WEIGHT = 3 X 51 = 154 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN/C

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

THIS DESIGN COMPLIES WITH:

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

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

CSI: TC=0.08/1.00 (C-D:1), BC=0.04/1.00 (I-J:4), WB=0.02/1.00 (D-I:1), SSI=0.05/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.08 (INPUT = 0.90)
JSI METAL= 0.03 (C) (INPUT = 1.00)

CITY OF BURLINGTON
BUILDING DIVISION
09/14/2021

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Per: danielle.devitt

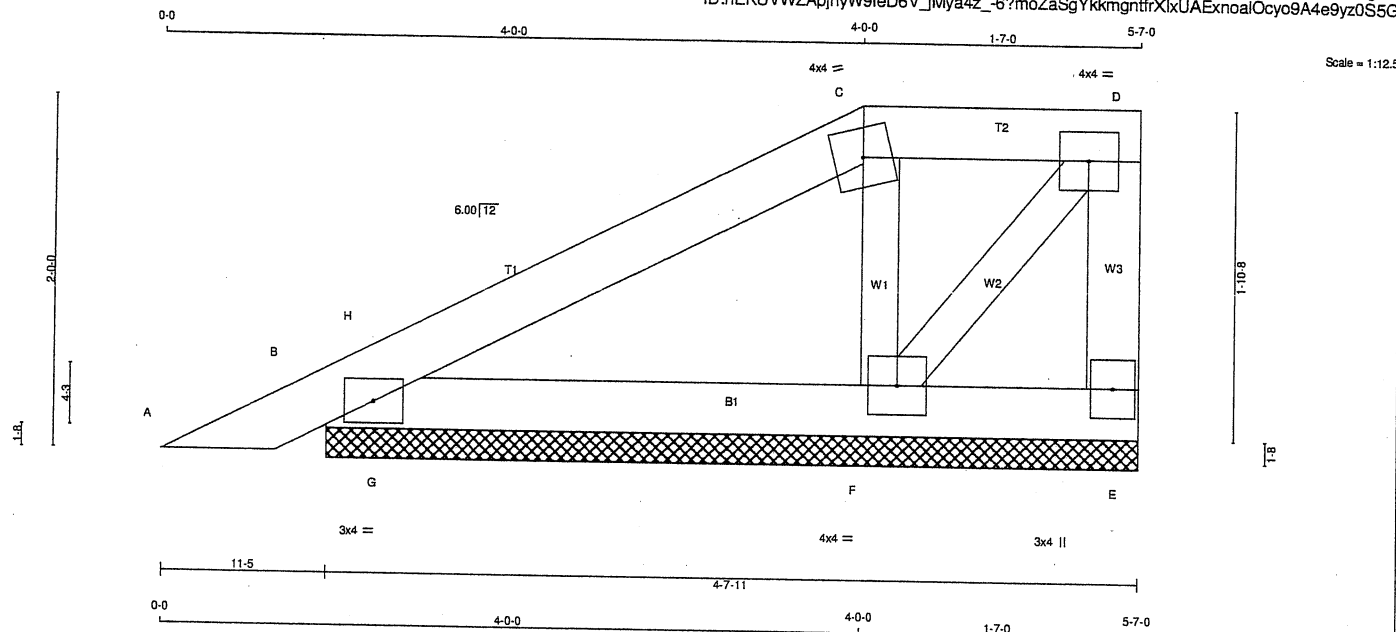


Structural component only
DWG# T-2121199

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412865	PB101	4	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITak Industries, Inc. Thu Jul 1 12:26:21 2021 Page 1
ID:hEKUVWZApjnyW9leD6V_jMya4z_-6?moZaSgYkmgntfrXlXUAExnoalOcyo9A4e9yz0S5G



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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE	PLATES			
B TMB1-I	MT20	3.0	4.0	
C TTW-m	MT20	4.0	4.0	
D TMVW-I	MT20	4.0	4.0	
E BMV1+p	MT20	3.0	4.0	
F BMVW1-I	MT20	4.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
E	76	0	76	0	4-7-11	4-7-11
B	252	0	252	0	4-7-11	4-7-11
F	264	0	264	0	4-7-11	4-7-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	53	39 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
B	177	126 / 0	0 / 0	0 / 0	0 / 0	50 / 0	0 / 0
F	188	118 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0

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

C H O R D S					W E B S				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO		FROM TO				FR-TO			
A-B	0 / 17	-91.8	-91.8	0.05 (1)	10.00	F-C	-176 / 0	0.03 (1)	
B-H	-18 / 0	-91.8	-91.8	0.02 (1)	6.25	F-D	0 / 24	0.01 (1)	
H-C	-33 / 0	-91.8	-91.8	0.10 (1)	6.25	G-H	-170 / 0	0.00 (1)	
C-D	-16 / 0	-91.8	-91.8	0.04 (1)	6.25				
E-D	-90 / 0	0.0	0.0	0.01 (1)	7.81				
B-G	0 / 28	-18.5	-18.5	0.09 (1)	10.00				
G-F	0 / 28	-18.5	-18.5	0.09 (1)	10.00				
F-E	0 / 0	-18.5	-18.5	0.06 (1)	10.00				

TOTAL WEIGHT = 4 X 16 = 64 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2015

THIS DESIGN COMPLIES WITH:

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

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

CSI: TC=0.10/1.00 (C-H:1), BC=0.09/1.00 (F-G:1), WB=0.03/1.00 (C-F:1), SSI=0.13/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP (DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	650	971	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.20 (B) (INPUT = 0.90)
JSI METAL = 0.06 (C) (INPUT = 1.00)



Structural component only
DWG# T-2121200

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

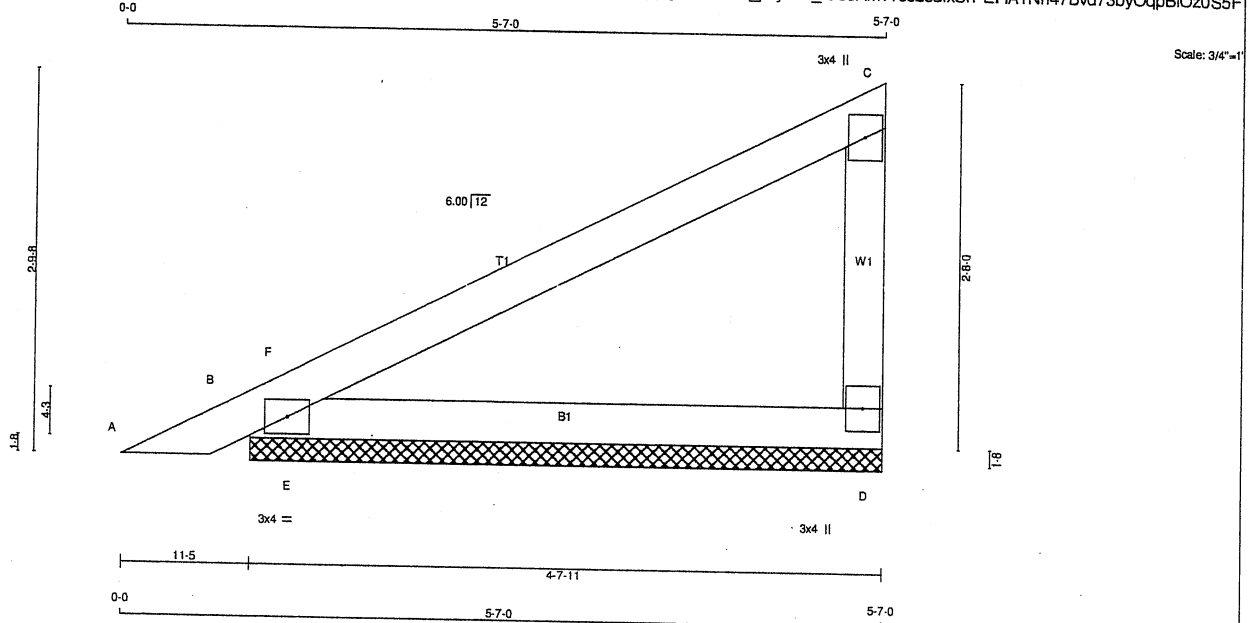
RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME PB102	QUANTITY 8	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:22 2021 Page 1
ID:hEKUVWZApinyW9leD6V_jMya4z_-bCJAmvTJJ2sdlxSrPEHA1Nn47Bvd73byOqpBiOz0S5F



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y
B	TMB1-I	MT20	3.0	4.0	
C	TMV+p	MT20	3.0	4.0	
D	BMV1+p	MT20	3.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
D	256	0	256	0	4-7-11	4-7-11
B	336	0	336	0	4-7-11	4-7-11

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	181	119 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
B	236	164 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 17	-91.8 -91.8	0.05 (1)	10.00	E-F	-310 / 7	0.00 (1)
B-F	-21 / 45	-91.8 -91.8	0.06 (1)	6.25			
F-C	-4 / 2	-91.8 -91.8	0.26 (1)	10.00			
D-C	-186 / 0	0.0 0.0	0.02 (1)	7.81			
B-E	0 / 0	-18.5 -18.5	0.18 (1)	10.00			
E-D	0 / 0	-18.5 -18.5	0.18 (1)	10.00			

TOTAL WEIGHT = 8 X 15 = 118 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

CSI: TC=0.26/1.00 (C-F:1), BC=0.18/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SS=0.25/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

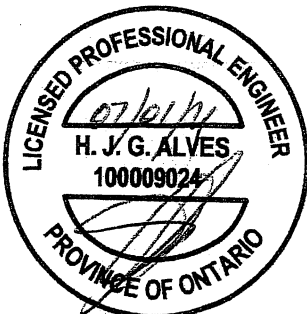
JSI GRIP = 0.26 (B) (INPUT = 0.90)
JSI METAL = 0.05 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

09/14/2021

RECEIVED

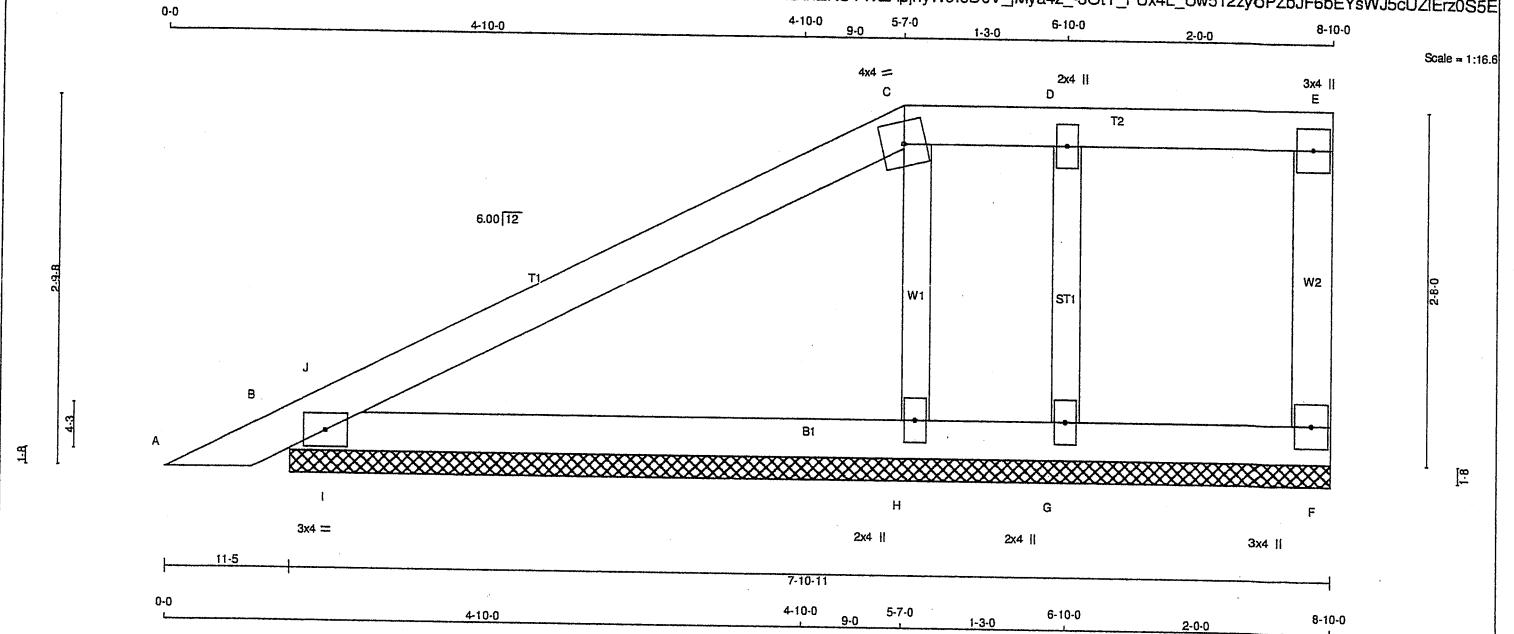
Per: danielle.devitt



Structural component only
DWG# T-2121201

JOB NAME 412865	TRUSS NAME PB103G	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:23 2021 Page 1
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LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - H	2x4	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
J - K	2x4	DRY	No.2	SPF
K - L	2x4	DRY	No.2	SPF
L - M	2x4	DRY	No.2	SPF
M - N	2x4	DRY	No.2	SPF
N - O	2x4	DRY	No.2	SPF
O - P	2x4	DRY	No.2	SPF
P - Q	2x4	DRY	No.2	SPF
Q - R	2x4	DRY	No.2	SPF
R - S	2x4	DRY	No.2	SPF
S - T	2x4	DRY	No.2	SPF
T - U	2x4	DRY	No.2	SPF
U - V	2x4	DRY	No.2	SPF
V - W	2x4	DRY	No.2	SPF
W - X	2x4	DRY	No.2	SPF
X - Y	2x4	DRY	No.2	SPF
Y - Z	2x4	DRY	No.2	SPF
Z - A	2x4	DRY	No.2	SPF

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMB1-H	MT20	3.0	4.0
C	TTW-m	MT20	4.0	4.0
D	TMW-w	MT20	2.0	4.0
E	TMV-p	MT20	3.0	4.0
F	BMV1-p	MT20	3.0	4.0
G	BMV1-w	MT20	2.0	4.0
H	BMV1-w	MT20	2.0	4.0

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC1)	MAX. UNBRACED LENGTH (FR-TO)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. VERT. LOAD (LC1)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 17	-91.8	-91.8	0.05 (1)	10.00	G-D	-193 / 0
B-J	-9 / 65	-91.8	-91.8	0.09 (1)	10.00	H-C	-206 / 0
J-C	-17 / 0	-91.8	-91.8	0.24 (1)	6.25	I-J	-374 / 0
C-D	0 / 0	-91.8	-91.8	0.05 (1)	10.00		
D-E	0 / 0	-91.8	-91.8	0.05 (1)	10.00		
E-F	-75 / 0	0.0	0.0	0.01 (1)	7.81		
B-I	0 / 9	-18.5	-18.5	0.20 (1)	10.00		
I-H	0 / 9	-18.5	-18.5	0.20 (1)	10.00		
H-G	0 / 0	-18.5	-18.5	0.14 (1)	10.00		
G-F	0 / 0	-18.5	-18.5	0.02 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

CSI: TC=0.24/1.00 (C-J:1), BC=0.20/1.00 (B-I:1), WB=0.03/1.00 (C-H:1), SS=0.28/1.00 (B-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN

MT20 650 370 747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.26 (B) (INPUT = 0.90)

JSI METAL= 0.11 (C) (INPUT = 1.00)

CITY OF RICHMOND

BUILDING DEPARTMENT

09/14/2021

RECEIVED

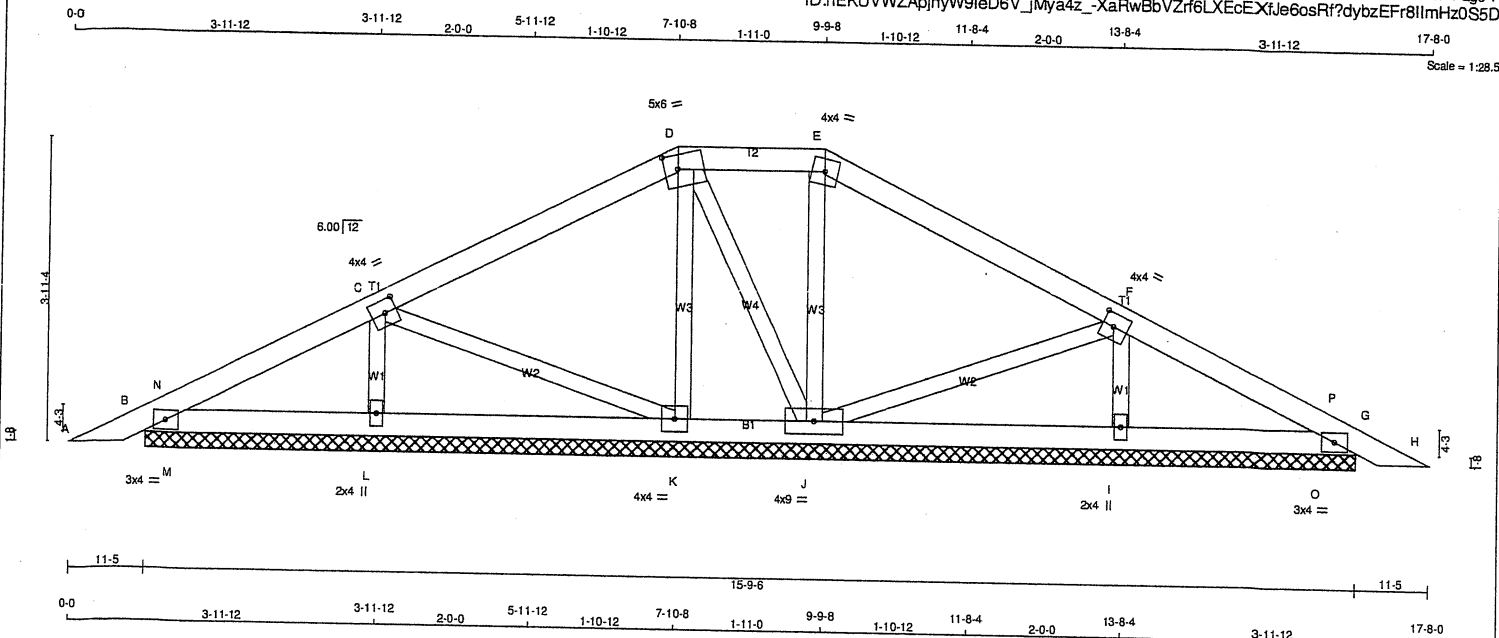
Per: danielle.devitt



Structural component only
DWG# T-2121202

JOB NAME 412865	TRUSS NAME PB104	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 12:26:24 2021 Page 1
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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
B - G	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TTWW-t	MT20	4.0	4.0	2.00 1.75
D	TTWW-m	MT20	5.0	6.0	2.25 2.00
E	TTWW-t	MT20	4.0	4.0	
F	TTWW-t	MT20	4.0	4.0	2.00 1.75
G	TMB1-I	MT20	3.0	4.0	
I	BMW1-w	MT20	2.0	4.0	
J	BMW1-w	MT20	4.0	9.0	
K	BMW1-w	MT20	4.0	4.0	
L	BMW1-w	MT20	2.0	4.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	JT	GROSS REACTION	BRG	IN-SX	BRG	IN-SX
B	222	0	222	0	15-9-6	15-9-6	15-9-6
G	213	0	213	0	15-9-6	15-9-6	15-9-6
K	205	0	205	0	15-9-6	15-9-6	15-9-6
J	385	0	385	0	15-9-6	15-9-6	15-9-6
L	447	0	447	0	15-9-6	15-9-6	15-9-6
I	428	0	428	0	15-9-6	15-9-6	15-9-6

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	155	112 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0
G	149	108 / 0	0 / 0	0 / 0	0 / 0	42 / 0	0 / 0
K	147	86 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
J	271	187 / 0	0 / 0	0 / 0	0 / 0	84 / 0	0 / 0
L	316	208 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0
I	303	197 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, G, K, J, L, I

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 17	-91.8 -91.8	0.05 (1)	10.00	D-J	-86 / 0	0.02 (1)
B-N	-80 / 0	-91.8 -91.8	0.01 (1)	6.25	C-K	-37 / 0	0.01 (1)
N-C	-39 / 0	-91.8 -91.8	0.19 (1)	6.25	J-F	-59 / 0	0.02 (1)
C-D	-42 / 0	-91.8 -91.8	0.19 (1)	6.25	K-D	-143 / 0	0.03 (1)
D-E	0 / 21	-91.8 -91.8	0.06 (1)	10.00	J-E	-238 / 0	0.05 (1)
E-F	0 / 0	-91.8 -91.8	0.19 (1)	10.00	L-C	-361 / 0	0.05 (1)
F-P	-21 / 0	-91.8 -91.8	0.19 (1)	6.25	I-F	-343 / 0	0.05 (1)
P-G	-63 / 0	-91.8 -91.8	0.02 (1)	6.25	M-N	-50 / 4	0.00 (1)
G-H	0 / 17	-91.8 -91.8	0.05 (1)	10.00	O-P	-50 / 4	0.00 (1)
B-M	0 / 57	-18.5 -18.5	0.04 (1)	10.00			
M-L	0 / 57	-18.5 -18.5	0.06 (4)	10.00			
L-K	0 / 57	-18.5 -18.5	0.06 (4)	10.00			
K-J	0 / 19	-18.5 -18.5	0.04 (4)	10.00			
J-I	0 / 42	-18.5 -18.5	0.06 (4)	10.00			
I-O	0 / 42	-18.5 -18.5	0.06 (4)	10.00			
O-G	0 / 42	-18.5 -18.5	0.04 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

CSI: TC=0.19/1.00 (F-P:1), BC=0.06/1.00 (K-L:4), WB=0.05/1.00 (E-J:1), SS=0.15/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 850 370 747 188 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

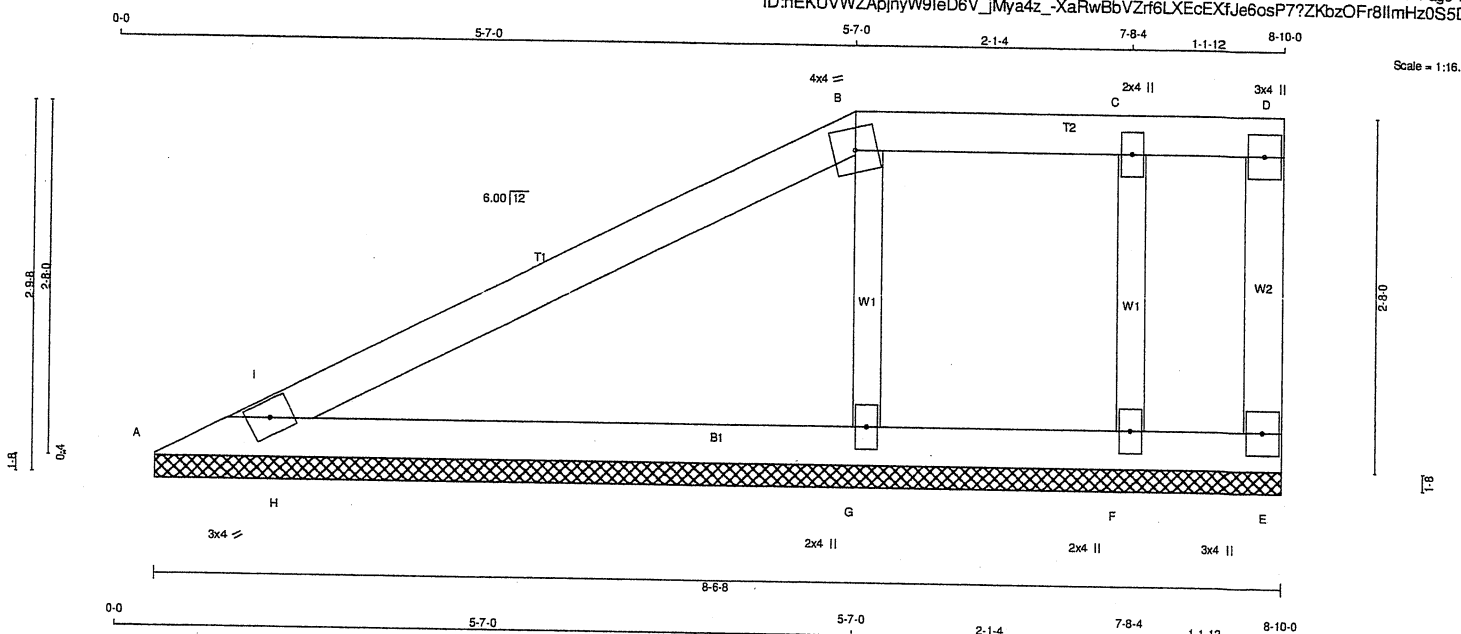
JSI GRIP = 0.30 (C) (INPUT = 0.90)
JSI METAL = 0.09 (E) (INPUT = 1.00)



Structural component only
DWG# T-2121203

RECEIVED
Per: danielle.devitt

JOB NAME 412865	TRUSS NAME PB105G	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.420 S Jan 21 M/Tek Industries, Inc. Thu Jul 1 12:26:24 2021 Page 1 ID:hEKUVWZApjnyW9leD6V_jMya4z_-XaRwBbVZr6LXEcEXfJe6osP7?ZKbzOFr8lImHz0S5D	



LUMBER

N. L. G. A. RULES

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

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBM1-h	MT20	3.0	4.0		
B	TTW-m	MT20	4.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		
F	BMW1+w	MT20	2.0	4.0		
G	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT		
A	272	0	272	0	8-6-8	8-6-8
E	65	0	65	0	8-6-8	8-6-8
G	502	0	502	0	8-6-8	8-6-8
F	103	0	103	0	8-6-8	8-6-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
A	192	128 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
E	46	27 / 0	0 / 0	0 / 0	0 / 0	19 / 0	0 / 0
G	357	224 / 0	0 / 0	0 / 0	0 / 0	132 / 0	0 / 0
F	71	57 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. VERT. LOAD LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	WEBS		MAX. FORCE (LBS)	MAX. CSI (LC)
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD	PLF					MEMB.	MAX. FORCE		
FR-TO			FROM	TO				FR-TO				
A-I	-14 / 0		-91.8	-91.8	0.05 (4)	6.25		G-B	-270 / 0		0.04 (1)	
I-B	-13 / 0		-91.8	-91.8	0.29 (1)	6.25		F-C	-199 / 0		0.03 (1)	
B-C	0 / 0		-91.8	-91.8	0.05 (1)	10.00		H-I	-238 / 0		0.00 (1)	
C-D	0 / 0		-91.8	-91.8	0.05 (1)	10.00						
E-D	-20 / 0		0.0	0.0	0.00 (1)	7.81						
A-H	-17 / 0		-18.5	-18.5	0.29 (1)	6.25						
H-G	0 / 12		-18.5	-18.5	0.29 (1)	10.00						
G-F	0 / 0		-18.5	-18.5	0.20 (1)	10.00						
F-E	0 / 0		-18.5	-18.5	0.05 (1)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

CSI: TC=0.29/1.00 (B-I:1), BC=0.29/1.00 (G-H:1), WB=0.04/1.00 (B-G:1), SSI=0.17/1.00 (A-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

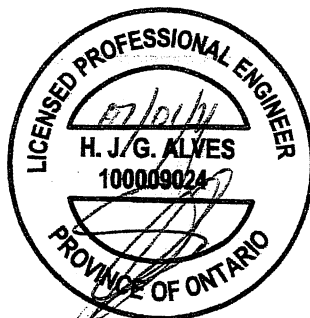
NAIL VALUES

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

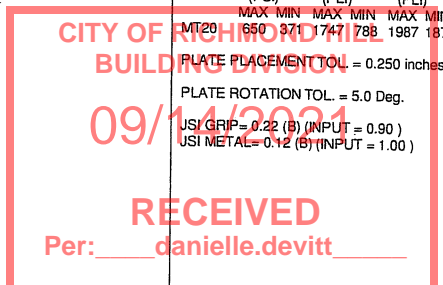
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

USI GRIP = 0.22 (B) (INPUT = 0.90)
USI METAL = 0.12 (B) (INPUT = 1.00)



Structural component only
DWG# T-2121204



Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 10:22:22 2021 Page 1
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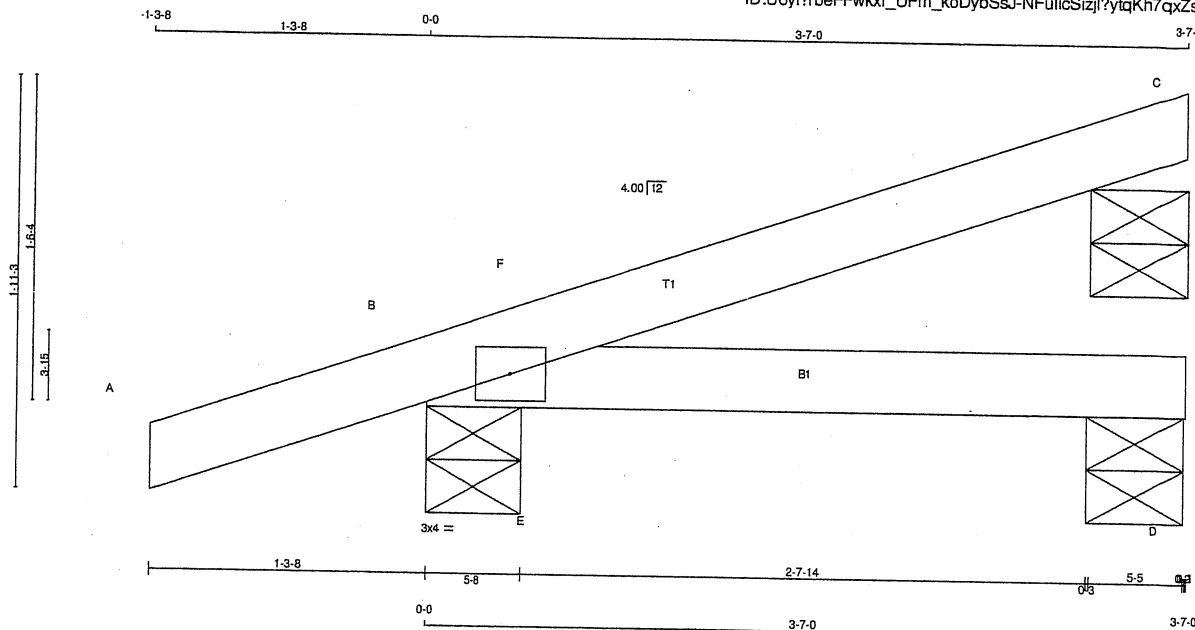


Structural component only
DWG# T-2121142

JOB NAME 412868	TRUSS NAME J03	QUANTITY 15	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Thu Jul 1 10:22:24 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-NFulicSizj?ytqKh7qxZsj_uuLTO5E80d2cdWz0TvT

Scale = 1:10.3



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMB1-1	MT20	3.0	4.0

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
C	141	0	141	0	0
B	320	0	320	0	0
D	57	0	57	0	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

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

UNFACTORED REACTIONS

JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	98	78 / 0	0 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
B	224	160 / 0	0 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
D	42	16 / 0	0 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO					FR-TO		
A-B	0 / 18	-91.8	-91.8	0.13 (5)	10.00	E-F	-138 / 5
B-F	-10 / 0	-91.8	-91.8	0.04 (4)	6.25		
F-C	0 / 2	-91.8	-91.8	0.15 (1)	10.00		
B-E	0 / 0	-18.5	-18.5	0.12 (1)	10.00		
E-D	0 / 0	-18.5	-18.5	0.12 (1)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CS1: TC=0.15/1.00 (C-F:1), BC=0.12/1.00 (B-E:1), WB=0.00/1.00 (E-F:1), SS1=0.11/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN
MT20 650 27 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.20 (B) (INPUT = 0.90)
JSI METAL = 0.05 (B) (INPUT = 1.00)



Structural component only
DWG# T-2121144

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

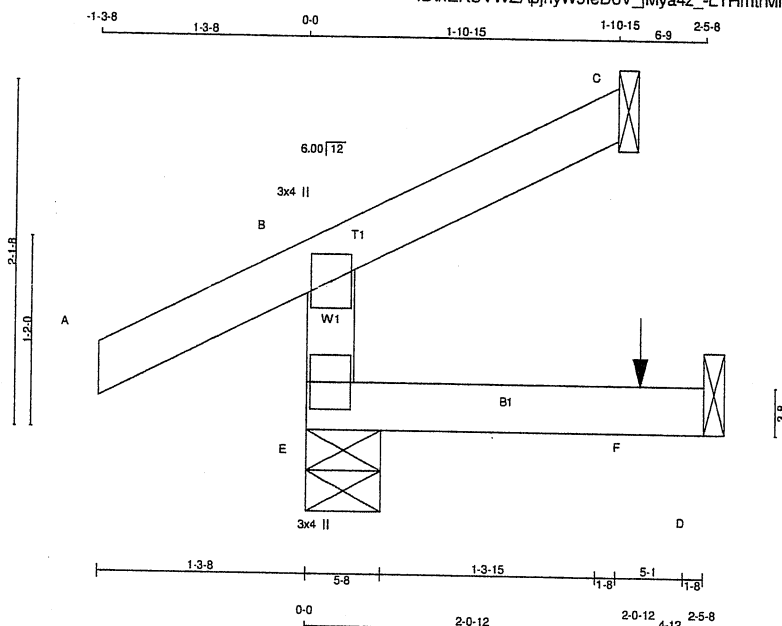
RECEIVED

Per: danielle.devitt

JOB NAME 412865	TRUSS NAME J11	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 12:26:13 2021 Page 1
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Scale = 1:13.5

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	3.0	4.0
E	BMV1+p	MT20	3.0	4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
E	260	0	260	0	0	5-8	5-8	
C	66	0	66	0	0	1-8	1-8	
D	23	0	26	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
E	182	130 / 0	0 / 0	0 / 0	0 / 0	52 / 0	0 / 0
C	46	37 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
D	18	0 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	UNBRAC LENGTH FR-TO	
E-B	-234 / 0	0.0	0.02 (4)	7.81
A-B	0 / 28	-91.8	-91.8 (5)	10.00
B-C	-10 / 0	-91.8	-91.8 (1)	10.00
E-F	0 / 0	-18.5	-18.5 (4)	10.00
F-D	0 / 0	-18.5	-18.5 (4)	10.00

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	2-0-12	-3	-3	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.13/1.00 (A-B:5), BC=0.03/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (A-B:5)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

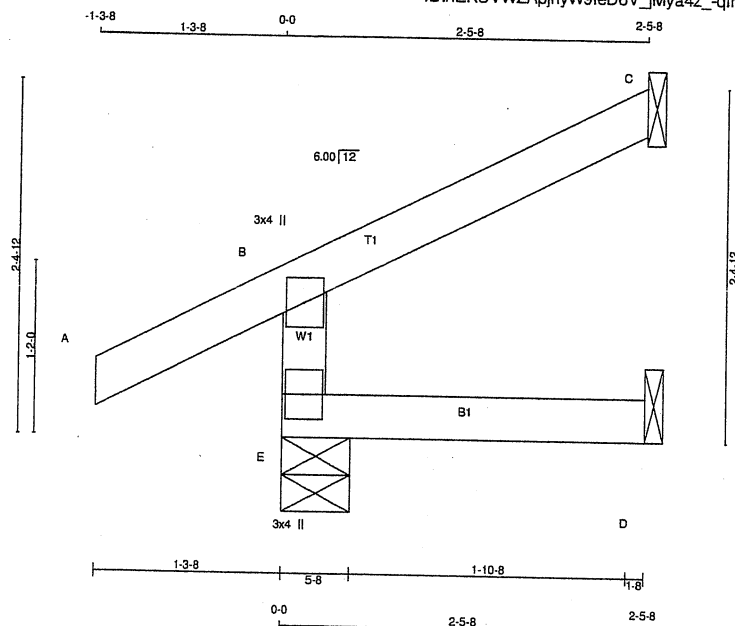
CITY OF RICHMOND HILL
BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt



Structural component only
DWG# T-2121191

JOB NAME 412865	TRUSS NAME J12	QUANTITY 7	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 12:26:14 2021 Page 1
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TOTAL WEIGHT = 7 X 9 = 60 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	DOWN	IN-SX	IN-SX
E	291	291	5-8	5-8
C	85	85	1-8	1-8
D	20	22	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	203	148 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
C	58	47 / 0	0 / 0	0 / 0	0 / 0	11 / 0	0 / 0
D	16	0 / 0	0 / 0	0 / 0	0 / 0	16 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS				W E B S			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB. MAX. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO	MEMB. MAX. FORCE (LBS)
FR-TO								
E-B	-265 / 0	0.0	0.0	0.02 (4)	7.81			
A-B	0 / 28	-91.8	-91.8	0.12 (5)	10.00			
B-C	-12 / 0	-91.8	-91.8	0.09 (1)	6.25			
E-D	0 / 0	-18.5	-18.5	0.03 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.00")

CSI: TC=0.12/1.00 (A-B:5), BC=0.03/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.10/1.00 (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.

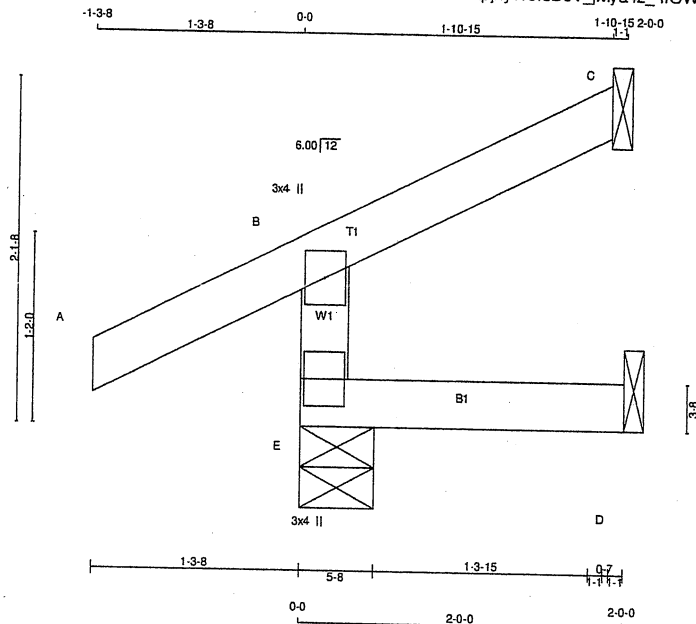
CITY OF RICHMOND HILL BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt



Structural component only
DWG# T-2121192

JOB NAME 412865	TRUSS NAME J13	QUANTITY 10	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:15 2021 Page 1
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Scale = 1:13.5

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	DOWN	IN-SX	IN-SX
E	254	0	5-8	5-8
C	66	0	1-8	1-8
D	16	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	177	130 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	46	37 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MEMB. FORCE (LBS)	FORCE (LBS)
FR-TO		FROM TO	UNBRAC LENGTH	FR-TO
E-B	-234 / 0	0.0	0.01 (4)	7.81
A-B	0 / 28	-91.8	-91.8 0.12 (1)	10.00
B-C	-10 / 0	-91.8	-91.8 0.06 (1)	10.00
E-D	0 / 0	-18.5	-18.5 0.02 (4)	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 10 X 7 = 73 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.12/1.00 (A-B:1), BC=0.02/1.00 (D-E:4),
WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.09 (E) (INPUT = 0.90)
JSI METAL = 0.06 (B) (INPUT = 1.00)

CITY OF KENNEDY AND HILL
BUILDING DEPARTMENT

09/14/2021

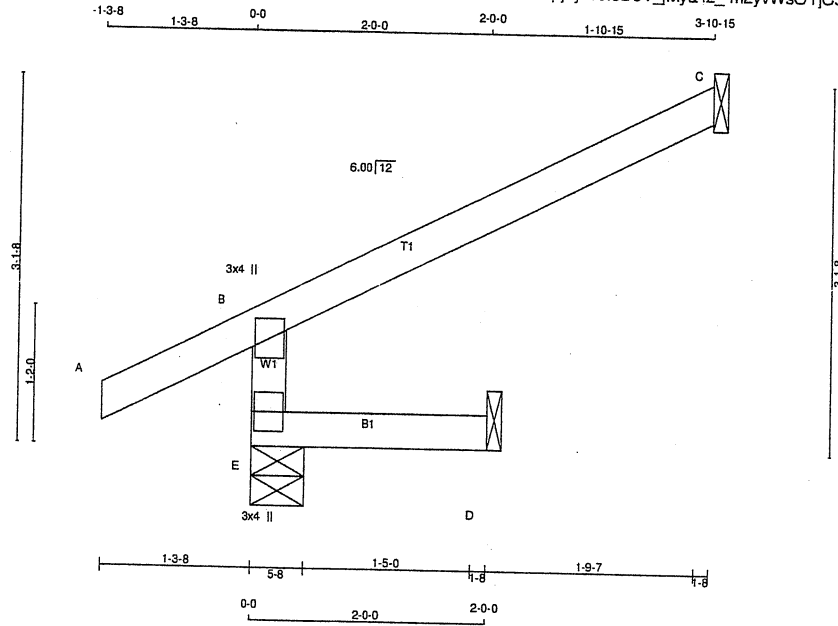
Per: danielle.devitt



Structural component only
DWG# T-2121193

JOB NAME 412865	TRUSS NAME J14	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:16 2021 Page 1
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LUMBER			
N. L. G. A. RULES	SIZE	DRY	LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	3.0	4.0
E	BMV1+p	MT20	3.0	4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	369	0	369	0	5-8	5-8
C	135	0	135	0	1-8	1-8
D	16	0	16	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
E	256	194/0	0/0	0/0	0/0	62/0	0/0
C	93	75/0	0/0	0/0	0/0	18/0	0/0
D	13	0/0	0/0	0/0	0/0	13/0	0/0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)
FR-TO		FROM TO		LENGTH FR-TO
E-B	-349/0	0.0 0.0 0.01 (4)	7.81	
A-B	0/28	-91.8 -91.8 0.13 (5)	10.00	
B-C	-20/0	-91.8 -91.8 0.24 (1)	6.25	
E-D	0/0	-18.5 -18.5 0.02 (4)	10.00	

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 2 X 10 = 20 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.24/1.00 (B-C:1), BC=0.02/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.14 (E) (INPUT = 0.90)
JSI METAL = 0.10 (B) (INPUT = 1.00)

CITY OF BURLINGTON
BUILDING DEPARTMENT

09/14/2021

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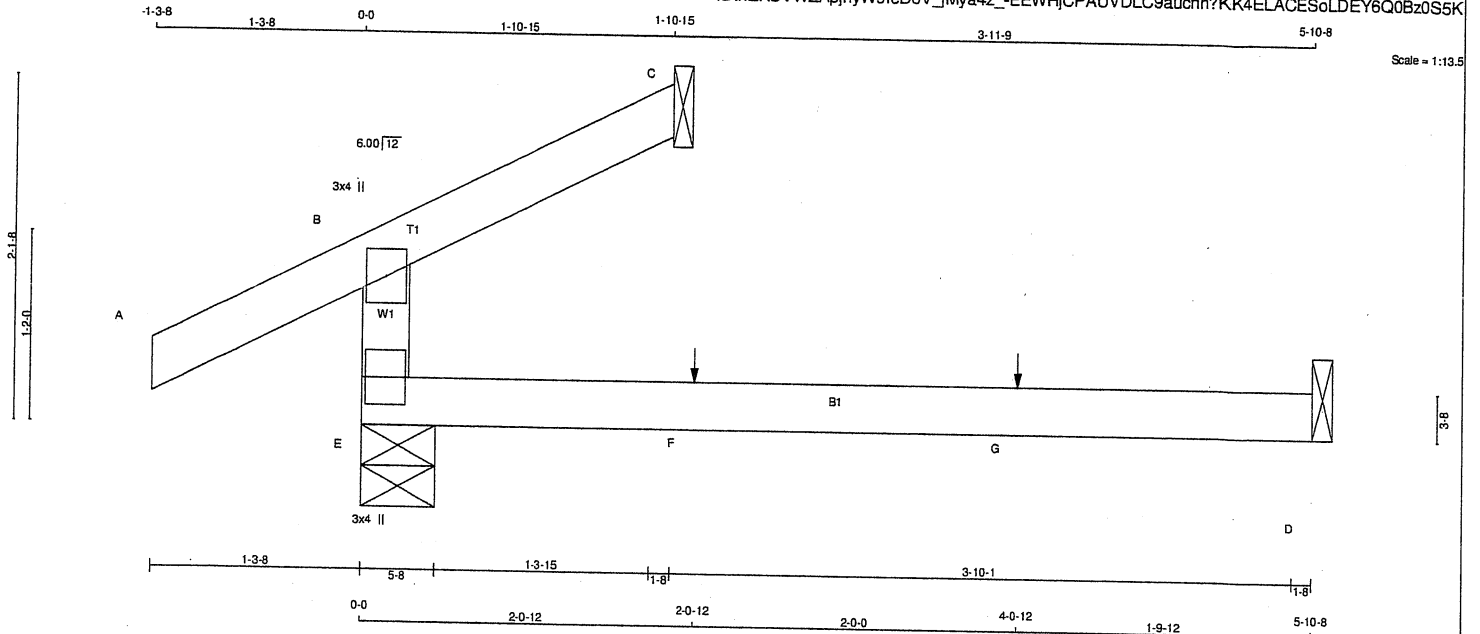
Per: danielle.devitt



Structural component only
DWG# T-2121194

JOB NAME 412865	TRUSS NAME J15	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:17 2021 Page 1
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<u>LUMBER</u>			
N. L. G. A. RULES			
CHORDS	SIZE		LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

DESCR.	SPF	SPF	SPF

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG IN-SX	REQD BRG IN-SX
JT	VERT	HORZ	DOWN	HORZ
E	297	0	297	0
C	66	0	66	0
D	45	0	50	0

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

UNFACTORED REACTIONS

	1ST LOSE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED						
E	212	130/0	0/0	0/0	0/0	82/0	0/0
C	46	37/0	0/0	0/0	0/0	9/0	0/0
D	36	0/0	0/0	0/0	0/0	36/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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	WEBS
	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH FR-TO
FR-TO		
E-B	-234/0	0.0 0.0 0.13 (4) 7.81
A-B	0/28	-91.8 -91.8 0.12 (1) 10.00
B-C	-10/0	-91.8 -91.8 0.06 (1) 10.00
E-F	0/0	-18.5 -18.5 0.13 (4) 10.00
F-G	0/0	-18.5 -18.5 0.13 (4) 10.00
G-D	0/0	-18.5 -18.5 0.13 (4) 10.00

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
F	2-0-12	1	1	---	FRONT	VERT	TOTAL	---	C1
G	4-0-12	1	1	---	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 BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

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

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

CSI: TC=0.13/1.00 (B-E:4), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (A-B:1)

DOL LUMBER=0.99 NAIL=0.99 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.09 (E) (INPUT = 0.90)
JSI METAL = 0.07 (B) (INPUT = 1.00)

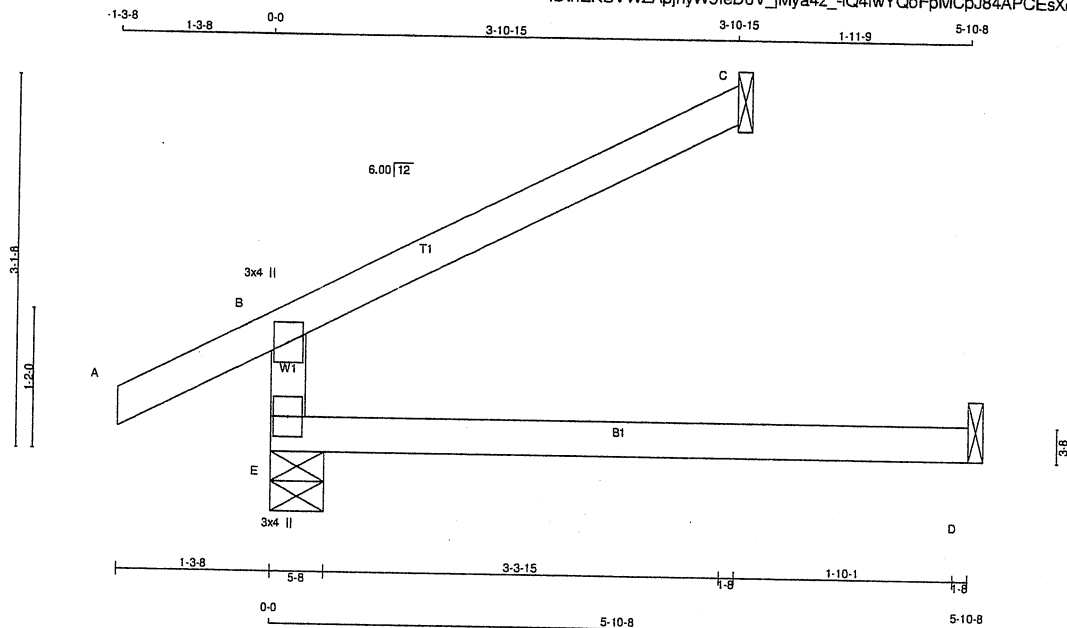
CITY OF BURLINGTON
BUILDING DEPARTMENT
09/14/2021
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Per: danielle.devitt



Structural component only
DWG# T-2121195

JOB NAME 412865	TRUSS NAME J16	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Thu Jul 1 12:26:18 2021 Page 1
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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	3.0	4.0
E	BMV1+p	MT20	3.0	4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	412	0	412	0	5-8	5-8
C	135	0	135	0	1-8	1-8
D	45	0	50	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LOASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
E	291	194 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
C	93	75 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (LBS)	LC1	MAX. CSI (LC)	MEMB. FORCE (LBS)	MAX. CSI (LC)	MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO								
E-B	-349 / 0	0.0	0.0	0.13 (4)	7.81			
A-B	0 / 28	-91.8	-91.8	0.12 (1)	10.00			
B-C	-20 / 0	-91.8	-91.8	0.24 (1)	6.25			
E-D	0 / 0	-18.5	-18.5	0.13 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.24/1.00 (B-C:1), BC=0.13/1.00 (D-E:4),
WB=0.00/1.00 (n/a:0), SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.14 (E) (INPUT = 0.90)
JSI METAL=0.10 (B) (INPUT = 1.00)

CITY OF BURLINGTON
BUILDING DEPARTMENT
09/14/2021
RECEIVED
Per: danielle.devitt

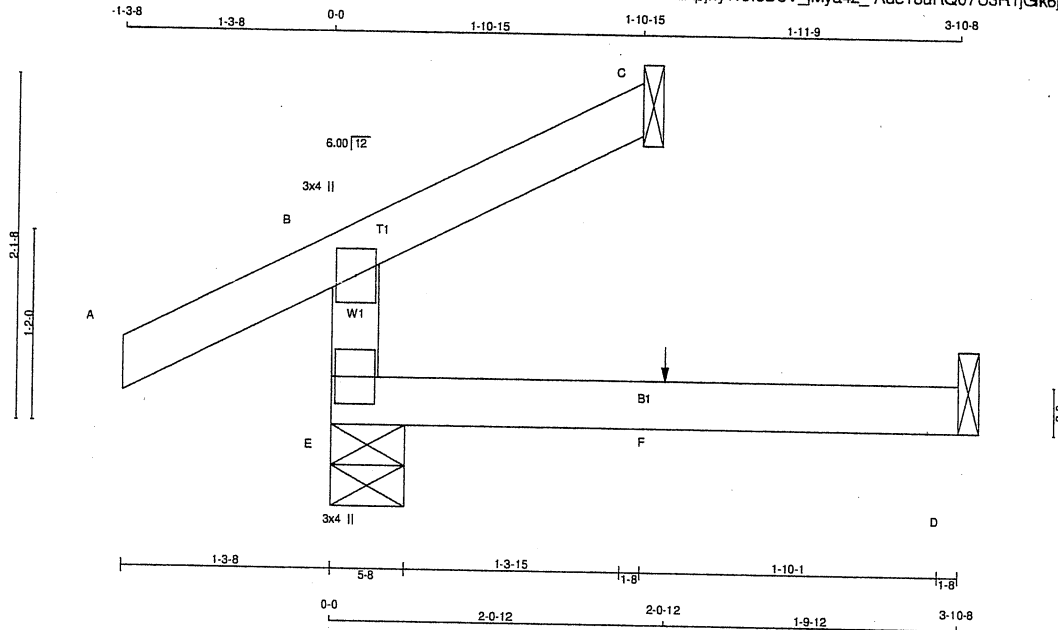


Structural component only
DWG# T-2121196

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:19 2021 Page 1
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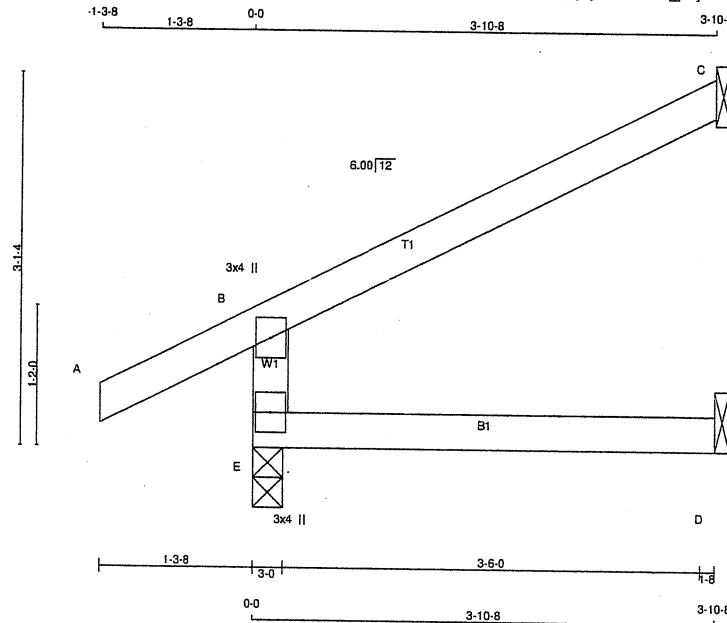


TOTAL WEIGHT = 3 X 9 = 28 lb

Structural component only
DWG# T-2121197

JOB NAME 412865	TRUSS NAME J18	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 1 12:26:19 2021 Page 1
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Scale = 1:18.3

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	3.0	4.0
E	BMV1+p	MT20	3.0	4.0

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
JT	388	0	388	0
E	133	0	133	0
C	30	0	34	0
D				

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

UNFACTORED REACTIONS

1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED					
E	272	193 / 0	0 / 0	0 / 0	78 / 0	0 / 0
C	92	74 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	24	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO					
E-B	-347 / 0	0.0	0.0	0.05 (4)	7.81		
A-B	0 / 28	-91.8	-91.8	0.14 (5)	10.00		
B-C	-20 / 0	-91.8	-91.8	0.23 (1)	6.25		
E-D	0 / 0	-18.5	-18.5	0.06 (4)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.23/1.00 (B-C:1), BC=0.06/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

CITY OF RICHMOND HILL
BUILDING DEPARTMENT
09/14/2021

NAIL VALUES
PLATE GRIP/DRY SHEAR SECTION (PLI)
(PSI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.14 (E) (INPUT = 0.90)
JSI METAL = 0.10 (B) (INPUT = 1.00)

Per: danielle.devitt



Structural component only
DWG# T-2121198



Alves Engineering Services Inc.

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

RESPONSABILITIES

- 1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components
- 2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.
- 3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.
- 4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.
- 5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

SPECIFICATIONS

1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.

- 2- Lumber is to be the sizes and grade specified on the truss drawing.
- 3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.
- 4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings
- 5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.
- 6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)
- 7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.
- 8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

CITY OF RICHMOND HILL
BUILDING DIVISION

09/14/2021

Feb 09, 2018

RECEIVED

Per: danielle.devitt

T-1900219

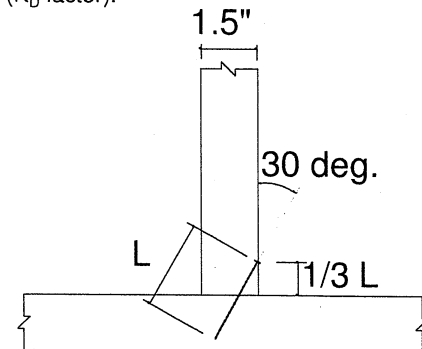
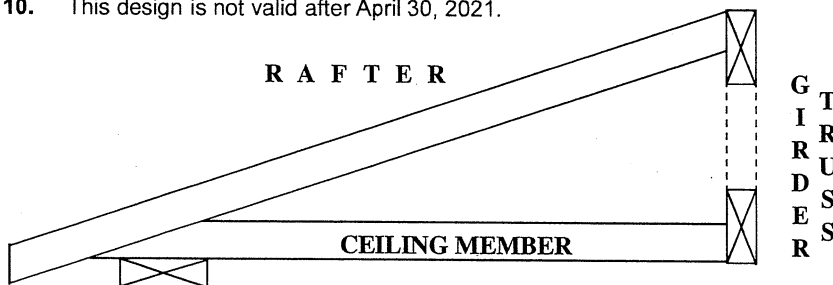
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately $1/3$ the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry ($< 19\%$ moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-14, section 12.9.4
10. This design is not valid after April 30, 2021.

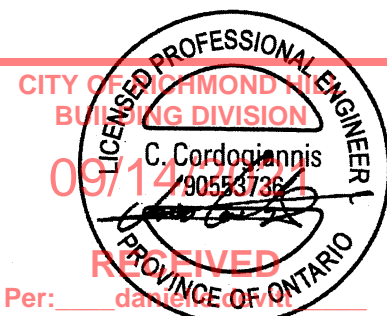


TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	(3.5" nail)		(3" and 3.25" nail)	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4

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

PEO
Certificate No. 10889485



April 2, 2020

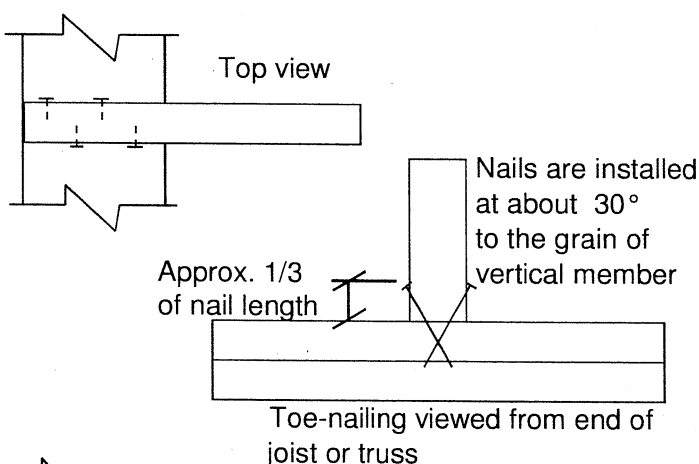
B97791H2

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

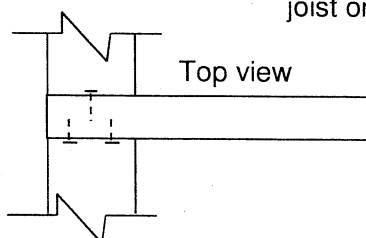
NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: G = 0.42(SPF), G = 0.49(D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after April 30, 2021.

The diagram shows an elevation view of a mechanical assembly. A horizontal rectangular block is labeled "Bearing plate" with an arrow pointing to its right side. Below this block, a shaft is represented by a horizontal line. Four T-shaped components are mounted on the shaft, indicated by vertical lines with horizontal bars at the top. The entire assembly is shown within a rectangular frame.



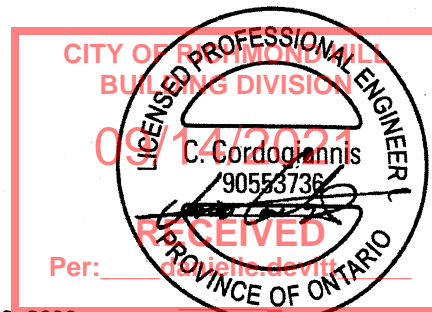
Elevation view



MiTek®

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

PEO
Certificate No. 10889485



April 2, 2020

HUS/LJS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: See table

Finish: G90 galvanized

Design:

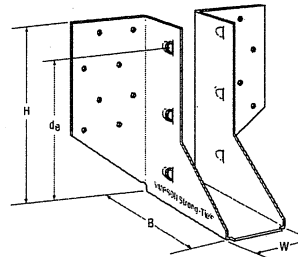
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

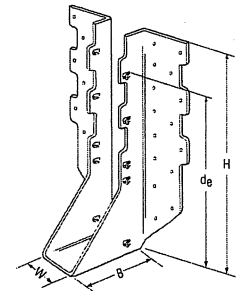
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

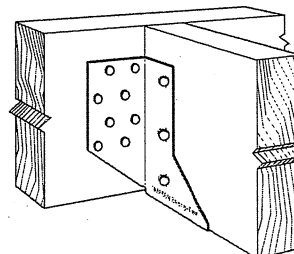
- See current catalogue for options



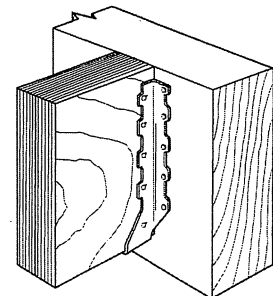
LJS26DS



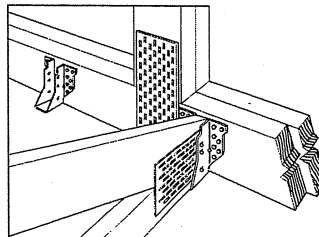
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



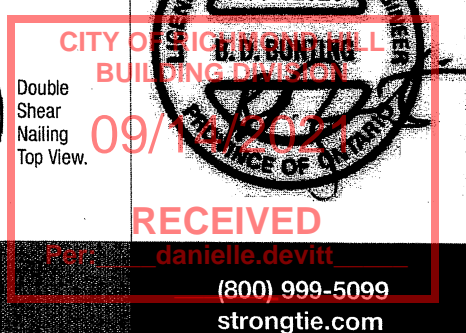
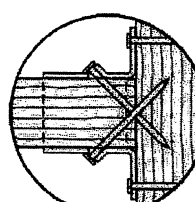
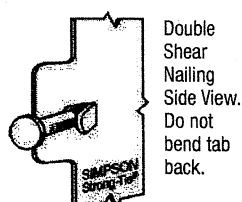
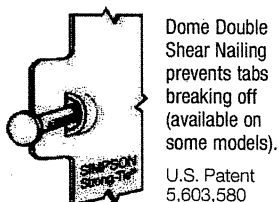
Typical HUS
Installation



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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₈ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.	Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.
LJS26DS	18	1⅞	5	3½	4⅞	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅞	5⅞	3	3⅞	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅞	7⅞	3	6⅞	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅞	9⅞	3	7⅞	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅞	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d₈ is the distance from the seat of the hanger to the highest joist nail.



HGUS – Double Shear Joist Hangers

SIMPSON

Strong-Tie

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 12 gauge

Finish: G90 galvanized

Design:

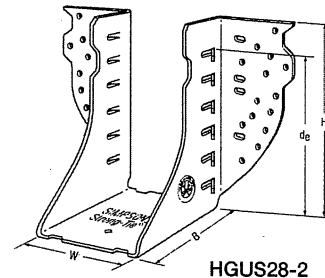
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

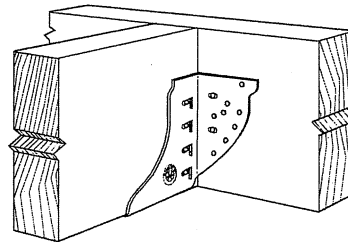
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

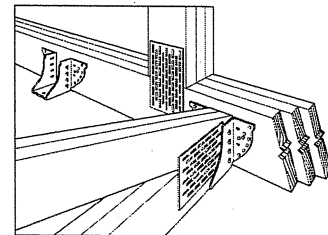
- See current catalogue for options



HGUS28-2



Typical HGUS Installation



Typical HGUS Installation

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

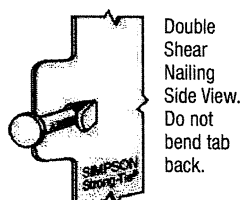
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HGUS26	12	1⅞	5⅞	5	4⅝ ₃₂	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3⅞	5⅞	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4⅞	5⅞	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6⅞	5⅞	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1⅞	7⅞	5	6⅝	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3⅞	7⅞	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4⅞	7⅞	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6⅞	7⅞	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1⅞	9⅞	5	7⅞	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3⅞	9⅞	4	8⅝	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4⅞	9⅞	4	8⅝	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6⅞	9⅞	4	8⅝	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6⅞	10⅞	4	10⅝	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6⅞	12⅞	4	11⅝	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d₀ is the distance from the seat of the hanger to the highest joist nail.

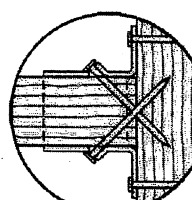


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



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H – Seismic and Hurricane Ties

SIMPSON

Strong-Tie

The H connector series provides wind and seismic ties for trusses and rafters.

Material: 18 gauge **Finish:** G90 galvanized

Design: • Factored resistances are in accordance with CSA O86-14

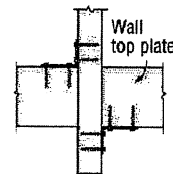
- Factored resistances have been increased 15%. No further increase is permitted.

Installation: • Use all specified fasteners

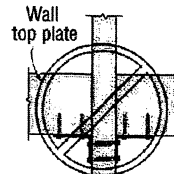
- Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½" long, 10d x 1½" = 0.146" x 1½" long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

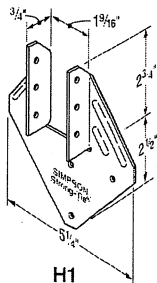
Hurricane Tie Installations to Achieve Twice the Load (Top View)



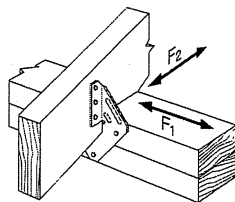
Install diagonally across from each other for minimum 2x truss.



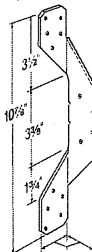
Nailing into both sides of a single ply 2x truss may cause the wood to split.



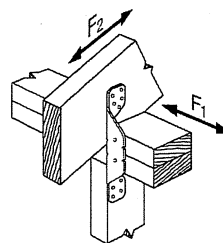
H1



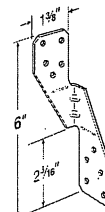
H1 Installation



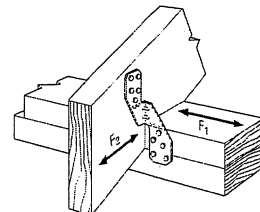
H2A



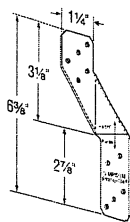
H2A Installation



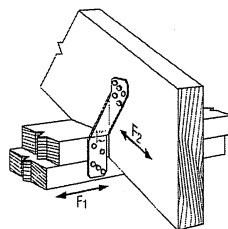
H2.5A



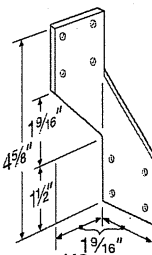
H2.5A Installation



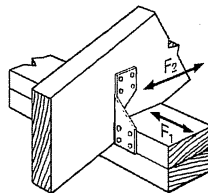
H2.5T



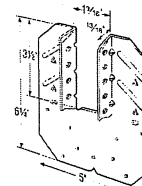
H2.5T Installation
(Nails into both top plates)



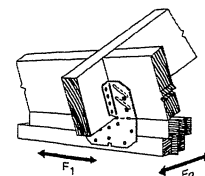
H3



H3 Installation



H10A



H10A Installation

Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
					D.Fir-L			S-P-F		
		To Rafter	To Plates	To Studs	Uplift	Normal		Uplift	Normal	
						F ₁	F ₂		F ₁	F ₂
						(K ₀ =1.15)			(K ₀ =1.15)	
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H2.5T	18	(5) 8d	(5) 8d	—	835	175	240	740	160	210
H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.

2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.

3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.

4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.



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LUS – Double Shear Joist Hangers

SIMPSON

Strong-Tie

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

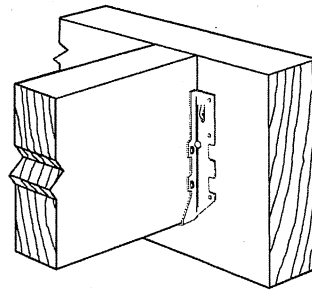
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

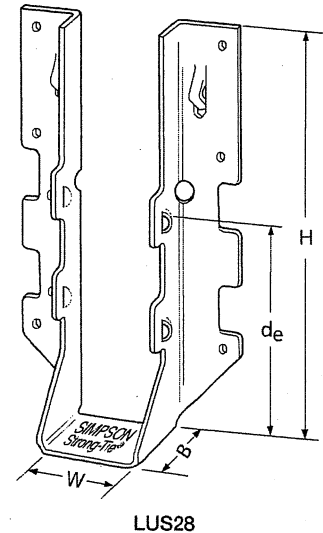
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



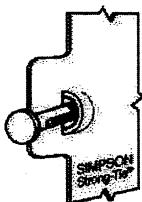
Typical LUS Installation



LUS28

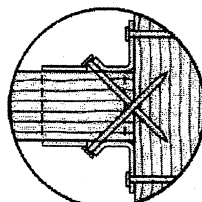
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LUS24	18	1½	3½	1¾	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 15/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3 5/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4½	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4½	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 13/16	1¾	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4½	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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



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

U.S. Patent 5,603,580



Double Shear Nailing Top View.



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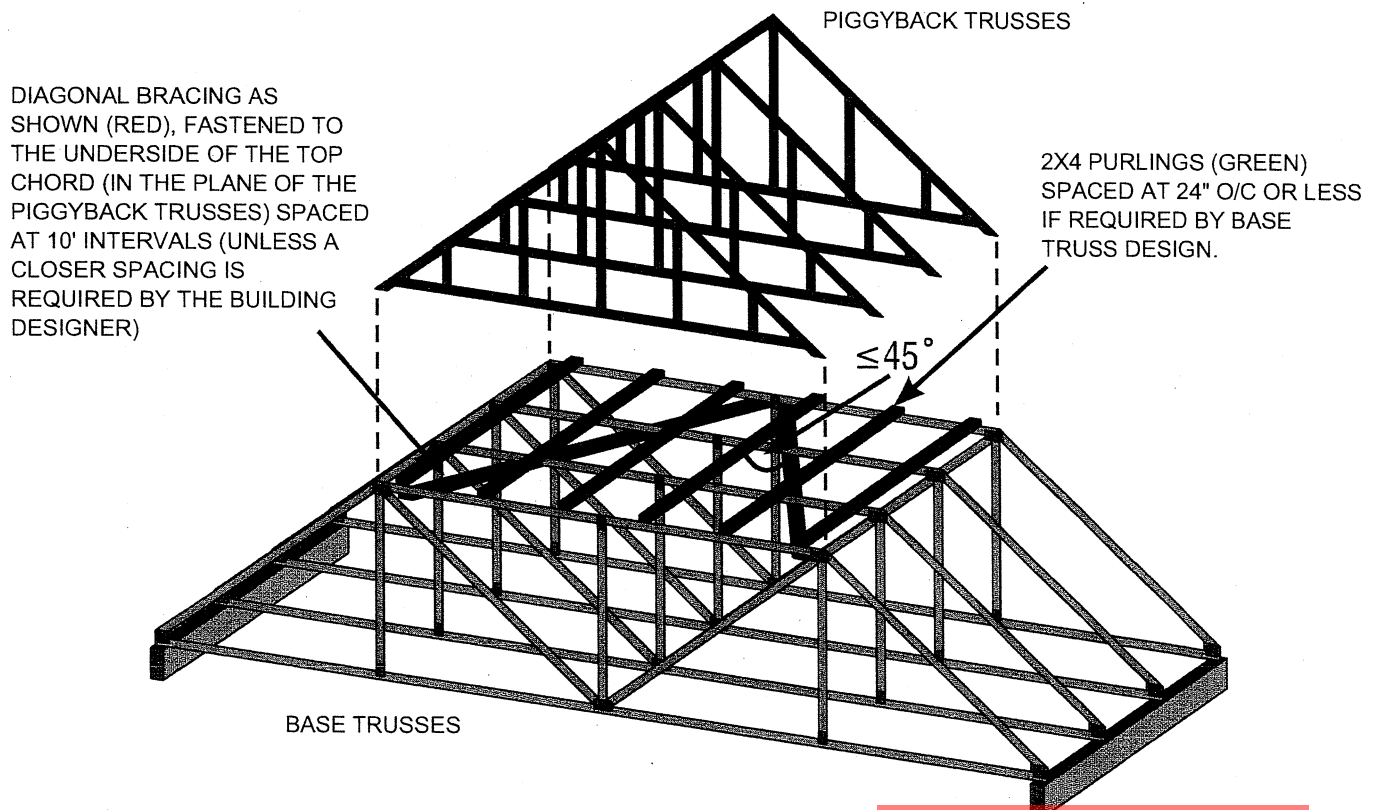
WAP
WATER
DESIGN

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.

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BUILDING DIVISION
SKETCH FROM BCSI-CANADA 2013
09/14/2021
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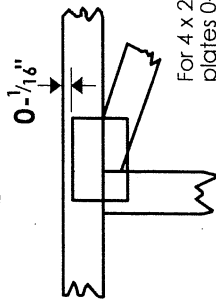
Disclaimer:

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

Symbols

PLATE LOCATION AND ORIENTATION

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



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

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



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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

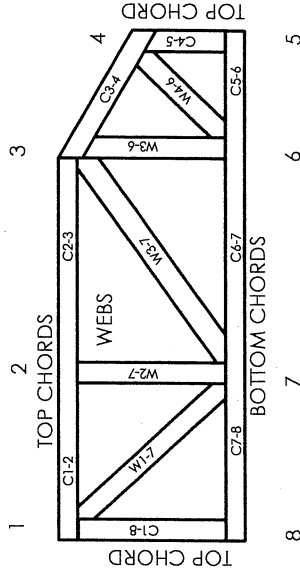
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

CCMC Reports:

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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