

HARDWARE:

LUS24 - (O)
 LJS26DS - (V)
 LUS26-2 - (VV)
 HGUS26-2 - (XX)
 HUC26-2 (CC)

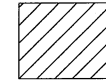
ASPHALT SHINGLES
 FINISHED OVERHANG: 12"
 2x6 EXTERIOR WALLS
 2x6 FASCIA BOARD
 HEEL: R.T.M.C.

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

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

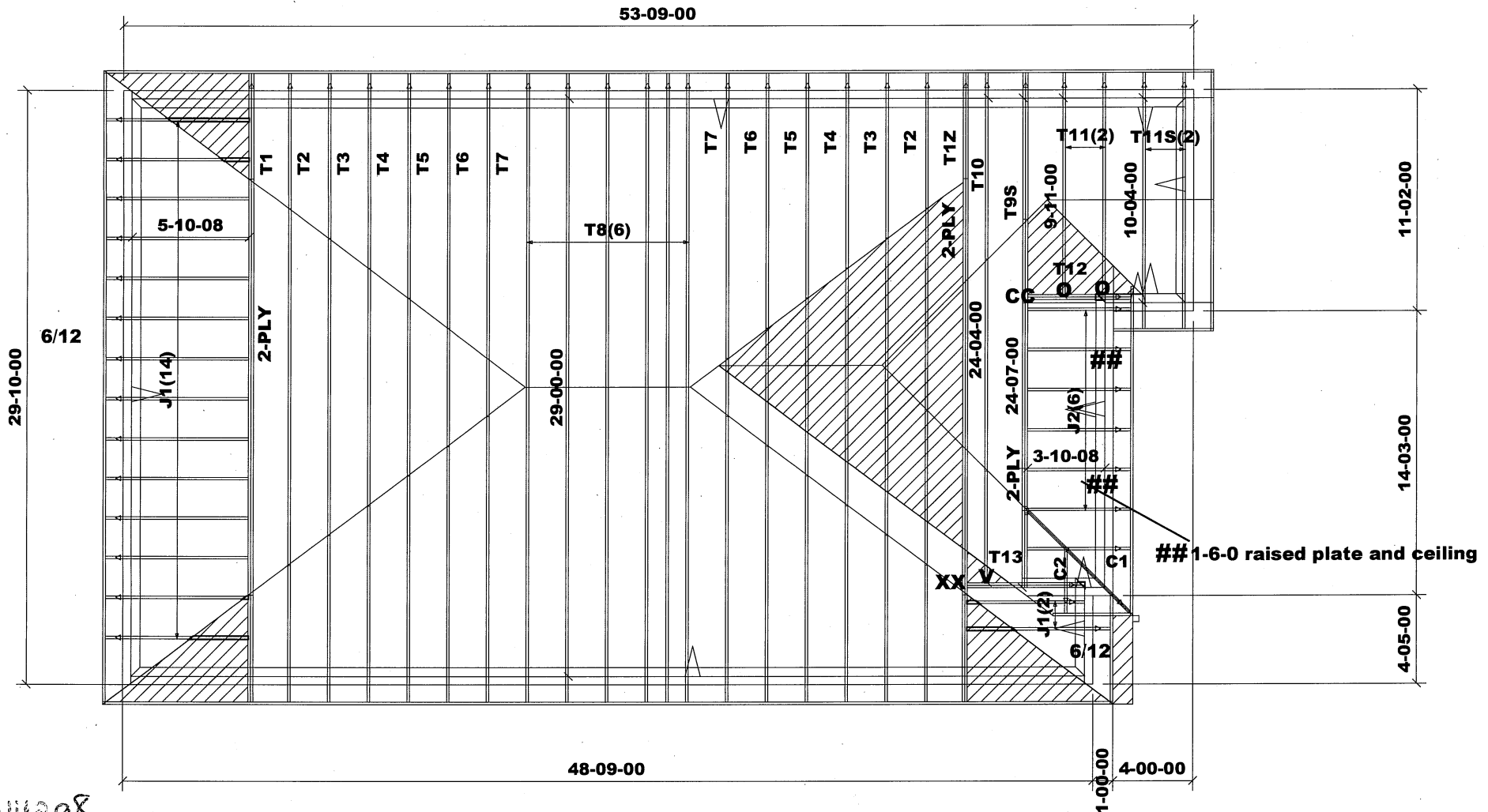
DESIGN LOADS:

TCSL = 25.6 psf
 TCDL = 6.0 psf
 BCLL = 0.0 psf
 BCDL = 7.4 psf



DENOTES:
 CONVENTIONAL
 FRAMING

8/12 roof pitch unless noted



M14208



Job Track: **51012**
 Plan Log: **204906**
 Layout ID: **419799**

Builder / Location:

ROYAL PINE HOMES / RICHMOND HILL

Model / Elevation:

38-13 / A CHADWICK

Project: **CENTREFIELD**

Date: **2021-08-05** Sales: Rick DiCiano Designer: JG

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

Mitek ver 8.4.2.286

HARDWARE:

LUS24 - (O)
 LJS26DS - (V)
 LUS26-2 - (VV)
 HGUS26-2 - (XX)
 HUC26-2 (CC)

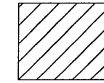
ASPHALT SHINGLES
 FINISHED OVERHANG: 12"
 2x6 EXTERIOR WALLS
 2x6 FASCIA BOARD
 HEEL: R.T.M.C.

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

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

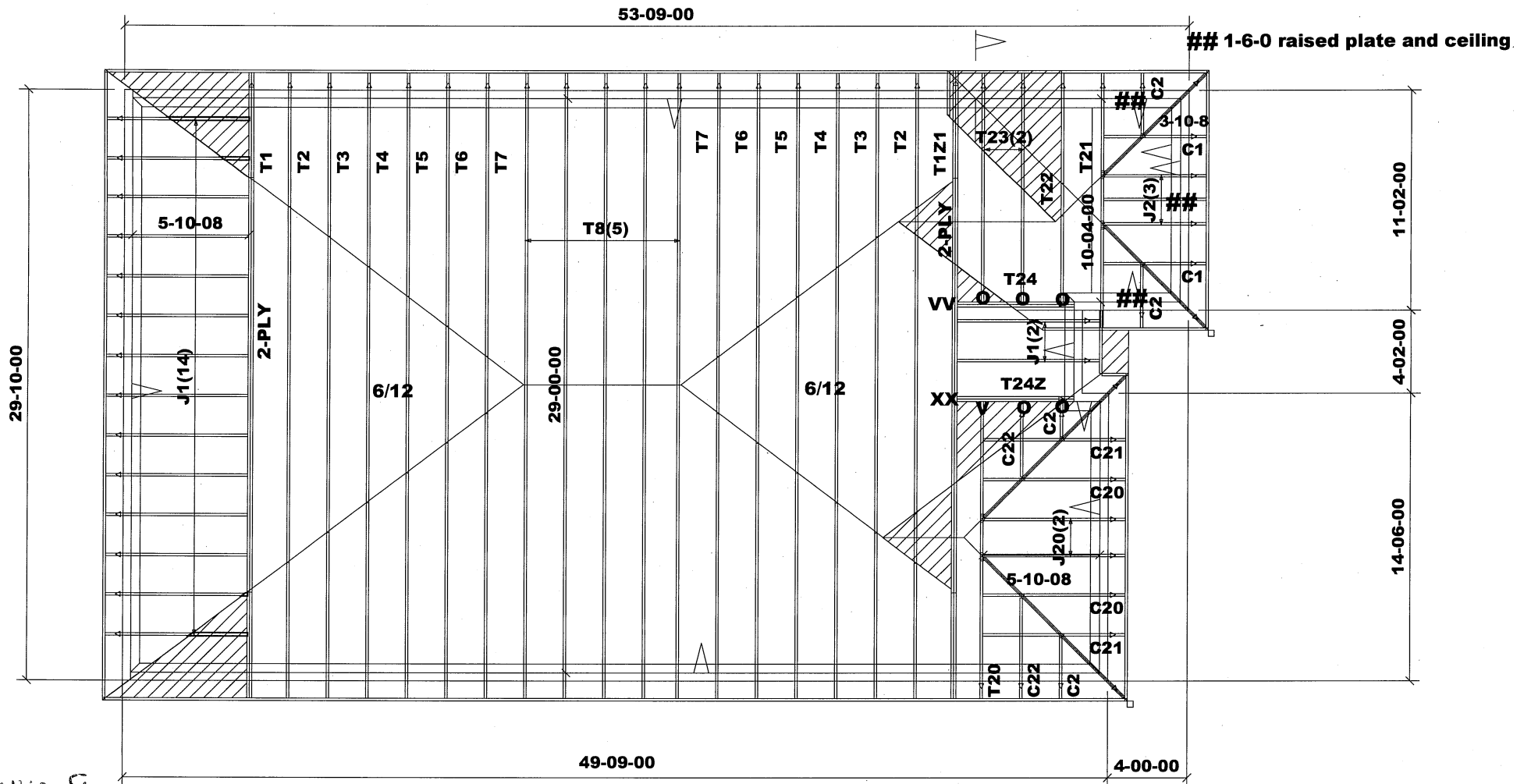
DESIGN LOADS:

TCSL = 25.6 psf
 TCDL = 6.0 psf
 BCLL = 0.0 psf
 BCDL = 7.4 psf



DENOTES:
 CONVENTIONAL
 FRAMING

8/12 roof pitch unless noted



M14208



Job Track: **51012**
 Plan Log: **204906**
 Layout ID: **419800**

Builder / Location:

ROYAL PINE HOMES / RICHMOND HILL

Model / Elevation:

38-13 / B CHADWICK

Project: **CENTREFIELD**

Date: **2021-08-05** Sales: **Rick DiCiano** Designer: **JG**

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Mitek ver 8.4.2.286

LUS24 - (O)
LJS26DS - (V)
LUS26-2- (VV)
HGUS26-2 - (XX)
HUC26-2 (CC)

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

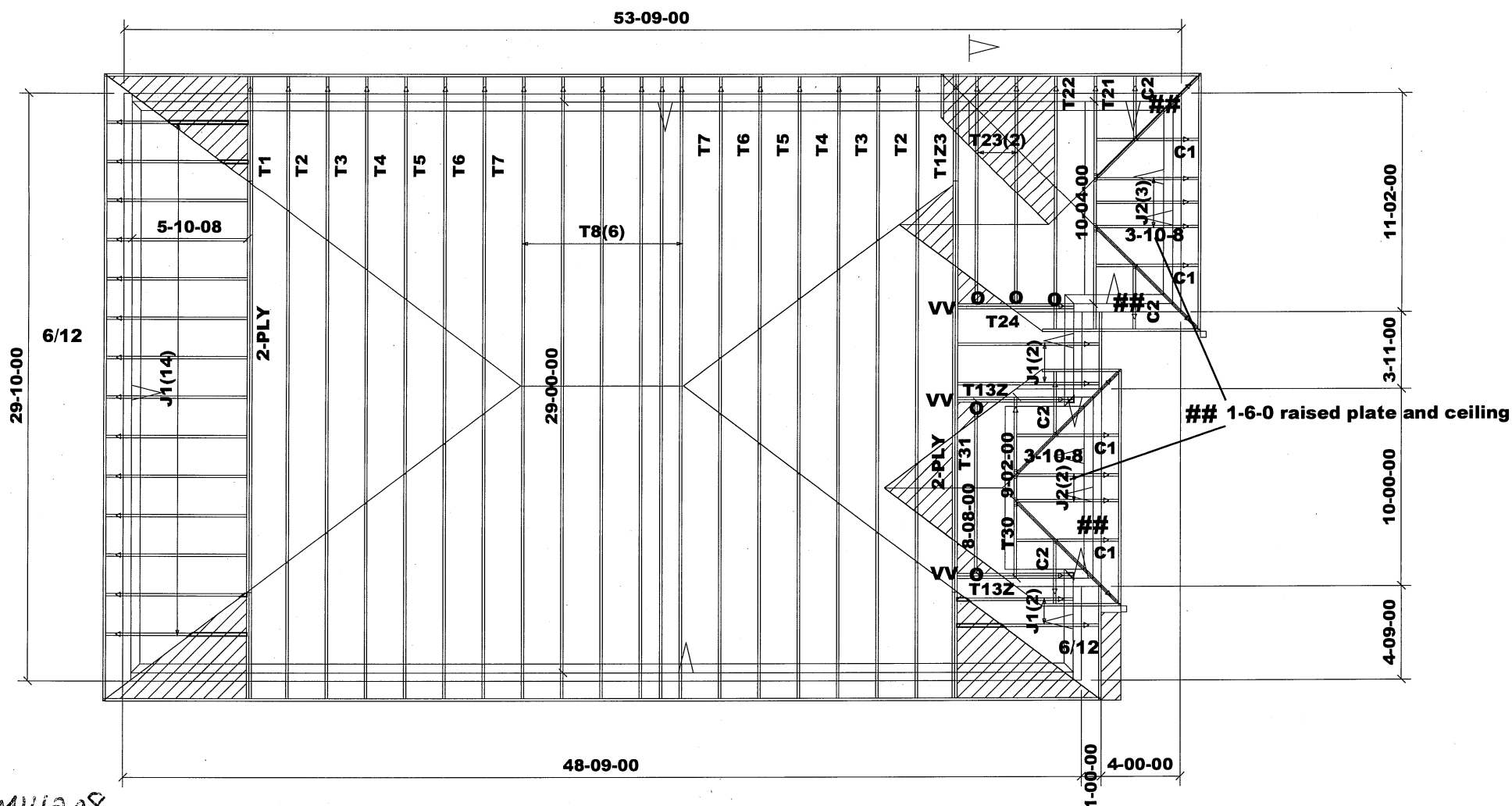
All conventional framing to conform with Part 9 of O.B.C. 2012 (2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post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

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

TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

NOTES:
CONVENTIONAL
FRAMING

8/12 roof pitch unless noted



M14208



Job Track:	51012
Plan Log:	204906
Layout ID:	419801

Builder / Location:

ROYAL PINE HOMES / RICHMOND HILL

Project: **CENTREFIELD**


Date: 2021-08-05	Sales: Rick DiCiano	Designer: JG
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Model / Elevation:









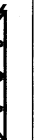
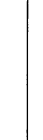
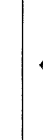
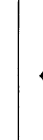


38-13 / C CHADWICK


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Mitek ver 8.4.2.286

DELIVERY SHIPLIST		
 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	Lumber Yard: TAMARACK LUMBER	Job Track: 51012
	Builder: ROYAL PINE HOMES	PlanLog: 204906
	Project: CENTREFIELD	Layout ID: 419799
	Location: RICHMOND HILL	Ref # 1 of 2
	Model: 38-13	Page: 08-05-2021
	Lot #: A	Designer: Rick DiCiano
Elevation: A		Sales Rep: Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	297.17 180.00		
	1 2-ply	T12 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	297.17 180.00		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.06 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.46 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.97 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.05 168.00		
	2	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	263.53 164.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	268.04 168.67		
	6	T8 Common	8 /12	29-00-00	11-00-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	833.42 520.00		
	1 2-ply	T9S Hip Girder	8 /12	24-07-00	5-05-13	2 x 4 2 x 6	1-03-08	1-04-13 1-04-13	245.38 154.67		
	1	T10 Hip	8 /12	24-04-00	6-09-13	2 x 4	1-03-08	1-04-13 3-00-13	108.42 67.83		
	2	T11 Common	8 /12	9-11-00	4-10-02	2 x 4	1-03-08	1-04-13 1-08-02	81.35 51.00		
	2	T11S Scissor	8 /12 5 /12	10-04-00	4-10-02	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	86.86 55.67		
	1 2-ply	T12 Jack-Closed Girder	8 /12	3-10-08	5-05-13	2 x 4 2 x 6	1-03-08	2-10-13 5-05-13	50.9 33.00		




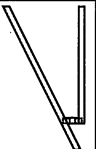
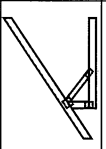
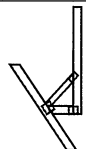
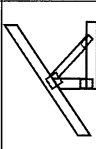
TAMARACK
 ROOF TRUSSES INC.
ALPHA LUMBER GROUP

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
Builder: ROYAL PINE HOMES
Project: CENTREFIELD
Location: RICHMOND HILL
Model: 38-13
Lot #:
Elevation: A

Job Track: 51012
PlanLog: 204906
Layout ID: 419799
Ref # 2 of 2
Page: 08-05-2021
Date:
Designer:
Sales Rep: Rick DiCiano

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	T13 Flat Girder	0 /12	5-10-08	1-06-00	2 x 6		1-06-00 1-06-00	54.19 33.67		
	16	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	268.68 170.67		
	6	J2 Jack-Open	8 /12	3-10-08	3-11-13	2 x 4	1-03-08	1-04-13 3-11-13	85.02 54.00		
	1	C1 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 2-01-01	1-04-13 2-07-02	11.19 7.00		
	1	C2 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 1-01	1-04-13 2-07-02	8.9 5.67		

TOTAL # TRUSS= 57

TOTAL BFT OF ALL TRUSSES= 2482.85


BFT.

TOTAL WEIGHT OF ALL TRSSES 3969.74 LBS











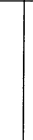



HARDWARE


QTY	TYPE	MODEL	LENGTH
1	Hardware	LJS26DS	
2	Hardware	LUS24	
1	Hardware	HGUS26-2	
1		HUC26-2	

TOTAL NUMBER OF ITEMS= 5

DELIVERY SHIPLIST			
 <p>TAMARACK ROOF TRUSSES INC. <small>— ALPA LUMBER GROUP —</small></p>	Lumber Yard: TAMARACK LUMBER	Job Track: 51012	PlanLog: 204906 Layout ID: 419800 Ref # 1 of 2 Page: 08-05-2021 Designer: Sales Rep: Rick DiCiano
	Builder: ROYAL PINE HOMES	Project: CENTREFIELD	
	Location: RICHMOND HILL	Model: 38-13	
	Lot #: B	Elevation: B	

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	297.17 180.00		
	1 2-ply	T1Z1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	297.17 180.00		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.06 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.46 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.97 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	289.05 168.00		
	2	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	263.53 164.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	268.04 168.67		
	5	T8 Common	8 /12	29-00-00	11-00-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	674.65 421.67		
	1	T20 Hip Girder	8 /12	13-08-00	5-03-13	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	70.28 42.83		
	1	T21 Hip Girder	8 /12	10-04-00	3-11-13	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	53.48 35.33		
	1	T22 Hip	8 /12	10-04-00	5-09-08	2 x 4	1-03-08	2-10-13 2-10-13	53.91 35.33		
	2	T23 Common	8 /12	10-04-00	5-07-02	2 x 4	1-03-08	1-04-13 2-10-13	92.72 61.33		
	1 2-ply	T24 Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.63 37.00		



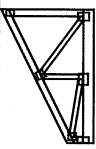
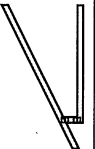
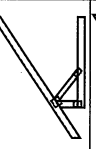
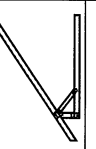
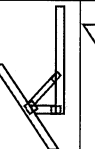

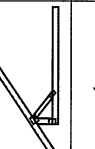
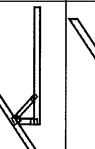
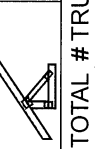
TAMARACK
 ROOF TRUSSES INC.
ALPHA LUMBER GROUP

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
Builder: ROYAL PINE HOMES
Project: CENTREFIELD
Location: RICHMOND HILL
Model: 38-13
Lot #:
Elevation: B

Job Track: 51012
PlanLog: 204906
Layout ID: 419800
Ref #: 2 of 2
Page: 08-05-2021
Date:
Designer:
Sales Rep: Rick DiCiano


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	T24Z Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.63 37.00		
	16	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	268.68 170.67		
	3	J2 Jack-Open	8 /12	3-10-08	3-11-13	2 x 4	1-03-08	1-04-13 3-11-13	42.51 27.00		
	2	J20 Jack-Open	8 /12	5-10-08	5-03-13	2 x 4	1-03-08	1-04-13 5-03-13	38.38 23.33		
	2	C1 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 2-01-01	1-04-13 2-07-02	22.37 14.00		
	4	C2 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 1-01	1-04-13 2-07-02	35.62 22.67		
	2	C20 Jack-Open	8 /12	3-09-07	3-11-02	2 x 4	1-03-08 2-01-01	1-04-13 3-11-02	32.66 20.67		
	2	C21 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 4-01-01	1-04-13 2-07-02	26.93 16.67		
	2	C22 Jack-Open	8 /12	1-10-08	3-11-02	2 x 4	1-03-08 1-10-15	1-04-13 2-07-13	23.42 15.33		
TOTAL # TRUSS= 63		TOTAL BFT OF ALL TRUSSES= 2310.5			BFT.		TOTAL WEIGHT OF ALL TRSSES 3686.29 LBS				








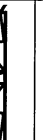




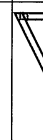

HARDWARE


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

TOTAL NUMBER OF ITEMS= 8

DELIVERY SHIPLIST			
 <p>TAMARACK ROOF TRUSSES INC. <small>— ALPA LUMBER GROUP —</small></p>	Lumber Yard: TAMARACK LUMBER	Job Track: 51012	PlanLog: 204906 Layout ID: 419801 Ref # 1 of 2 Page: 08-05-2021 Designer: Sales Rep: Rick DiCiano
	Builder: ROYAL PINE HOMES	PlanLog: 204906	
	Project: CENTREFIELD	Layout ID: 419801	
	Location: RICHMOND HILL	Ref # 1 of 2	
	Model: 38-13	Page: 08-05-2021	
	Lot #: C	Designer:	
Elevation: C			

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	270.74 165.33		
	1 2-ply	T123 Hip Girder	8 /12	29-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	297.17 180.00		
	2	T2 Hip	8 /12	29-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	232.06 146.67		
	2	T3 Hip	8 /12	29-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	252.46 160.00		
	2	T4 Hip	8 /12	29-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.97 162.33		
	2	T5 Hip	8 /12	29-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	289.05 188.00		
	2	T6 Hip	8 /12	29-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	263.53 164.00		
	2	T7 Hip	8 /12	29-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	268.04 168.67		
	6	T8 Common	8 /12	29-00-00	11-00-13	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	809.58 506.00		
	2 2-ply	T13Z Flat Girder	0 /12	5-10-08	1-06-00	2 x 6		1-06-00 1-06-00	110.36 70.00		
	1	T21 Hip Girder	8 /12	10-04-00	3-11-13	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	52.27 34.67		
	1	T22 Hip	8 /12	10-04-00	5-09-08	2 x 4	1-03-08 1-03-08	2-10-13 2-10-13	55.68 36.00		
	2	T23 Common	8 /12	10-04-00	5-07-02	2 x 4	1-03-08	1-04-13 2-10-13	92.72 61.33		
	1 2-ply	T24 Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.64 37.00		



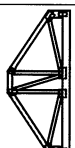
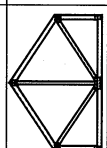
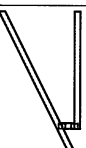
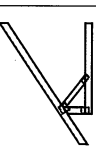
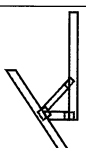
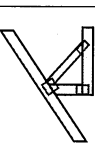
TAMARACK
 ROOF TRUSSES INC.
ALFA LUMBER GROUP

DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
Builder: ROYAL PINE HOMES
Project: CENTREFIELD
Location: RICHMOND HILL
Model: 38-13
Lot #: C
Elevation: C

Job Track: 51012
PlanLog: 204906
Layout ID: 419801
Ref #: 2 of 2
Page: 08-05-2021
Date: Rick DiCiano
Designer: Sales Rep:

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	T30 Hip Girder	8 /12	9-02-00	3-11-13	2 x 4 2 x 6		1-04-13 1-04-13	46.1 30.00		
	1	T31 Common	8 /12	8-08-00	5-11-08	2 x 4		3-00-13 3-00-13	40.21 26.00		
	18	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	302.26 192.00		
	5	J2 Jack-Open	8 /12	3-10-08	3-11-13	2 x 4	1-03-08	1-04-13 3-11-13	70.85 45.00		
	4	C1 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 2-01-01	1-04-13 2-07-02	44.74 28.00		
	4	C2 Jack-Open	8 /12	1-09-07	2-07-02	2 x 4	1-03-08 1-01	1-04-13 2-07-02	35.62 22.67		

TOTAL # TRUSS= 65

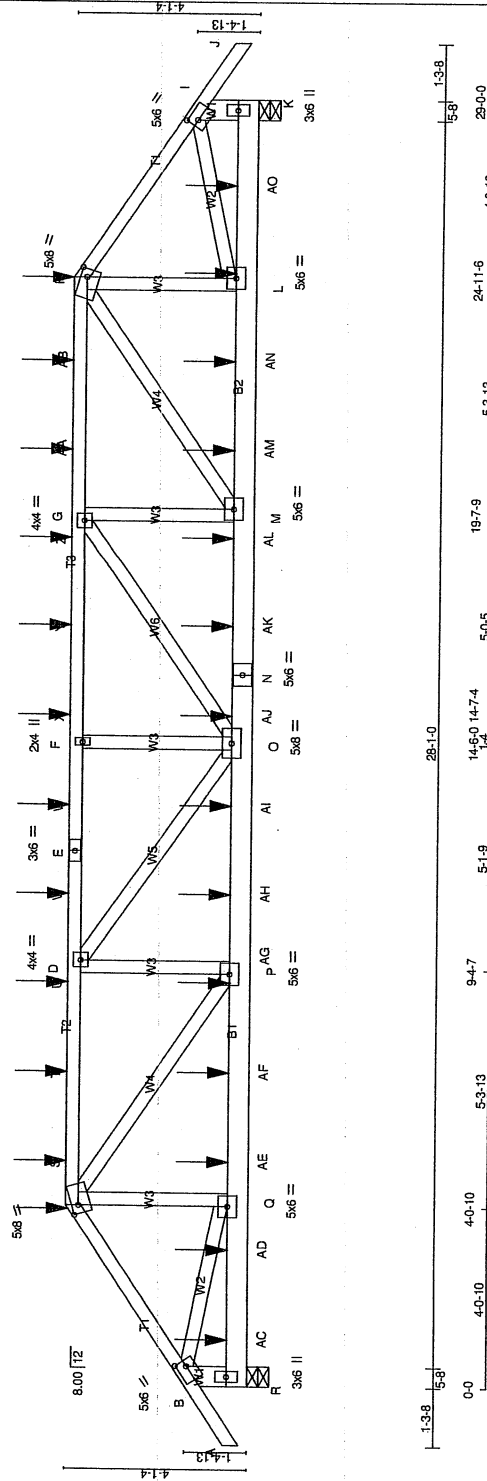
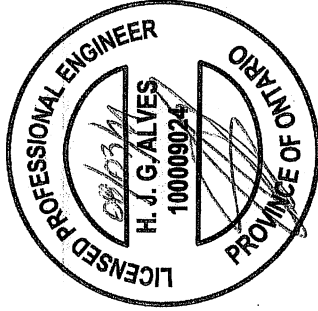
TOTAL BFT OF ALL TRUSSES= 2403.67

TOTAL WEIGHT OF ALL TRSSES 3827.05 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
5	Hardware	LUS24	
3	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 8

[illegible][illegible]

Structural component only
DWG# T-2126162

CONTINUED ON PAGE 2

JOB NAME

419799

TRUSS NAME

T1Z

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. Tue Aug 3 13:01:18 2021 Page 2

ID:pl42Fvgw5RqjHJZyh4JpTvhK9w-76T0d83TZqSg3W7nYGB8PaI1LzjXXSK37zN9yZUX

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMWV-t	MT20	5.0	6.0	2.50 1.75
C	TTWW-m	MT20	5.0	8.0	1.75 2.50
D	TMWV-t	MT20	4.0	4.0	
E	TS-t	MT20	3.0	6.0	
F	TMW-w	MT20	2.0	4.0	
G	TMWV-t	MT20	4.0	4.0	
H	TTWW-m	MT20	5.0	8.0	2.00 3.00
I	TMWV-p	MT20	5.0	6.0	1.50 3.00
K	BMV1-p	MT20	3.0	6.0	
L	BMWV-t	MT20	5.0	8.0	4.25 2.50
M, P, Q					
M	BMWV-t	MT20	5.0	6.0	
N	BS-t	MT20	5.0	6.0	
O	BMWVW-t	MT20	5.0	8.0	
R	BMV1-p	MT20	3.0	6.0	

08/03/21

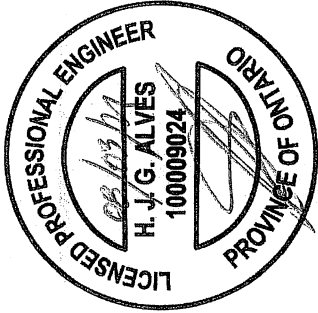
H. J. G. ALVES

100009024

LICENSED PROFESSIONAL ENGINEER

PROVINCE OF ONTARIO

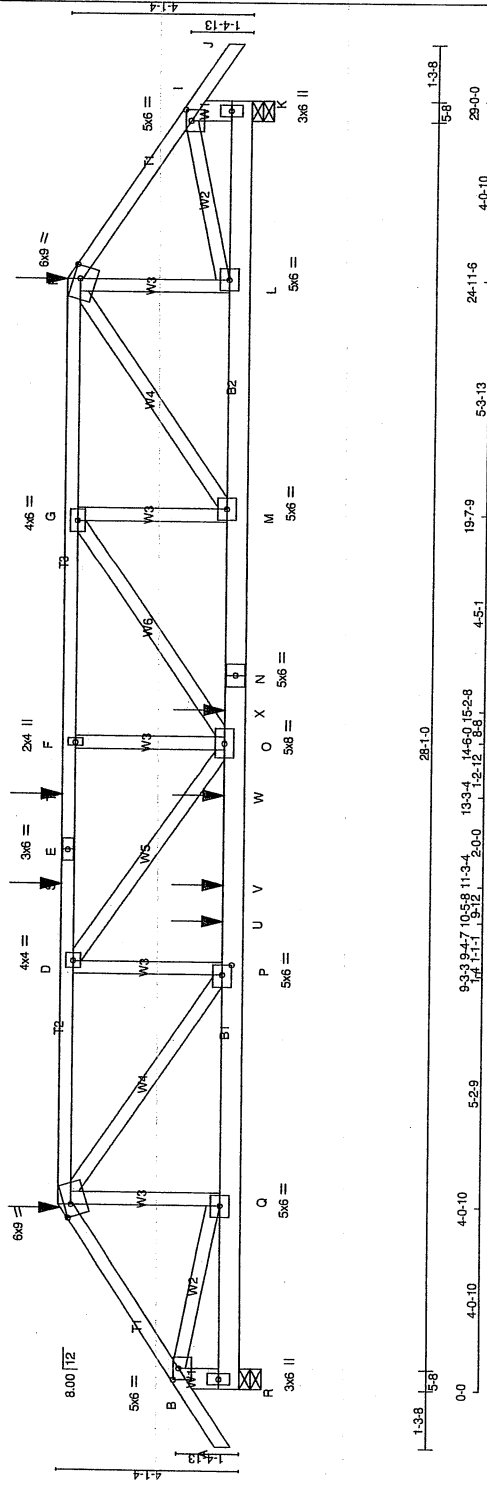
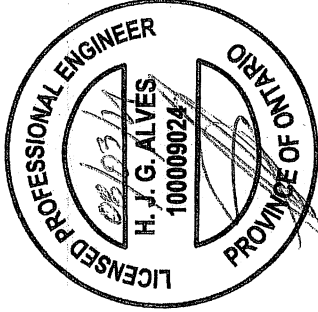
Structural component only
DWG# T-2126163



Structural component only
DWG# T-2126163

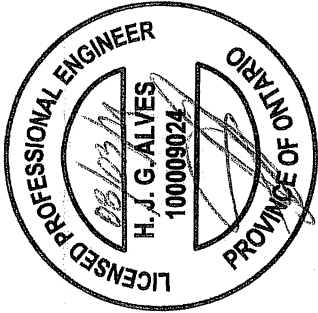
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419800	T1Z1	1	2	TRUSS DESC.		

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:03:54 2021 Page 1
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 -1-3-8 0-0 4-0-10 5-0-5 9-4-7 1-10-13 11-3-4 13-3-4 14-5-0 5-1-9 24-11-6 29-0-1 30-3-8 4-0-10 1-3-8 Scale = 1/4" = 1'-0"

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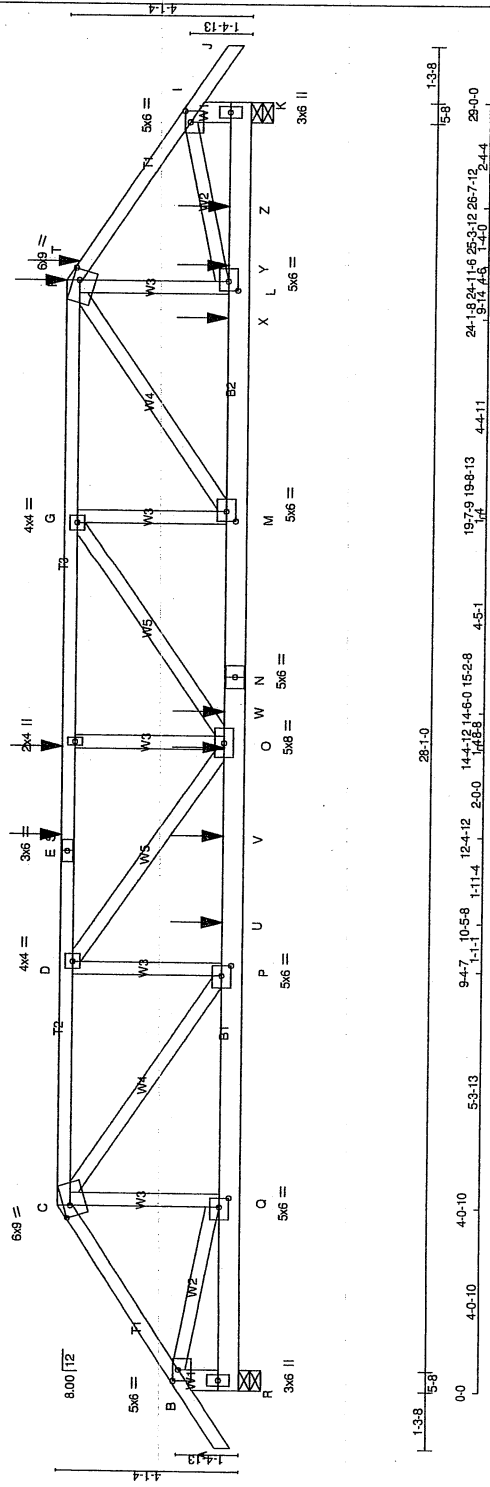
Structural component only
DWG# T-2126181

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.																																																																																																																
419800	T-1Z1	1	2	TRUSS DESC.																																																																																																																		
Tamarack Roof Truss, Burlington																																																																																																																						
Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:03:54 2021 Page 2																																																																																																																						
ID:pl42Fvaw6FgiHJZVh4JpTvHK9w-VV0n9zaMGk1nLbV589EY7eS1rk 67edKw yZSS																																																																																																																						
<div>PLATES (table is in inches)</div> <table><thead><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr></thead><tbody><tr><td>B</td><td>TMVW-p</td><td>MT20</td><td>5.0</td><td>6.0</td><td>1.50</td><td>3.00</td></tr><tr><td>C</td><td>TTWW-m</td><td>MT20</td><td>6.0</td><td>9.0</td><td>1.75</td><td>3.25</td></tr><tr><td>D</td><td>TMWW-t</td><td>MT20</td><td>4.0</td><td>4.0</td><td></td><td></td></tr><tr><td>E</td><td>TS-t</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td><td></td></tr><tr><td>F</td><td>TMW-w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>G</td><td>TMWW-t</td><td>MT20</td><td>4.0</td><td>6.0</td><td></td><td></td></tr><tr><td>H</td><td>TTWW-m</td><td>MT20</td><td>6.0</td><td>9.0</td><td>1.75</td><td>3.50</td></tr><tr><td>I</td><td>TMVW-p</td><td>MT20</td><td>5.0</td><td>6.0</td><td>1.50</td><td>3.00</td></tr><tr><td>K</td><td>BMV1-p</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td><td></td></tr><tr><td>L, M, Q</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>L</td><td>BMWW-t</td><td>MT20</td><td>5.0</td><td>6.0</td><td></td><td></td></tr><tr><td>N</td><td>BS-t</td><td>MT20</td><td>5.0</td><td>6.0</td><td></td><td></td></tr><tr><td>O</td><td>BMWWW-t</td><td>MT20</td><td>5.0</td><td>8.0</td><td></td><td></td></tr><tr><td>P</td><td>BMWW-t</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.50</td><td>2.75</td></tr><tr><td>R</td><td>BMV1-p</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td><td></td></tr></tbody></table> <div>CONNECTION REQUIREMENTS</div> <p>1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.</p>							JT	TYPE	PLATES	W	LEN	Y	X	B	TMVW-p	MT20	5.0	6.0	1.50	3.00	C	TTWW-m	MT20	6.0	9.0	1.75	3.25	D	TMWW-t	MT20	4.0	4.0			E	TS-t	MT20	3.0	6.0			F	TMW-w	MT20	2.0	4.0			G	TMWW-t	MT20	4.0	6.0			H	TTWW-m	MT20	6.0	9.0	1.75	3.50	I	TMVW-p	MT20	5.0	6.0	1.50	3.00	K	BMV1-p	MT20	3.0	6.0			L, M, Q							L	BMWW-t	MT20	5.0	6.0			N	BS-t	MT20	5.0	6.0			O	BMWWW-t	MT20	5.0	8.0			P	BMWW-t	MT20	5.0	6.0	2.50	2.75	R	BMV1-p	MT20	3.0	6.0		
JT	TYPE	PLATES	W	LEN	Y	X																																																																																																																
B	TMVW-p	MT20	5.0	6.0	1.50	3.00																																																																																																																
C	TTWW-m	MT20	6.0	9.0	1.75	3.25																																																																																																																
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H	TTWW-m	MT20	6.0	9.0	1.75	3.50																																																																																																																
I	TMVW-p	MT20	5.0	6.0	1.50	3.00																																																																																																																
K	BMV1-p	MT20	3.0	6.0																																																																																																																		
L, M, Q																																																																																																																						
L	BMWW-t	MT20	5.0	6.0																																																																																																																		
N	BS-t	MT20	5.0	6.0																																																																																																																		
O	BMWWW-t	MT20	5.0	8.0																																																																																																																		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75																																																																																																																
R	BMV1-p	MT20	3.0	6.0																																																																																																																		



Structural component only
DWG# T-2126181

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419801	T123	1	2	TRUSS DESC.		
Tamarack Roof Truss, Burlington						
Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 12:55:00 2021 Page 1						
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						29-0-0
						3-8-4
						1-3-8
						Scale = 1:48.4

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419801	T1Z3	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Tue Aug 3 12:56:00 2021 Page 2

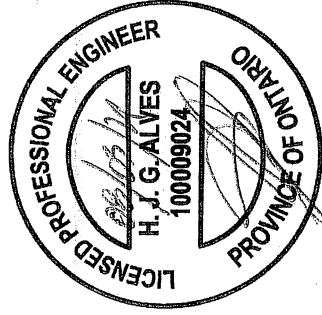
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	6.0	9.0	1.75	3.00
D	TMWV-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMW-w	MT20	2.0	4.0		
G	TMWV-t	MT20	4.0	4.0		
H	TTWW-m	MT20	6.0	9.0	1.75	3.00
I	TMWV-p	MT20	5.0	6.0	1.50	3.00
L	BMV1-p	MT20	3.0	6.0		
K	BMWV-t	MT20	5.0	6.0	2.50	2.50
M	BMWV-t	MT20	5.0	6.0	2.50	2.75
N	BS-t	MT20	5.0	6.0		
O	BMWVW-t	MT20	5.0	8.0		
P	BMWV-t	MT20	5.0	6.0	2.50	2.75
Q	BMWV-t	MT20	5.0	6.0	2.50	2.50
R	BMV1-p	MT20	3.0	6.0		

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2126188 *mm*

JOB NAME

419799

Tamarack Roof Truss, Burlington

TRUSS NAME

T4

QUANTITY

2

PLY

1

JOB DESC.

ROYAL PINE HOMES

TRUSS DESC.

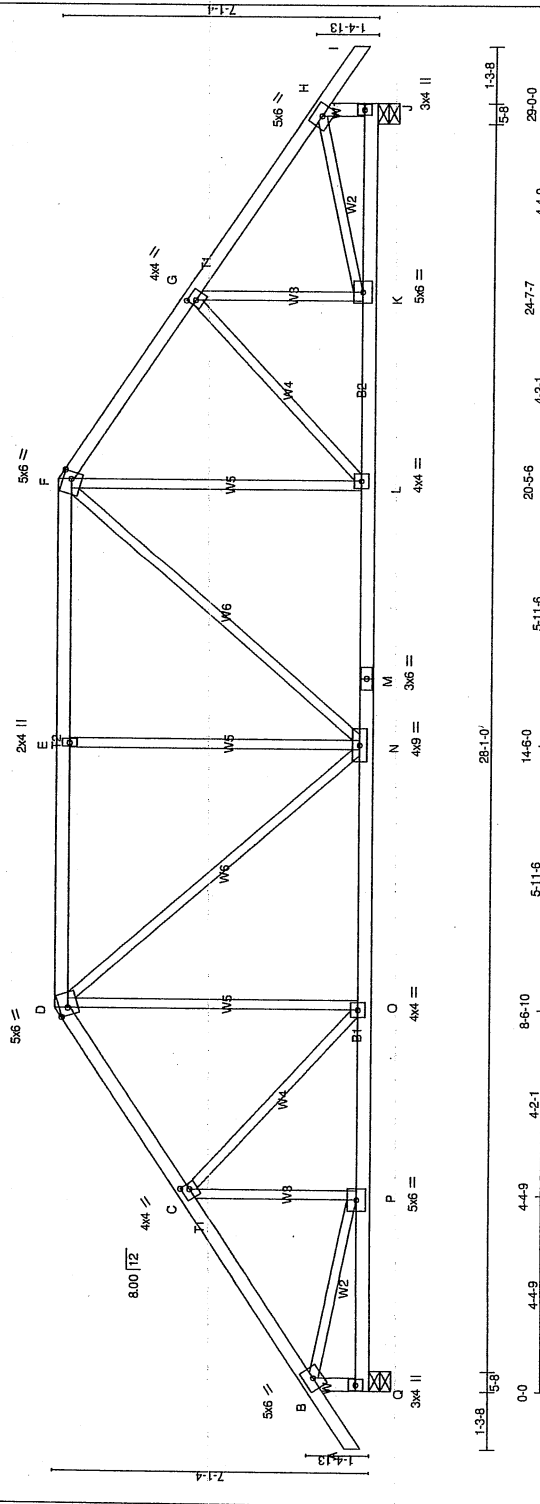
DRWG NO.

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Tue Aug 3 13:01:18 2021 Page 1

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1-3-8 0-0 4-4-9 4-4-9 4-2-1 8-6-10 5-11-6 14-6-0 5-11-6 20-5-6 4-2-1 24-7-7 4-4-9 29-0-0 30-3-8 1-3-8

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



LUMBER		N.L.G.A. RULES		CHORDS		PLATES (table is in inches)		W		LEN		Y		X	
A	D	2x4	DRY	LUMBER	No.2	SPF	DESCR.	BEARINGS	FACTORED	MAXIMUM	FACTORED	INPUT	REORD		
B	F	2x4	DRY	VERT	DOWN	BRG	GROSS REACTION	DOWN	BRG	IN-SX	IN-SX	IN-SX	IN-SX		
C	H	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
D	I	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
E	J	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
F	K	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
G	L	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
H	M	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
I	N	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
J	O	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
K	P	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
L	Q	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
M	R	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
N	S	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
O	T	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
P	U	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
Q	V	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
R	W	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
S	X	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
T	Y	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
U	Z	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
V	AA	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
W	AB	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
X	AC	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
Y	AD	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
Z	AE	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AA	AF	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AB	AG	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AC	AH	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AD	AI	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AE	AJ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AF	AK	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AG	AL	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AH	AM	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AI	AN	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AJ	AO	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AK	AP	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AL	AQ	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AM	AR	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AN	AS	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AO	AT	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AP	AU	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AQ	AV	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AR	AW	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AS	AX	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AT	AY	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AU	AZ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AV	BA	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AW	BB	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AX	BC	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AY	BD	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
AZ	BE	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BA	BF	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BB	BG	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BC	BH	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BD	BI	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BE	BJ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BF	BK	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BG	BL	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BH	BM	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BI	BN	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BJ	BO	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BK	BP	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BL	BQ	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BM	BR	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BN	BS	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BO	BT	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BP	BU	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BQ	BV	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BR	BW	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BS	BX	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BT	BY	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BU	BZ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BV	CA	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BW	CB	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BX	CC	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BY	CD	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
BZ	CE	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CA	CF	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CB	CG	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CC	CH	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CD	CI	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CE	CJ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CF	CK	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CG	CL	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CH	CM	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CI	CN	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CJ	CO	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CK	CP	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CL	CQ	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CM	CR	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CN	CS	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CO	CT	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CP	CU	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CQ	CV	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CR	CW	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CS	CX	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CT	CY	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CU	CZ	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CV	DA	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CW	DB	2x4	DRY	HORIZ	UP	5-8	1725	0	5-8	5-8	5-8	5-8	5-8		
CX	DC	2x4	DRY	HORIZ	DOWN	5-8	1725	0	5-8	5-8	5-8</				

JOB NAME 419799	TRUSS NAME T9S	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. Tue Aug 3 13:01:23 2021 Page 2																																																																																															
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<div><div><div>PLATES (table is in inches)</div><table><tr><td>JT TYPE</td><td>W</td><td>LEN</td><td>Y</td><td>X</td></tr><tr><td>B TMWV-i</td><td>5.0</td><td>6.0</td><td>2.50</td><td>1.75</td></tr><tr><td>C TTWW-m</td><td>5.0</td><td>8.0</td><td>1.75</td><td>3.50</td></tr><tr><td>D TMV+p</td><td>3.0</td><td>4.0</td><td></td><td></td></tr><tr><td>E TMWW-i</td><td>MT20</td><td>4.0</td><td>4.0</td><td></td></tr><tr><td>F TTWW-m</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.00 1.75</td></tr><tr><td>G TMWV-i</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.50 1.75</td></tr><tr><td>H BMV1-p</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td></tr><tr><td>I BMWW-i</td><td>MT20</td><td>5.0</td><td>6.0</td><td></td></tr><tr><td>J BMWW-i</td><td>MT20</td><td>5.0</td><td>6.0</td><td></td></tr><tr><td>K BVMMWW-i</td><td>MT20</td><td>8.0</td><td>12.0</td><td>4.50 4.50</td></tr><tr><td>L BMV+p</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td></tr><tr><td>M BMWWV-i</td><td>MT20</td><td>8.0</td><td>9.0</td><td></td></tr><tr><td>N BMV1-p</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td></tr></table></div><div><div>SPECIFIED CONCENTRATED LOADS (LBS)</div><table><tr><td>JT</td><td>LOC.</td><td>LC1</td><td>MAX.</td><td>MAX.</td></tr><tr><td>Y</td><td>22-7-12</td><td>-14</td><td>-14</td><td>---</td></tr></table><div>CONNECTION REQUIREMENTS</div><div>1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.</div></div><div><table><tr><td>FACE</td><td>DIRL</td><td>TYPE</td><td>HEEL</td><td>CONN.</td></tr><tr><td>BACK</td><td>VERT</td><td>TOTAL</td><td>---</td><td>C1</td></tr></table></div></div>						JT TYPE	W	LEN	Y	X	B TMWV-i	5.0	6.0	2.50	1.75	C TTWW-m	5.0	8.0	1.75	3.50	D TMV+p	3.0	4.0			E TMWW-i	MT20	4.0	4.0		F TTWW-m	MT20	5.0	6.0	2.00 1.75	G TMWV-i	MT20	5.0	6.0	2.50 1.75	H BMV1-p	MT20	3.0	6.0		I BMWW-i	MT20	5.0	6.0		J BMWW-i	MT20	5.0	6.0		K BVMMWW-i	MT20	8.0	12.0	4.50 4.50	L BMV+p	MT20	3.0	6.0		M BMWWV-i	MT20	8.0	9.0		N BMV1-p	MT20	3.0	6.0		JT	LOC.	LC1	MAX.	MAX.	Y	22-7-12	-14	-14	---	FACE	DIRL	TYPE	HEEL	CONN.	BACK	VERT	TOTAL	---	C1
JT TYPE	W	LEN	Y	X																																																																																											
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<div><div>LICENSED PROFESSIONAL ENGINEER</div><div><div></div><div>H. J. G. ALVES</div><div>100009024</div></div><div>PROVINCE OF ONTARIO</div></div> <div>Structural component only DWG# T-2126171</div>																																																																																															

419799

Tamarack Roof Truss, Burlington

TRUSS NAME

T10

QUANTITY

1

PLY

1

JOB DESC.

ROYAL PINE HOMES

TRUSS DESC.

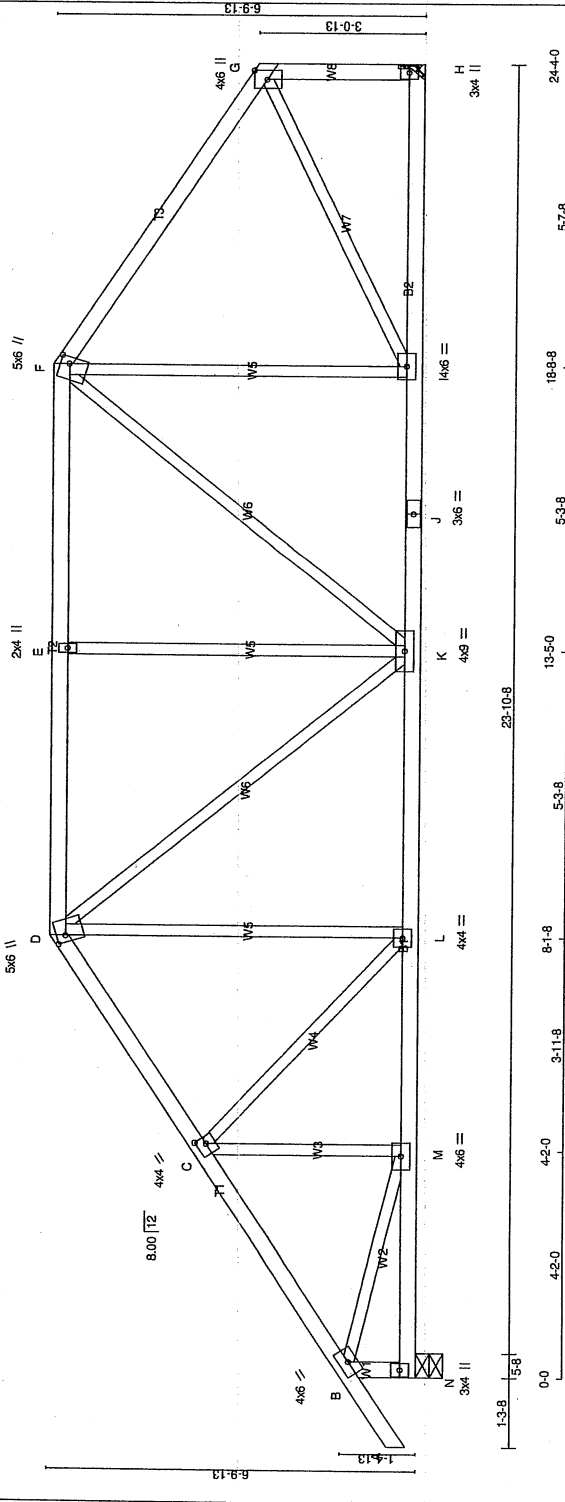
DRWG NO.

Version 8.420 S Jan 21 2021 Mitak Industries, Inc. Tue Aug 3 13:01:24 2021 Page 1

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1-3-8 0-0 4-2-0 4-2-0 4-2-0 3-11-8 8-1-8 5-3-8 13-5-0 5-3-8 18-8-8 5-7-8 24-4-0

Scale = 1:40.7



LUMBER		N.L.G.A. RULES		CHORDS		DESCR.	
JT	TYPE	PLATES	W	LEN	Y	X	
A	D	2x4	MT20	4.0	6.0	2.00	1.50
B	D	2x4	MT20	4.0	4.0	2.00	1.50
C	D	2x4	MT20	5.0	6.0	2.00	1.50
D	F	2x4	MT20	2.0	4.0	2.00	1.50
E	F	2x4	MT20	2.0	4.0	2.00	1.50
F	F	2x4	MT20	2.0	4.0	2.00	1.50
G	F	2x4	MT20	2.0	4.0	2.00	1.50
H	F	2x4	MT20	2.0	4.0	2.00	1.50
I	F	2x4	MT20	2.0	4.0	2.00	1.50
J	F	2x4	MT20	2.0	4.0	2.00	1.50
K	F	2x4	MT20	2.0	4.0	2.00	1.50
L	F	2x4	MT20	2.0	4.0	2.00	1.50
M	F	2x4	MT20	2.0	4.0	2.00	1.50
N	F	2x4	MT20	2.0	4.0	2.00	1.50
ALL WEBS EXCEPT	2x3	DRY					
DRY: SEASONED LUMBER.							

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
N	1035	693 / 0	0 / 0	0 / 0	0 / 0	343 / 0	0 / 0		
H	949	623 / 0	0 / 0	0 / 0	0 / 0	326 / 0	0 / 0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

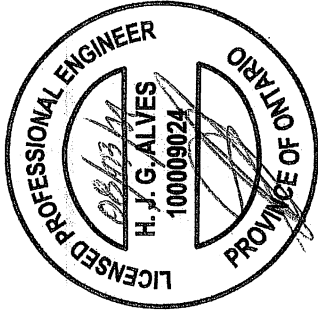
LOADING
TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX.		W.E.B.S.	
MEMB.	MAX. FACTORED	VERT. LOAD (LBS)	PLF	CS1 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB. FORCE (LBS)	MAX. FACTORED CS1 (LC)
FR-TO		FROM	TO				
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	M-C	-250 / 0
B-C	-1479 / 0	-91.8	-91.8	0.21 (1)	5.18	C-L	-182 / 0
C-D	-1370 / 0	-91.8	-91.8	0.21 (1)	5.24	D-L	0 / 218
D-E	-1289 / 0	-91.8	-91.8	0.35 (1)	5.27	D-K	0 / 266
E-F	-1289 / 0	-91.8	-91.8	0.35 (1)	5.27	K-E	-595 / 0
F-G	-1080 / 0	-91.8	-91.8	0.40 (1)	5.55	K-F	-317 / 0
G-H	-1432 / 0	0.0	0.0	0.15 (1)	6.82	B-M	0 / 1291
H-G	-1299 / 0	0.0	0.0	0.22 (1)	7.08	F-G	0 / 1005
N-M	0 / 0	-18.5	-18.5	0.07 (4)	10.00		
M-L	0 / 1250	-18.5	-18.5	0.25 (1)	10.00		
L-K	0 / 1121	-18.5	-18.5	0.23 (1)	10.00		
K-J	0 / 901	-18.5	-18.5	0.23 (1)	10.00		
J-I	0 / 901	-18.5	-18.5	0.23 (1)	10.00		
I-H	0 / 0	-18.5	-18.5	0.14 (4)	10.00		

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

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. OC
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12	
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015	
THIS DESIGN COMPLIES WITH:	
- PART 9 OF NBC 2015, ABC 2019	
- PART 9 OF NBC 2012 (2019 AMENDMENT)	
- CSA 086-14	
- TPC 2014	
(5% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD	
ALLOWABLE DEFLECTION (LL) = L/360 (0.81")	
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.04")	
ALLOWABLE DEFLECTION (TL) = L/360 (0.81")	
CALCULATED VERT. DEFLECTION (TL) = L/999 (0.08")	
CSI: TC=0.40/1.00 (F-G-1), BC=0.25/1.00 (L-M-1), WB=0.46/1.00 (E-K-1), SS=0.29/1.00 (E-F-1)	
DOL LUMBER=1.00 NAIL=1.00 LBS 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 (OR) SHEAR SECTION	(PLI)
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 (B) (INPUT = 0.90)	
JSI METAL = 0.57 (G) (INPUT = 1.00)	

TOTAL WEIGHT = 108 lb (M/F)

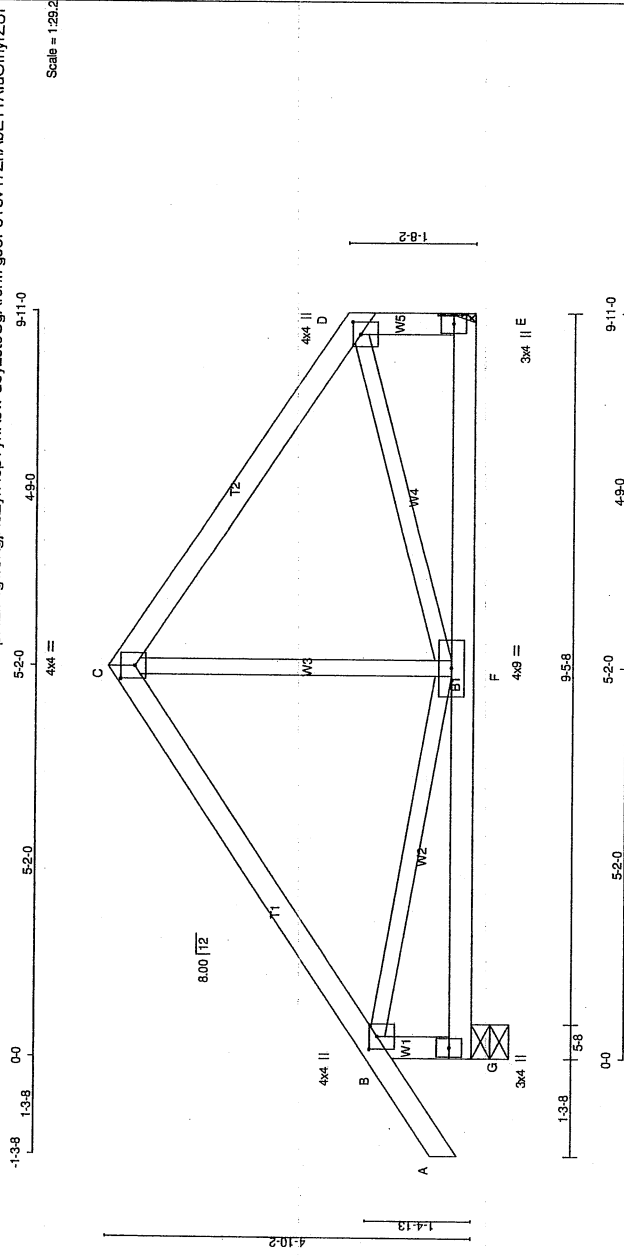


Structural component only
DWG# T-2126172

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419799	T11	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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LUMBER		N. L. G. A. RULES		DESOR.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA		TOTAL WEIGHT = 2 X 41 = 81 LB		[M/F]					
CHORDS		LUMBER		SIZE		DRY		SPF		FACTORED		MAXIMUM FACTORED		INPUT		REORD		SPECIFIED LOADS:		TOTAL LOAD = 39.0 PSF		SPACING = 24.0 IN./C/C			
A - C	No.2	2x4	DRY	SPF	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	BRG	BRG	TOP CH.	LL	25.6 PSF	DL	6.0 PSF	TOP CH.	LL	25.6 PSF	DL	6.0 PSF			
C - D	No.2	2x4	DRY	SPF	VERT	HORZ	0	0	0	5-8	IN-SX	IN-SX	BOT CH.	LL	0.0 PSF	DL	7.4 PSF	BOT CH.	LL	0.0 PSF	DL	7.4 PSF			
G - B	No.2	2x4	DRY	SPF	E	673	0	0	0	MECHANICAL			TOTAL LOAD		39.0 PSF			TOTAL LOAD		39.0 PSF					
E - D	No.2	2x4	DRY	SPF	G	547	0	0	0																
G - E	No.2	2x4	DRY	SPF	E	547	0	0	0																
ALL WEBS EXCEPT		No.2	2x3	DRY	SPF	A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.																			
DRY - SEASONED LUMBER																									

DRY: SEASONED LUMBER.

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

BEARINGS		FACTORED	MAXIMUM	FACTORED	INPUT	RECORD
		GROSS REACTION	GROSS REACTION	DOWN	UP/LIFT	BRG
		VERT	HORIZ	HORIZ	UP/LIFT	IN-SX
JT	G	673	0	0	5-8	5-8
E	A	547	0	0	MECHANICAL	

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

UNFACTORED REACTIONS					COMPONENT REACTIONS		
1ST/LCASE		MAX./MIN.	LIVE	PERM/LIVE	WIND	DEAD	SOIL
COMBINED		SNOW					
JT	G	473	324 / 0	0 / 0	0 / 0	149 / 0	0 / 0
E	A	387	254 / 0	0 / 0	0 / 0	133 / 0	0 / 0

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

	BRACING	TOP CHO	MAX LINE
D	1m w w+p	4.0	4.0
E	BMV1+p	3.0	4.0
F	BMVW-w-t	4.0	9.0
G	BMV1+p	3.0	4.0

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB. LENGTH (F)	FR-TO	MAX. FORCE (LBS)	FACTORED CSI (LC)
FR-TO	0/35	FROM TO					
A-B	-373/0	-91.8	-91.8	10.00	F-C	-41/71	0.02 (4)
B-C	-373/0	-91.8	-91.8	10.00	F-D	0/317	0.07 (1)
C-D	-373/0	-91.8	-91.8	10.00	F-E	0/323	0.07 (1)
G-B	-685/0	0.0	0.0	7.81			
E-D	-514/0	0.0	0.0	7.81			
G-F	0/0	-18.5	-18.5	10.00			
F-E	0/0	-18.5	-18.5	10.00			

CHORDS

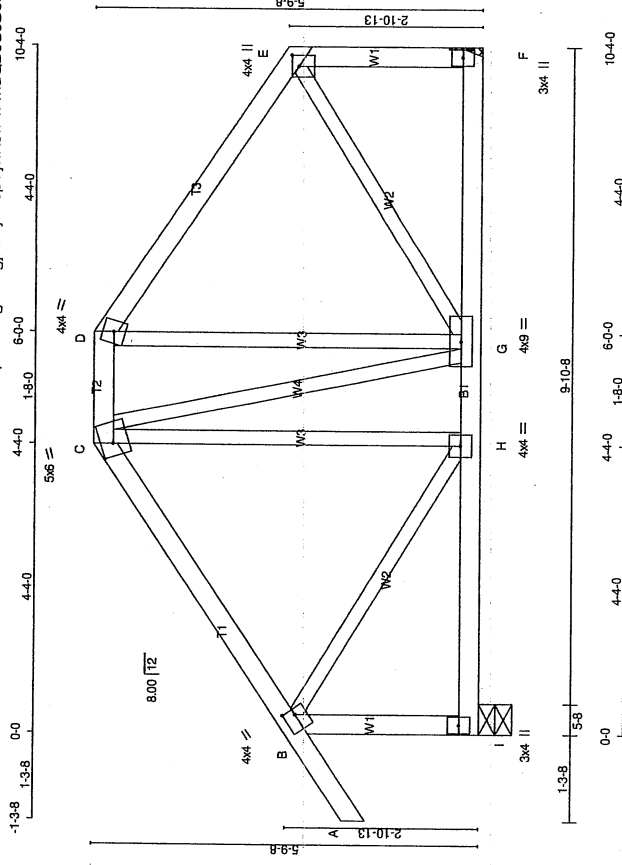
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419800	T22	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MilTek Industries, Inc. Tue Aug 3 13:03:57 2021 Page 1
ID:pl42lFvgw5RgijHJzyh4JpTyhK9w-w4huQB0SeB6ceoJ4mHexAMlFzE0UxQzZMcS_XJyRZS0

Scale = 1:320



TOTAL WEIGHT = 54

W/FT

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

RF = 0.0 PSF

BOT CH. LL = 7.4 PSF

DL = 7.4 PSF

RF = 39.0 PSF

TOTAL LOAD = 24.0 IN/C

SPACING = 24.0 IN/C

LOADING IN FLAT SECTION BASED ON A SLOPE

OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR

SMALL BUILDING REQUIREMENTS OF PART 9,

NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBC 2015, 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 DEFLECTION = L/360 (0.34")

CALCULATED VERT. DEF. (LL) = 0.999 (0.007")

ALLOWABLE DEF. (TL) = L/360 (0.34")

CALCULATED VERT. DEF. (TL) = 1.999 (0.027")

CSI: TC=0.22/1.00 (B-C-1), BC=0.10/1.00 (B-H-4),

WB=0.07/1.00 (B-H-1), SH=0.13/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT

RESPONSIBLE FOR QUALITY CONTROL IN THE

TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PL) (PL)

MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

ISI GRIP= 0.48 (B) (INPUT = 0.90)

ISI METAL= 0.17 (B) (INPUT = 1.00)

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

BUILDING DESIGNER

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REORD

GROSS REACTION

BRG

IN-SX

IN-SX

MECHANICAL

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

WIND

DEAD

SOIL

0/0

0/0

0/0

0/0

0/0

0/0

0/0

0/0

0/0

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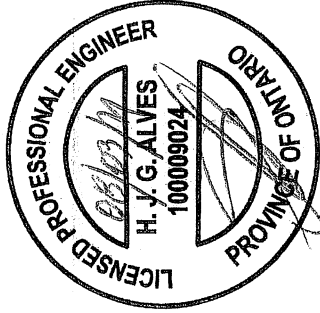
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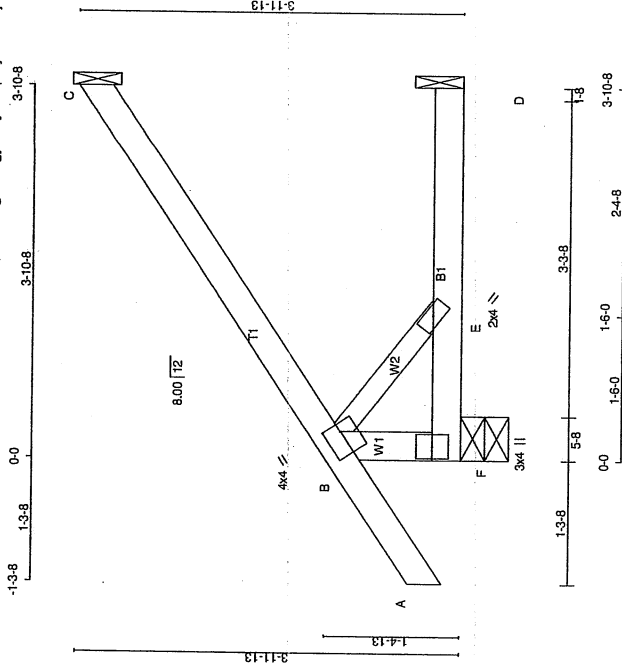
Structural component only
DWG# T-2126184

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419799	J2	6	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:01:13 2021 Page 1
ID:pl42iFvgw5RgjhJZyn4Jp1ynkGw-JXnu76taGoSzbnY9qUWmyD972LWGRQe5JmQyZLla

Scale = 1/22.8



TOTAL WEIGHT = 6 X 14 = 85 lb

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

BEARINGS	FACTORED	MAXIMUM	FACTORED	INPUT	RECORD
JT	VERT	GROSS	REACTION	BRG	IN-SX
F	340	0	340	0	5-8
C	178	0	178	0	1-8
D	36	0	40	0	1-8

SEE MITEK STANDARD DETAIL B87791 H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	COMBINED	SNOW	MAX./MIN.	COMPONENT	REACTIONS
F	238	169/0	0/0	0/0	0/0
C	122	99/0	0/0	0/0	0/0
D	29	0/0	0/0	0/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MEMB.	MAX. FORCE	FACTORED
MEMB.	(LBS)	(LBS)	FROM	TO	CS1 (LC)	UNBRAC	FR-TO	CS1 (LC)
F-B	-304/0	0/0	0.0	0.03 (1)	7.81	B-E	0/0	0.00 (1)
A-B	0/35	-91.8	-91.8	0.14 (5)	10.00			
B-C	0/0	-91.8	-91.8	0.29 (1)	10.00			
F-E	0/0	-18.5	-18.5	0.08 (4)	10.00			
E-D	0/0	-18.5	-18.5	0.08 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. OC

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
- TPC 2014

(5% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEF. (LL) = L/360 (0.19")

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

ALLOWABLE DEF. (TL) = L/360 (0.19")

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

CSI: TC=0.23/1.00 (B-C:1), BC=0.08/1.00 (D-E:4),

WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

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

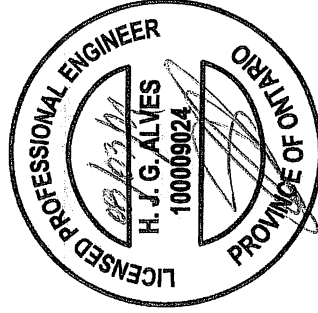
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.19 (B) (INPUT = 0.90)

JSI METAL = 0.06 (B) (INPUT = 1.00)



Structural component only
DWG# T-2126161

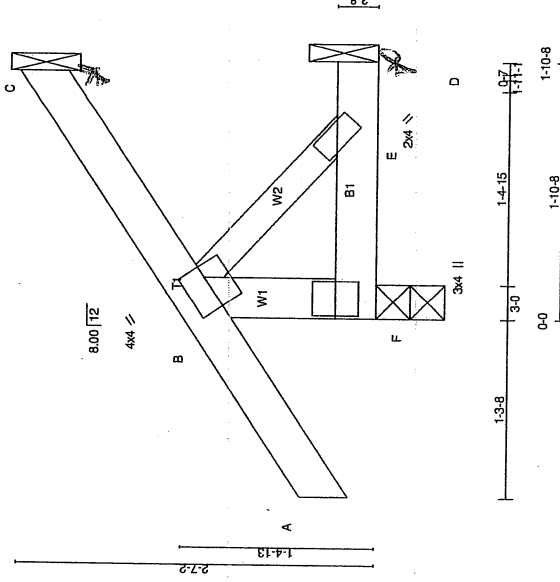
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419799	C2	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:01:11 2021 Page 1
ID:pl42lFvgw5RgJHJZyH4lpTyhKgw-n87aQYkBC9kIdA2Pg?RLtVOKN2Mx7BnEChwyZUc

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

Scale: 3/4"=1'



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

TOTAL WEIGHT = 9 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. OC

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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.I. 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 (0.007")
ALLOWABLE DEFL (TL) = L/360 (0.19")
CALCULATED VERT. DEFL (TL) = L/999 (0.007")

CSI: TC=0.1201 (0.4-B-1), BC=0.0201 (0.0-E-F-4), WB=0.001 (0.0-B-E-1), SS=0.0671 (0.0-B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)

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

BEARINGS

FACTORED	MAXIMUM	FACTORED	INPUT	RECORD
GROSS REACTION	DOWN	HORIZ	UPLIFT	IN-SX
JT	274	0	0	3-0
F	34	0	-39	1-8
C	34	0	-39	1-8
D	17	0	19	1-8

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

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	190	143/0	0/0	0/0	0/0	47/0	0/0
F	23	19/-27	0/0	0/0	0/0	4/0	0/0
C	23	19/-27	0/0	0/0	0/0	4/0	0/0
D	14	0/0	0/0	0/0	0/0	14/0	0/0

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

BRACING

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

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

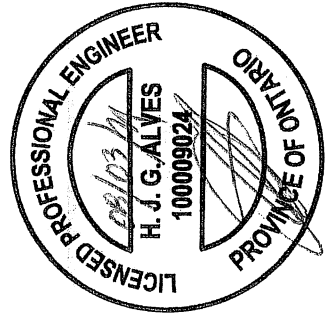
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (6)

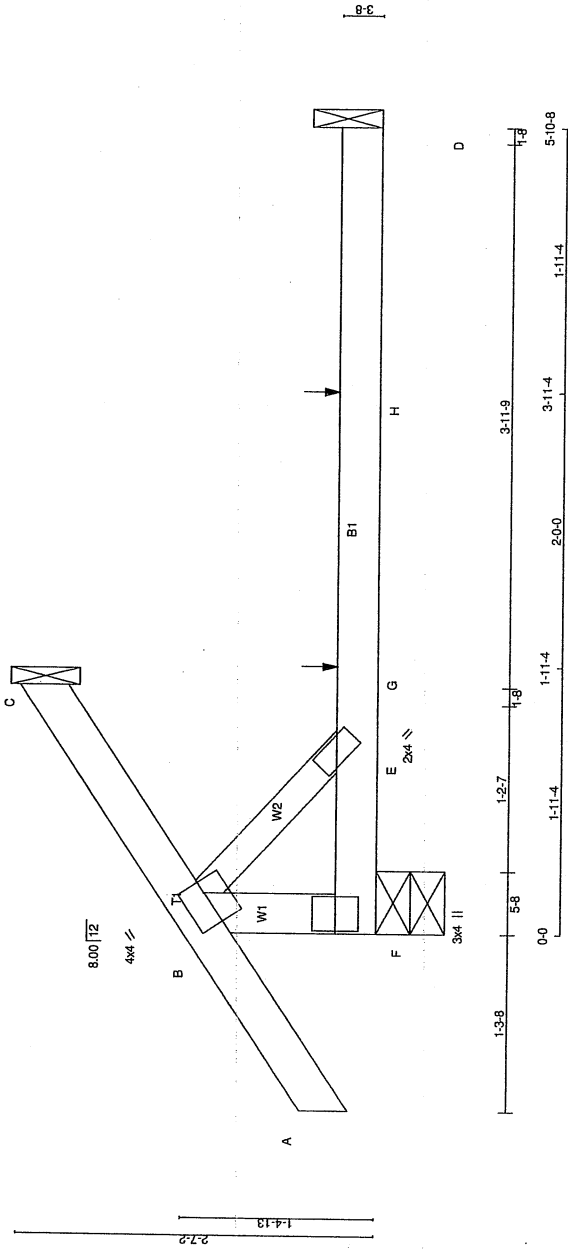
CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	UNBRAC	LENGTH	FR-TO	MEMB.	MAX. FACTORED
MEMB.	FORCE	(LBS)	(PLF)			CS1 (LC)				FORCE
FR-TO	-256/0	0.0	0.0	0.03 (1)	7.81	B-E	0/0	0.00 (1)		
F-B	0/35	-91.8	-91.8	0.12 (1)	10.00	B-E	0/0	0.00 (1)		
A-B	-27/0	-91.8	-91.8	0.12 (1)	6.25	B-E	0/0	0.00 (1)		
B-C	0/0	-18.5	-18.5	0.02 (4)	10.00	B-E	0/0	0.00 (1)		
F-E	0/0	-18.5	-18.5	0.02 (4)	10.00	B-E	0/0	0.00 (1)		
E-D	0/0	-18.5	-18.5	0.02 (4)	10.00	B-E	0/0	0.00 (1)		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN



Structural component only
DWG# T-2126159

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419800	C21	2	1	TRUSS DESC.		
Tamarack Roof Truss, Burlington						
Version 8.420 3 Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:03:51 2021 Page 1						
ID:pl42f-vgw5Rgt4JZyn4Jp1YhK9w-5wKc98xh3LMSwswQ0YXw5VF_qvYKZgzg?gJgyZS6						
Scale: 3/4"=1'						



LUMBER	DESCR.	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
N.L.G.A. RULES						
CHORDS						
F - B	2x4	311	0	311	0	TOP CH. LL = 25.6 PSF
A - C	2x4	311	0	311	0	DL = 6.0 PSF
F - D	2x4	311	0	311	0	BOT CH. LL = 7.4 PSF
ALL WEBS	2x3	311	0	311	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.						TOTAL LOAD = 39.0 PSF

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
F - B	MT20	4.0	4.0	2.00
A - C	MT20	2.0	4.0	1.00
F - D	MT20	3.0	4.0	1.00

UNFACTORED REACTIONS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

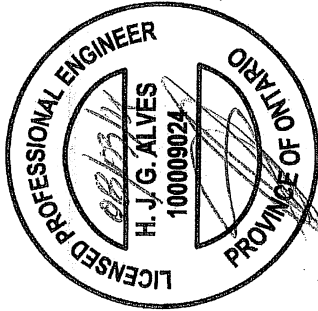
CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

CHORDS	FACTORED	MAXIMUM	INPUT	RECD	DESIGN CRITERIA
JT COMBINED					
F - B	220	143	0	0	TOP CH. LL = 25.6 PSF
A - C	23	19	0	0	DL = 6.0 PSF
F - D	43	0	0	0	BOT CH. LL = 7.4 PSF
ALL WEBS	54	0	0	0	DL = 0.0 PSF
DRY: SEASONED LUMBER.					TOTAL LOAD = 39.0 PSF

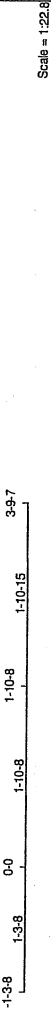


Structural component only
DWG# T-2126178

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
419800	C22	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Tue Aug 3 13:03:52 2021 Page 1
ID:pl42fVgw5RgHJZyn4UpTynK9w-Zbu?NTyKqfUJY1R6z3mT2OCODKWGBogCKdS6yZSS



Scale = 1/22.8

LUMBER	N.L.G.A. RULES	DESCR.	CHORDS	LUMBER	W	LEN	Y	X
F - B	2x4	DRY	SPF	No.2	4.0	4.0	2.00	1.00
A - C	2x4	DRY	SPF	No.2	2.0	4.0		
F - D	2x4	DRY	SPF	No.2	3.0	4.0		
ALL WEBS	2x3	DRY	SPF	No.2				
DRY; SEASONED LUMBER								

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-1	MT20	4.0	4.0	2.00	1.00	
E	BMW-1w	MT20	2.0	4.0			
F	BMV1+p	MT20	3.0	4.0			

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
JT	VERT	GROSS REACTION	BRG	BRG
F	DOWN	DOWN	UP/LIFT	IN/EX
C	174	0	317	0
D	17	0	174	0
			19	0
			13	1-3

SEE MITEK STANDARD DETAIL 897791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN.	COMPONENT REACTIONS	WIND	DEAD	SOIL
F	220	167/0	0/0	0/0	53/0	0/0
C	120	97/0	0/0	0/0	23/0	0/0
D	14	0/0	0/0	0/0	14/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS	MEMB.	MAX. FACTORED	VERT. LOAD	LC1	MAX	MEMB.	MAX. FACTORED
		FORCE				FORCE	MAX
		(LBS)				(LBS)	CSI (LC)
FR-TO	-300/0	FROM	TO	CS (LC)	UNBRAC	LENGTH	FR-TO
F-B	0/0	0.0	0.0	0.03 (1)	7.81	B-E	0.00 (1)
A-B	0/35	-91.8	-91.8	0.13 (5)	10.00		
B-C	0/0	-91.8	-91.8	0.22 (1)	10.00		
F-E	0/0	-18.5	-18.5	0.02 (4)	10.00		
E-D	0/0	-18.5	-18.5	0.01 (4)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
BOT CH.	DL	=	6.0	PSF
	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 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 2014

(5% 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 (0.007")

ALLOWABLE DEFL.(TL) = L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/999 (0.007")

CSI: TC=0.22/1.00 (B-C:1), BC=0.02/1.00 (E-F:4), WB=0.00/1.00 (B-E:1), SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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) (PL) (PL)

MAX MIN MAX MIN

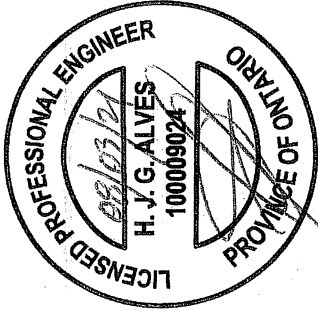
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

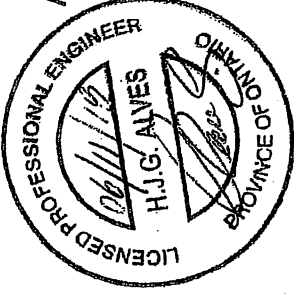
PLATE ROTATION TOL. = 5.0 Deg.

.JSI GRIP= 0.19 (B) (INPUT = 0.90)

.JSI METAL= 0.06 (B) (INPUT = 1.00)



Structural component only
DWG# T-2126179



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 M117473C REV.10-08 attached for information on symbols, numbering and General Safety notes.

T-19000213 Feb 09, 2018

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

	SPF		D. FIR		SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	Common wire	Common spiral	Common wire	Common spiral	Gun Nail
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

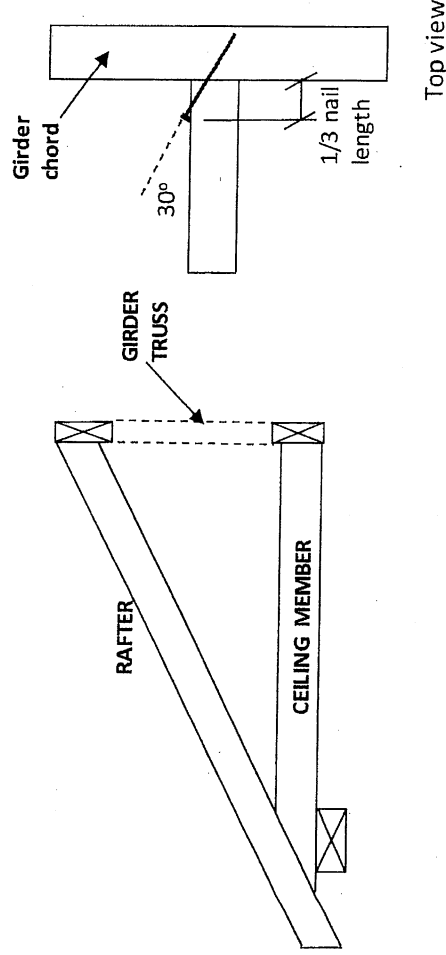
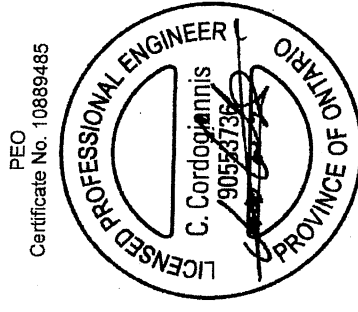


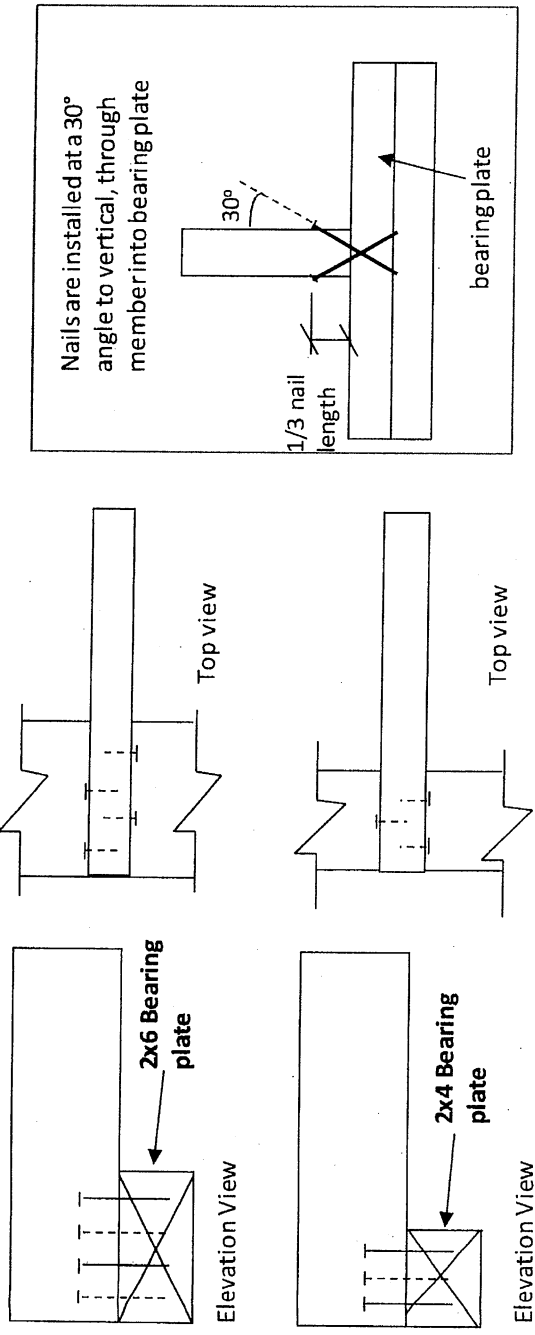
Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss



December 21, 2020

TOE-NAIL CAPACITY DETAILS

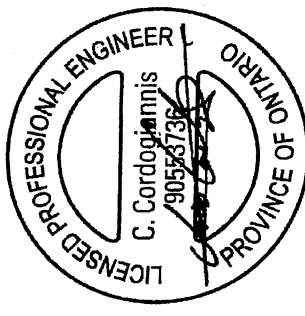
Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails**. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
4. Nail values are based on specific gravity of $G = 0.42$ (SPF) and $G = 0.49$ (D. Fir).
5. 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.
6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_0 factor). No increases are permitted for tabulated withdrawal resistances.
7. Lumber must be dry ($< 19\%$ moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485



LUL/LUS/LJS/HUS/HHUS/HGUS

SIMPSON
Strong-Tie®

Standard and Double-Shear Joist Hangers



*This product is preferable to similar connectors because of
a) easier installation, b) higher capacities, c) lower installed
cost, or a combination of these features.*

Most hangers in this series have double-shear nailing — an innovation that distributes the load through two points on each joist nail for greater strength. This allows for fewer nails, faster installation, and the use of all common nails for the same connection. (Do not bend or remove tabs)

Double-shear hangers range from the light capacity LUS hangers to the highest capacity HGUS hangers. For medium load truss applications, the HUS offers a lower cost alternative and easier installation than the HGUS hangers, while providing greater load capacity and bearing than the LUS.

Material: See table on pp. 217–218.

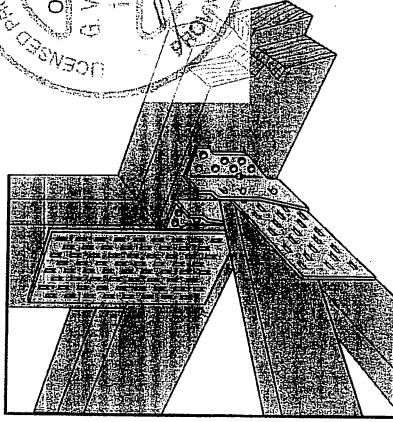
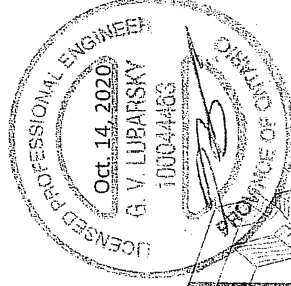
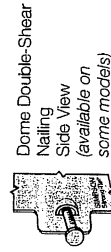
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

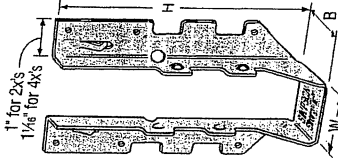
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1 1/2" nails into the header and 10d commons into the joist, and reduce the resistance to 0.64 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

Options:

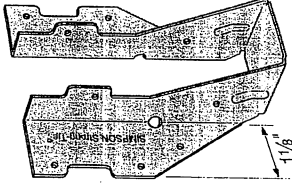
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



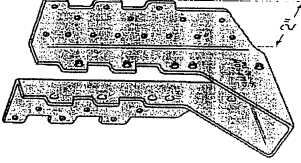
**Typical HUS26
Installation
with Reduced
Heel Height**
(Truss Designer
to provide
fastener quantity
for connecting
multiple members
together)



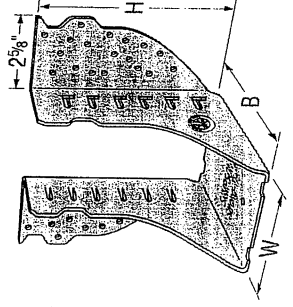
LUS28



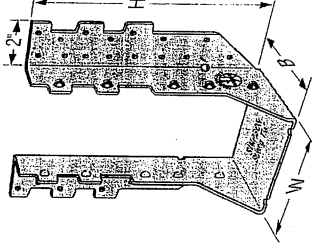
LU26L



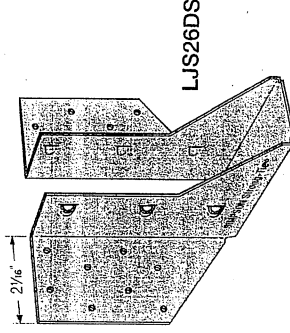
HUS210
(HUS26, HUS28,
and HHUS similar)



HGUS28-2



HHUS210-2



LJS26DS

TECHNICAL BULLETIN

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

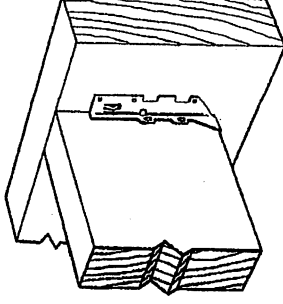
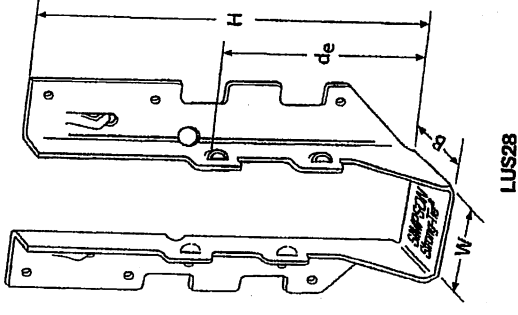
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

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

Options:

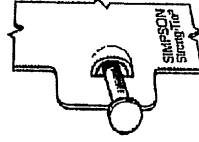
- These hangers cannot be modified



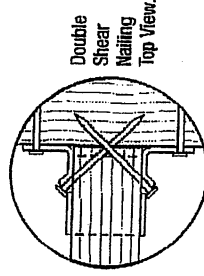
Typical LUS
Installation

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)		
		W	H	B	d _o ¹	Face	Joist	DFI-L		S-P-F
								Uplift	Normal	
LUS24	18	1⅞	3⅞	1¾	1 ⅞/16	(4) 10d	(2) 10d	(K _u =1.15)	(K _n =1.00)	Normal
LUS24-2	18	3⅞	3⅞	2	1 ⅞/16	(4) 16d	(2) 16d	(K _u =1.15)	(K _n =1.15)	(K _g =1.00)
LUS26	18	1⅞	4⅞	1¾	3⅞	(4) 10d	(4) 10d	1420	2170	1290
LUS26-2	18	3⅞	4⅞	2	4	(4) 16d	(4) 16d	1720	2595	1545
LUS26-3	18	4⅞	4⅞	2	3¼	(4) 16d	(4) 16d	1720	2595	1545
LUS28	18	1⅞	6⅞	1¾	3⅞	(6) 10d	(6) 10d	1420	2520	1290
LUS28-2	18	3⅞	7	2	4	(6) 16d	(4) 16d	1720	3325	1545
LUS28-3	18	4⅞	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545
LUS210	18	1⅞	7 ⅞/16	1¾	3⅞	(8) 10d	(4) 10d	1420	2785	1290
LUS210-2	18	3⅞	9	2	6	(8) 16d	(6) 16d	2580	4500	2320
LUS210-3	18	4⅞	8 ⅞/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320
										2375

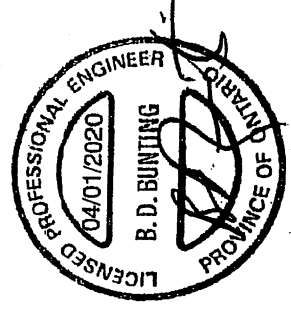
1. d_o is the distance from the seat of the hanger to the highest joist nail.



Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



**LIMIT
STATES
DESIGN**

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

© 2020 Simpson Strong-Tie Company Inc.

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

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: See table

Finish: G90 galvanized

Design:

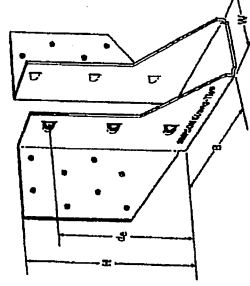
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

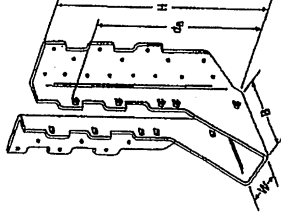
- Use all specified fasteners
- Nails: $16d = 0.162"$ dia. x $3\frac{1}{2}"$ long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

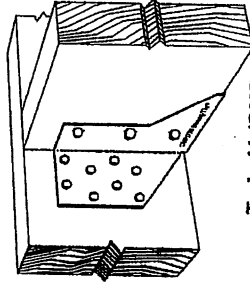
- See current catalogue for options



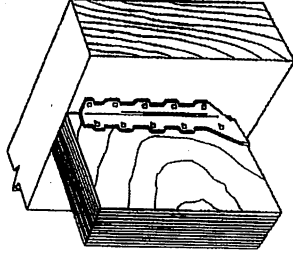
LJS26DS



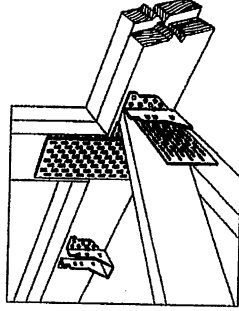
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



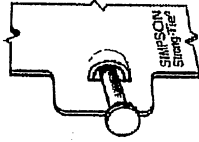
Typical HUS
Installation



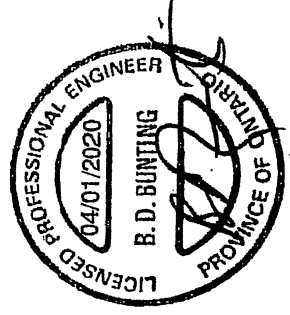
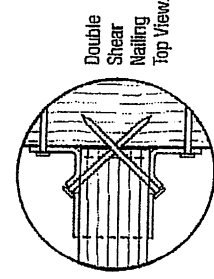
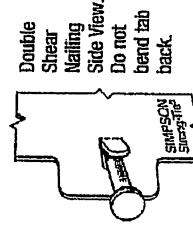
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d_1	Face	Joist	DLF ₁ -L		S-P-F	
								Uplift ($K_1=1.15$) lb.	Normal ($K_2=1.00$) lb.	Uplift ($K_1=1.15$) lb.	Normal ($K_2=1.00$) lb.
LJS26DS	18	1 $\frac{1}{4}$	5	3 $\frac{1}{2}$	4 $\frac{1}{2}$	(16) 16d	(6) 16d	2055	4285	1460	4115
HUS26	16	1 $\frac{1}{4}$	5 $\frac{1}{2}$	3	3 $\frac{1}{4}$	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 $\frac{1}{4}$	7 $\frac{1}{2}$	3	5 $\frac{1}{2}$	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 $\frac{1}{4}$	9 $\frac{1}{2}$	3	7 $\frac{1}{2}$	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.87/10	16	1 $\frac{1}{4}$	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d_1 is the distance from the seat of the hanger to the highest joist nail.



Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent
5,603,580



LIMIT
STATES
DESIGN

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

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

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TECHNICAL BULLETIN

HGUS – Double Shear Joist Hangers



All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 12 gauge

Finish: G90 galvanized

Design:

- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.

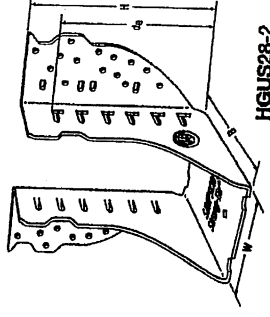
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

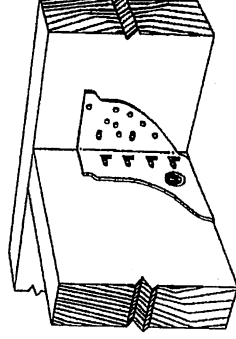
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

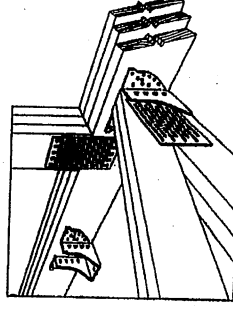
- See current catalogue for options



HGUS28-2



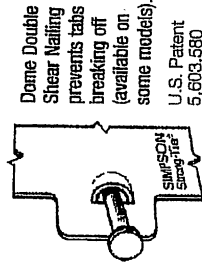
Typical HGUS Installation



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

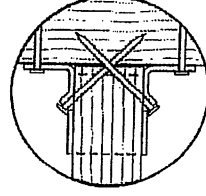
Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	q ₁	Face	Joist	D.Fir-L		S-P-F	
									Uplift	Normal	Uplift	Normal
									(K _u =1.15)	(K _u =1.00)	(K _u =1.15)	(K _u =1.00)
HGUS26	12	1 1/8	5 3/8	5	4 5/8	2	(20) 16d	(8) 16d	2885	6625	2685	5700
HGUS26-2	12	3 3/8	5 7/8	4	4 1/4	2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/2	4	4 1/4	2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 3/8	5 7/8	4	4 1/4	2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/8	7 1/8	5	6 1/8	3	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 3/8	7 3/8	4	6 1/8	3	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 1/8	7 1/4	4	6 1/8	3	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 3/8	7 3/8	4	6 1/8	3	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1 1/8	9 1/8	5	7 7/8	4	(46) 16d	(16) 16d	3635	11070	2510	8090
HGUS210-2	12	3 3/8	9 3/8	4	8 1/8	4	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 1/8	9 1/4	4	8 1/8	4	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 3/8	9 3/8	4	8 1/8	4	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 3/8	10 3/8	4	10 1/8	5	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 3/8	12 3/8	4	11 1/8	6	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d₁ is the distance from the seat of the hanger to the highest joist nail.

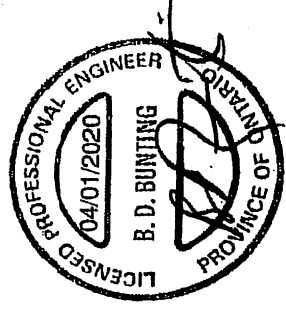


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



LIMIT STATES DESIGN

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T-SPEC-HGUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

HHUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie®

All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

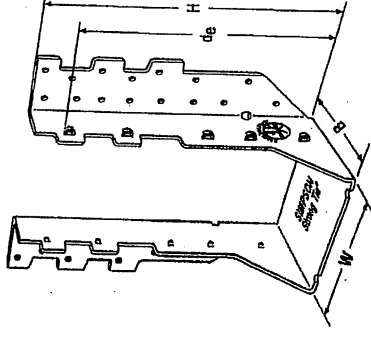
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

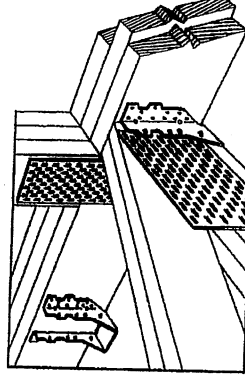
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



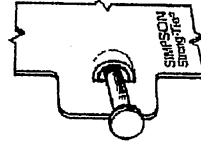
HHUS410



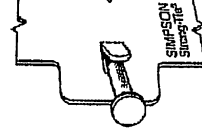
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)		
		W	H	B	d _e	Face	Joist	D.F.F.I.-L	Uplift	S-P-F
									Normal	Normal
HHUS26-2	14	3%	5 9/16	3	3 15/16	(14) 16d	(6) 16d	(K _p =1.15) (K _p =1.00) (K _p =1.15)	2065	5205
HHUS28-2	14	3%	7 7/16	3	6 5/16	(22) 16d	(8) 16d		2675	6345
HHUS210-2	14	3%	9 3/16	3	8	(30) 16d	(10) 16d		4235	7000
HHUS210-3	14	4 1/16	9	3	7 15/16	(30) 16d	(10) 16d		4235	6865
HHUS210-4	14	6%	8 29/32	3	7 27/32	(30) 16d	(10) 16d		4235	7210
HHUS46	14	3%	5 1/2	3	3 15/16	(14) 16d	(6) 16d		2065	5205
HHUS48	14	3%	7 1/8	3	6 1/8	(22) 16d	(8) 16d		2675	6345
HHUS50/10	14	5%	9	3	8	(30) 16d	(10) 16d		4235	7000
HHUS7.25/10	14	7 1/4	9	3%	7 29/32	(30) 16d	(10) 16d		4235	7210
									3370	7210

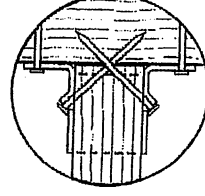
1. d_e is the distance from the seat of the hanger to the highest joist nail.



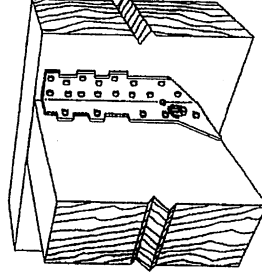
Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,560



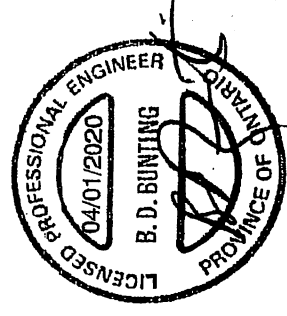
Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



Typical HHUS Installation



LIMIT
STATES
DESIGN

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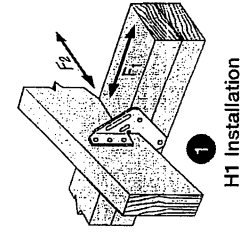
T-SPECHUS20 3/20 exp. 6/22

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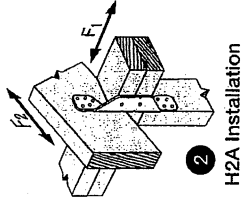
H/TSP

Seismic and Hurricane Ties (cont.)

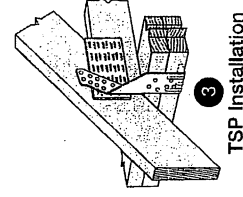
SIMPSON
Strong-Tie



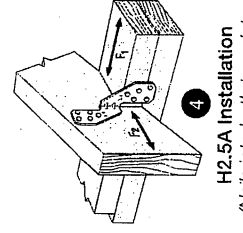
H1 Installation



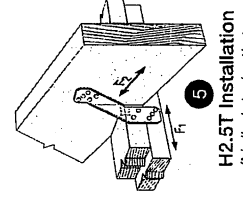
H2A Installation



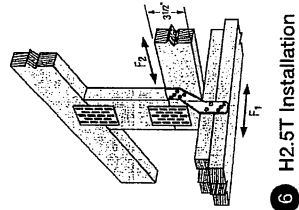
TSP Installation



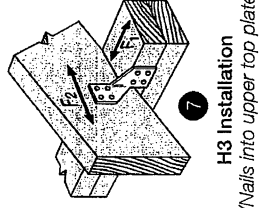
H2.5A Installation
(Nails into both top plates)



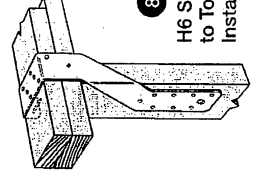
H2.5T Installation
(Nails into both top plates)



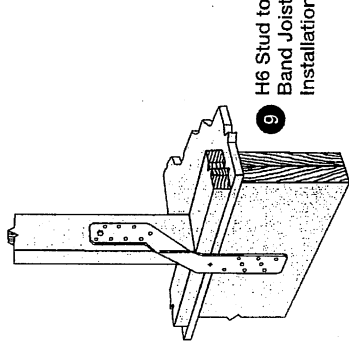
H2.5T Installation



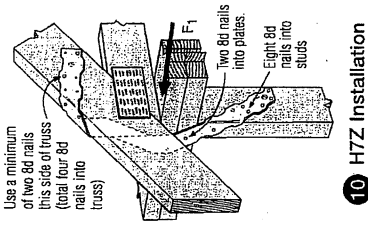
H3 Installation
(Nails into upper top plate)



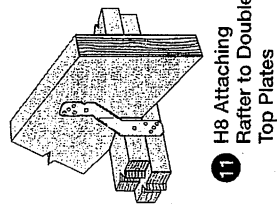
H6 Stud to Top Plate Installation



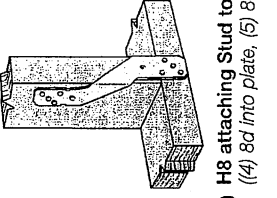
H6 Stud to Band Joist Installation



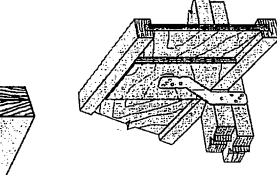
H7Z Installation



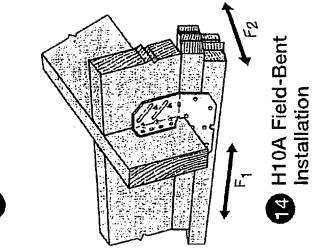
H8 Attaching Rafter to Double Top Plates



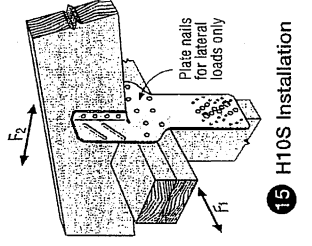
H8 attaching Stud to Sill
(4) 8d into plate, (5) 8d into stud)



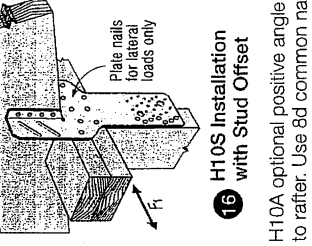
H8 attaching I-Joist to Double Top Plates



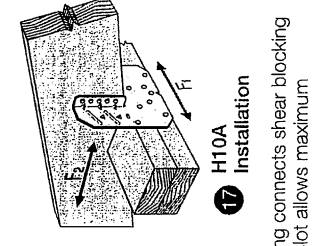
H10A Field-Bent Installation



H10S Installation

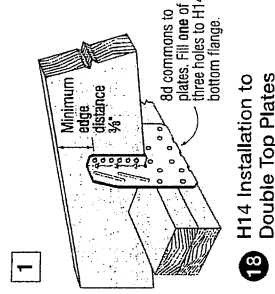


H10S Installation with Stud Offset

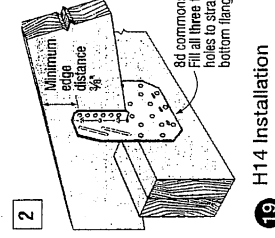


H10A Installation

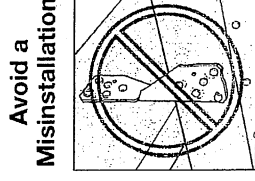
H10A optional positive angle nailing connects shear blocking to rafter. Use 8d common nails. Slot allows maximum field-bending up to a pitch of 6/12, use 75% of the table uplift value; bend one time only.



H14 Installation to Double Top Plates



H14 Installation to Double 2x Header



Avoid a Misinstallation

Do not make new holes or overdrive nails.

TECHNICAL BULLETIN

H – Seismic and Hurricane Ties

SIMPSON
Strong-Tie

The H connector series provides wind and seismic ties for trusses and rafters.

Material: 18 gauge **Finish:** G90 galvanized

Design: • Factored resistances are in accordance with CSA O86-14
• Factored resistances have been increased 15%. No further increase is permitted.

Installation: • Use all specified fasteners

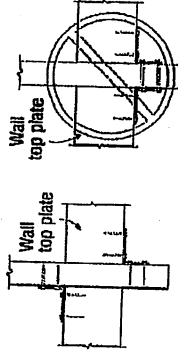
• Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½" long, 10d x 1½" = 0.146" x 1½" long

• H1 can be installed with flanges facing outwards

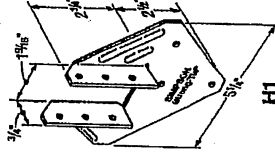
• Hurricane ties do not replace solid blocking

Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

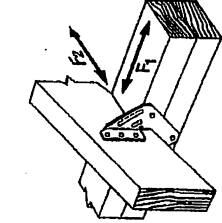
Hurricane Tie Installations to Achieve Twice the Load (Top View)



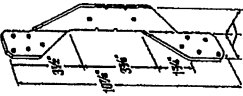
Install diagonally across from each other for minimum 2x truss. Nailing into both sides of a single ply 2x truss may cause the wood to split.



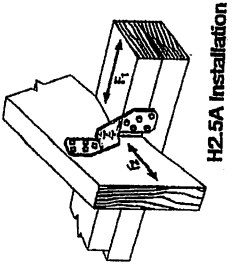
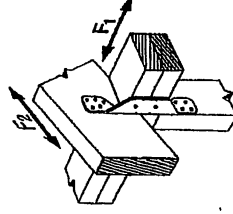
H1 Installation



H2A

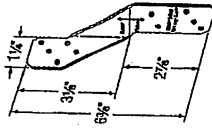


H2A Installation

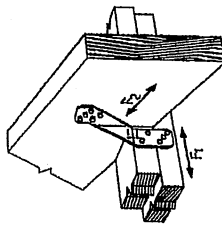


H2.5A

H2.5A Installation

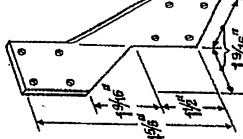


H2.5T

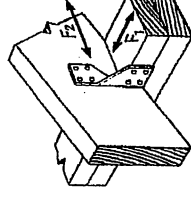


H2.5T Installation

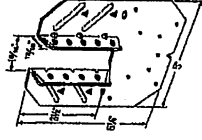
(Nails into both top plates)



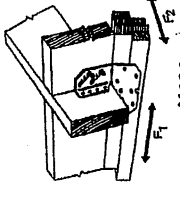
H3



H3 Installation



H10A



H10A Installation

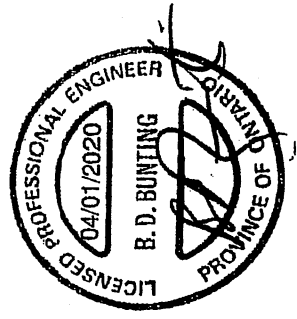
Model No.	Ga.	Fasteners				Factored Resistance (lb.)			
		To Rafter	To Plates	To Studs	D.Fir-L	Normal		Uplift	S-P-F
						F ₁	F ₂		
H1	18	(6) 8d x 1½"	(4) 8d	—	(K _{CP} =1.15)	740	685	300	680
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	(K _{CP} =1.15)	830	220	75	485
H2.5A	18	(5) 8d	(5) 8d	—	(K _{CP} =1.15)	805	160	160	550
H2.5T	18	(5) 8d	(5) 8d	—	(K _{CP} =1.15)	835	175	240	160
H3	18	(4) 8d	(4) 8d	—	(K _{CP} =1.15)	740	180	265	615
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	(K _{CP} =1.15)	1735	795	410	1505

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.



LIMIT
STATES
DESIGN

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T-SPECH20 3/20 exp. 6/22

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strongtie.com

TECHNICAL BULLETIN

TC – Truss Connectors

SIMPSON
Strong-Tie®

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches to plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

Material: 16 gauge

Finish: G90 galvanized

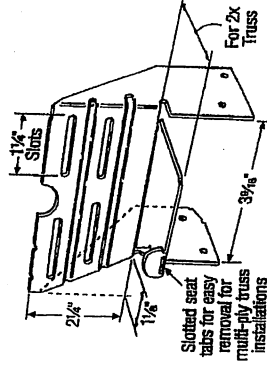
Design: Factored resistances are in accordance with CSA 086-14

Installation:

- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

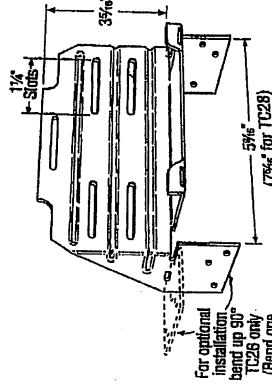
Optional TC Installation:

- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



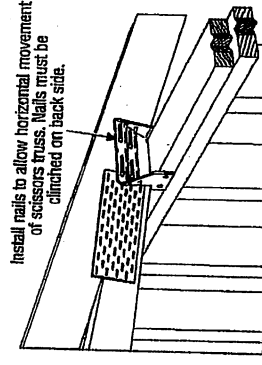
TC24

U.S. Patent 4,932,173

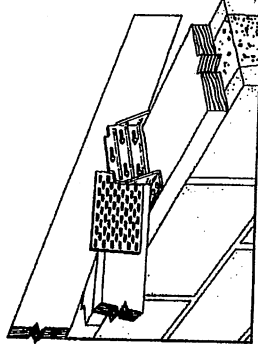


TC26

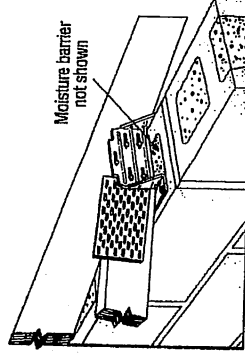
(TC28 Similar)



Typical TC24 Installation



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer
(8", 10", 12" Wall Installation Similar)



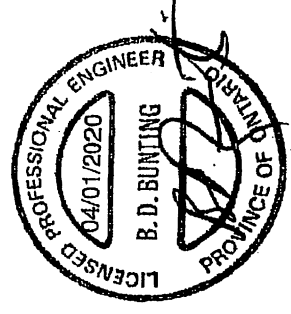
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lb.

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L Uplift ($K_p=1.15$) lb.	S-P-F Uplift ($K_p=1.15$) lb.
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L Uplift ($K_p=1.15$) lb.	S-P-F Uplift ($K_p=1.15$) lb.
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660



**LIMIT
STATES
DESIGN**

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

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(800) 999-5099
strongtie.com

T-SPECTC20 3/20 exp. 6/22

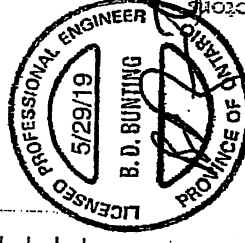
HTU**SIMPSON**
Strong-Tie**Face-Mount Truss Hanger (cont.)**

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32-34 for more information.

Alternate Installation for (2) 2x4 and (2) 2x6 Headers

Model No.	Min. Heel Height (in.)	Minimum Header Size	Fasteners		Factored Resistance			
			Header	Joist	D.Fit-L		S-P-F	
					Uplift ($K_D = 1.15$)	Normal ($K_D = 1.00$)	Uplift ($K_D = 1.15$)	Normal ($K_D = 1.00$)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
HTU26 (Min.)	3 7/8	(2) 2x4	(10) 16d	(14) 10d x 1 1/2"	1740	3340	1235	2370
					774	1486	549	1054
HTU26 (Max.)	5 1/2	(2) 2x4	(10) 16d	(20) 10d x 1 1/2"	2470	4015	1755	2850
					1099	1786	781	1288
HTU28 (Max.)	3 3/4	(2) 2x6	(20) 16d	(26) 10d x 1 1/2"	4150	6395	2945	4540
					1848	2846	1310	2019
HTU210 (Max.)	7 1/4	(2) 2x6	(20) 16d	(32) 10d x 1 1/2"	4150	6395	2945	4540
					1848	2846	1310	2019

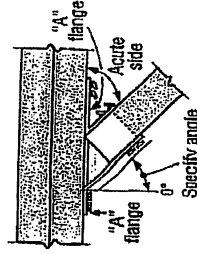
See table footnotes on p. 260.

**Hanger Options**

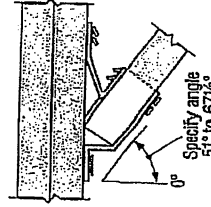
See Hanger Options Information on pp. 125-127.

Skewed Seat

- Skewable up to 67 1/2°
- Available in single and 2-ply size
- No bevel cut required



Top View HTU Hanger
Skewed Right < 51°



Top View HTU Hanger
Skewed Right ≥ 51°

Factored Resistances for Skewed HTU Hangers

Model No.	Skew Angle (Degrees)	Header	Joist	Fasteners		Factored Resistance			
						D.Fit-L		S-P-F	
						Uplift ($K_D = 1.15$)	Normal ($K_D = 1.00$)	Uplift ($K_D = 1.15$)	Normal ($K_D = 1.00$)
						lb.	lb.	lb.	lb.
						kN	kN	kN	kN
HTU26	< 51	(20) 16d	(14) 10d x 1 1/2"			1835	4110	1300	2905
						816	1828	578	1292
HTU28	51-67 1/2	(20) 16d	(12) 10d x 1 1/2"			1350	3620	955	2560
						601	1610	425	1138
HTU210	< 51	(26) 16d	(20) 10d x 1 1/2"			2810	4270	1985	3030
						1250	1899	883	1348
HTU26-2	51-67 1/2	(26) 16d	(17) 10d x 1 1/2"			2075	3930	1465	2780
						923	1748	652	1237
HTU28-2	< 51	(32) 16d	(26) 10d x 1 1/2"			3765	4430	2675	3135
						1684	1971	1190	1395
HTU210-2	51-67 1/2	(32) 16d	(22) 10d x 1 1/2"			2795	4240	1980	3000
						1243	1886	881	1335
HTU26-2	< 51	(20) 16d	(14) 10d			2140	3715	1515	2625
						952	1653	674	1168
HTU28-2	51-67 1/2	(20) 16d	(12) 10d			1610	3920	1140	2785
						716	1744	507	1239
HTU210-2	< 51	(26) 16d	(20) 10d			3960	5425	2815	3855
						1762	2413	1282	1715
HTU26-2	51-67 1/2	(26) 16d	(17) 10d			2385	5425	1695	3855
						1061	2413	754	1715
HTU28-2	< 51	(32) 16d	(26) 10d			5025	6890	3570	4890
						2235	3065	1588	2175
HTU210-2	51-67 1/2	(36) 16d	(22) 10d			3145	6880	2225	4745
						1399	2972	990	2110

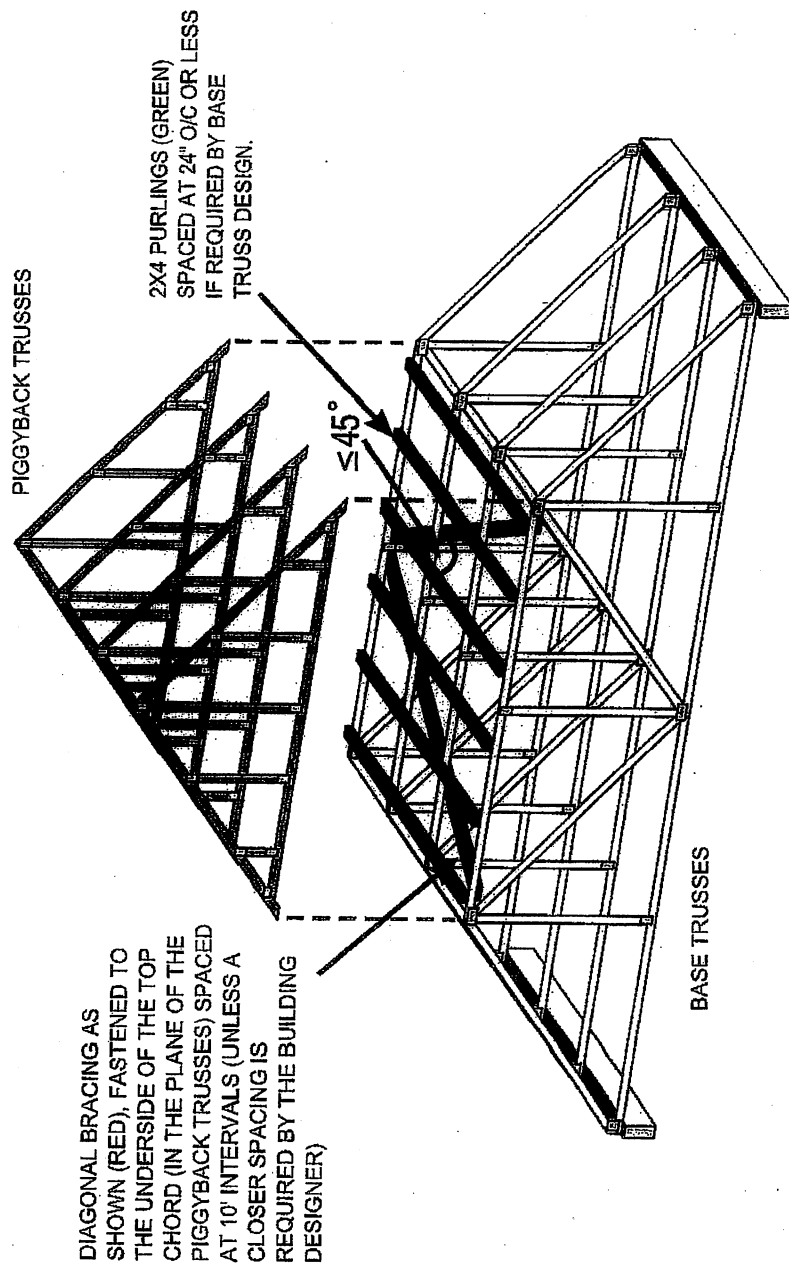
1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Reduced heel heights are not permitted for skewed HTU's.
3. Nails: 16d = 0.162" dia. x 3 3/8" long, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long, 10d = 0.148" dia. x 3" long. See pp. 27-28 for other nail sizes and information.

Overview:

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

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

Detail:



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

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

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

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTC/MSTI

Strap Ties

Straps are designed to transfer tension loads in a wide variety of applications.

HRS — Heavy strap designed for installation on the edge of 2x members. The HRS416Z installs with Strong-Drive® SDS Heavy-Duty Connector screws.

LSTA and MSTA — Designed for use on the edge of 2x members, with a nailing pattern that reduces the potential for splitting.

LSTI and MSTI — Light and medium straps that are suitable where pneumatic-nailing is necessary through diaphragm decking and wood chord open-web trusses.

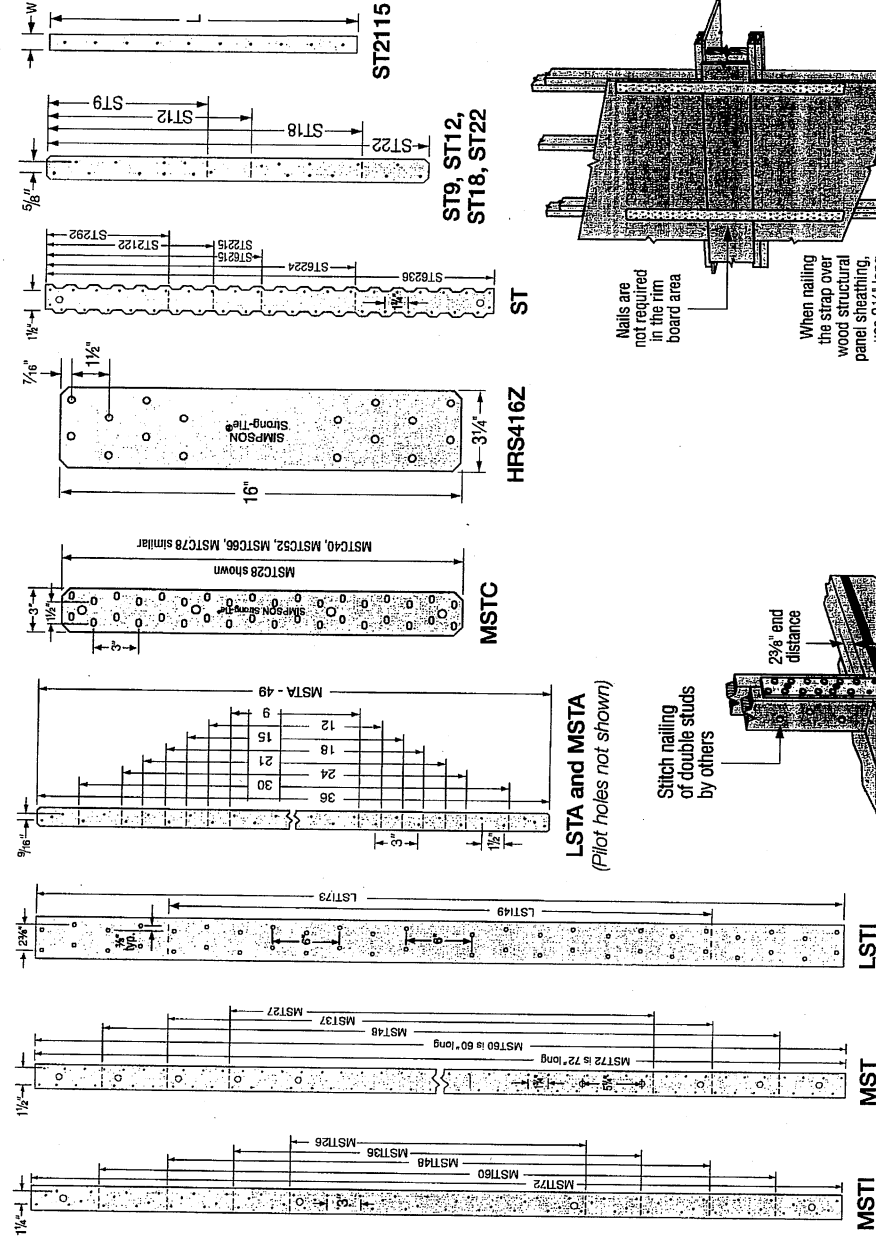
MST — High-capacity strap that can be installed with either nails or bolts. Suitable for double 2x member connections or greater.

MSTC — High-capacity strap that utilizes a staggered nail pattern to help minimize wood splitting. Nail slots have been countersunk to provide a lower nail head profile.

Finish: Galvanized. Some products are available in stainless steel, ZMAX® coating or black powder coat (add PC to sku); contact Simpson Strong-Tie. See Corrosion Information, pp. 18–20.

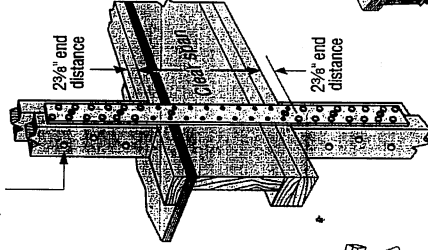
Installation: Use all specified fasteners; see General Notes

Options: Special sizes can be made to order; contact Simpson Strong-Tie for longer lengths

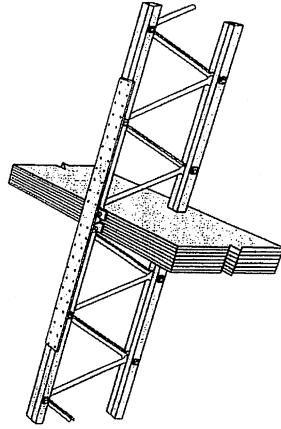


LSTA and MSTA
(Pilot holes not shown)

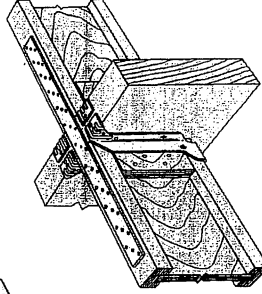
Stitch nailing
of double studs
by others



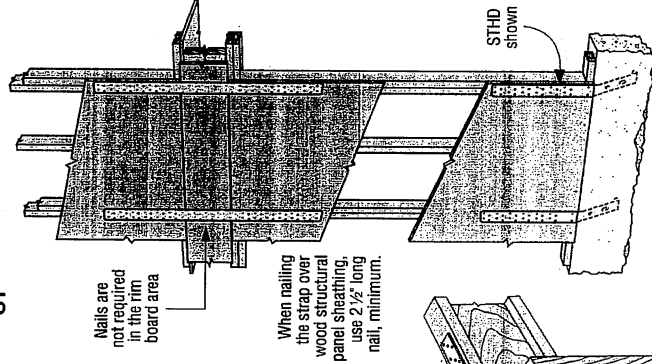
Floor-to-Floor Tie
Installation
Showing a
Clear Span



Typical LSTI Installation



Typical MSTI Installation
(MIT hanger shown)
LSTI similar



Typical Detail with
Strap Installed over
Wood Structural
Panel
Sheathing

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

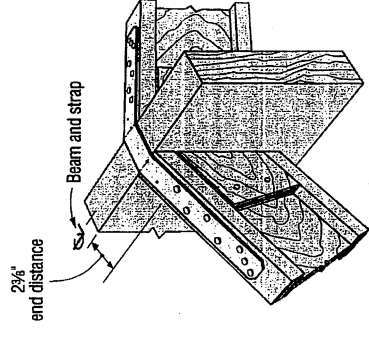
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

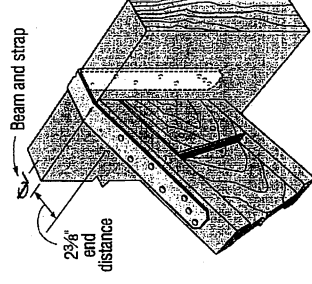
Model No.	Ga.	Dimensions (in.)		Fasteners (Total)	Factored Tensile Resistance					
		W	L		D, Fir-L ($K_D = 1.00$)		D, Fir-L ($K_D = 1.15$)		S-P-F ($K_D = 1.00$)	
					lb.	kn	lb.	kn	lb.	kn
LSTA9	20	1½	9	(6) 10d	600	690	3.07	555	635	2.82
LSTA12		1½	12	(8) 10d	800	920	4.09	735	845	3.76
LSTA15		1½	15	(10) 10d	1000	1150	5.12	920	1060	4.72
LSTA18		1½	18	(12) 10d	1200	1380	6.14	1105	1270	5.65
LSTA21		1½	21	(14) 10d	1400	1610	7.16	1290	1485	6.61
LSTA24		1½	24	(16) 10d	1600	1840	8.19	1475	1695	7.54
ST292		2½	9¾	(8) 8d	585	675	3.00	535	615	2.74
ST2122		2½	12¾	(12) 8d	940	1085	4.83	865	995	4.43
ST2115		¾	16¾	(8) 8d	670	770	3.43	615	710	3.16
ST2215		2½	16¾	(16) 8d	1335	1540	6.85	1235	1420	6.32
LSTA30	18	1½	30	(20) 10d	2235	2465	10.97	2075	2385	10.61
LSTA36		1½	36	(24) 10d	2465	2465	10.97	2465	2465	10.97
LST149		3¾	49	(32) 10d x 1½	3115	3580	15.93	2852	3280	14.59
LST173		3¾	73	(48) 10d x 1½	4670	5370	23.89	4280	4920	21.89
MSTA9		1½	9	(6) 10d	670	770	3.43	625	715	3.18
MSTA12		1½	12	(8) 10d	895	1030	4.58	830	955	4.25
MSTA15		1½	15	(10) 10d	1120	1285	5.72	1040	1195	5.32
MSTA18		1½	18	(12) 10d	1340	1545	6.97	1245	1430	6.36
MSTA21		1½	21	(14) 10d	1565	1800	8.01	1455	1670	7.43
MSTA24		1½	24	(16) 10d	1790	2060	9.16	1660	1910	8.50
MSTA30	16	1½	30	(20) 10d	2470	2840	12.63	2260	2595	11.54
MSTA36		1½	36	(24) 10d	2965	3070	13.66	2710	3070	13.66
MSTA49		1½	49	(28) 8d	2725	2725	12.12	2545	2725	12.12
ST6215		2½	16¾	(16) 8d	1405	1615	7.18	1300	1500	6.67
ST6224		2½	23¾	(24) 8d	2305	2650	11.79	2155	2475	11.01
ST9		1½	9	(6) 8d	525	605	2.69	490	560	2.49
ST12		1½	11¾	(8) 8d	700	805	3.58	650	750	3.34
ST18		1½	17¾	(12) 8d	1050	1210	5.38	975	1125	5.00
ST22		1½	21¾	(18) 8d	1580	1790	7.96	1465	1685	7.50

- Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
- Use half of the nails in each member being connected to achieve the listed resistances.
- Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.



Typical LSTA Installation
(hanger not shown)
Bend strap one time only

Straps and Ties



Typical LSTA Installation
(hanger not shown)
Bend strap one time only

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.



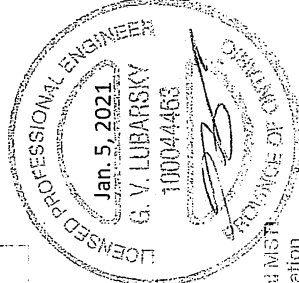
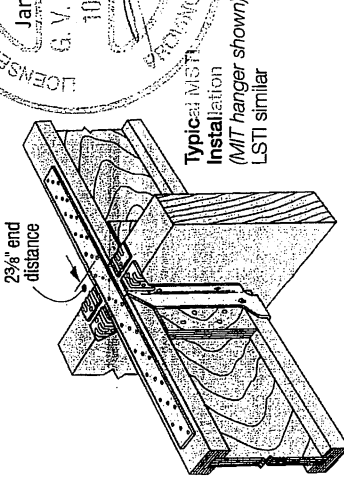
Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.		Ga.	Dimensions (in.)		Fasteners (Total)	Factored Tensile Resistance							
						D.Fir-L				S-P-F			
						(K _D = 1.00)		(K _D = 1.15)		(K _D = 1.00)		(K _D = 1.15)	
			W	L		lb.	kN	lb.	kN	lb.	kN	lb.	kN
MSTC28		16	3	28 1/4	(32) 10d	3955	4545	3615	4155				
						17.59	20.22	16.08	18.48				
MSTC40			3	40 1/4	(48) 10d	5930	6820	5420	6235				
						26.38	30.34	24.11	27.74				
MSTC52		14	3	52 1/4	(54) 10d	6670	6940	6100	6940				
						29.67	30.87	27.14	30.87				
MSTC66			3	65 3/4	(66) 10d	8515	8565	7455	8565				
						37.88	38.10	33.16	38.10				
MSTC78		12	3	77 3/4	(66) 10d	8515	8565	7455	8565				
						37.88	38.10	33.16	38.10				
ST6236			2 1/8	33 3/8	(36) 8d	3735	4295	3270	3760				
						16.61	19.11	14.55	16.73				
MST126		10	2 1/8	26	(22) 10d x 1 1/2"	2825	3250	2475	2850				
						12.57	14.46	11.01	12.68				
MST136			2 1/8	36	(32) 10d x 1 1/2"	4110	4725	3600	4140				
						18.28	21.02	16.01	18.42				
MST148		12	2 1/8	48	(44) 10d x 1 1/2"	5650	6500	4955	5695				
						25.13	28.91	22.04	25.33				
MST160			2 1/8	60	(56) 10d x 1 1/2"	7195	7360	6305	7250				
						32.01	32.74	28.05	32.25				
MST172		16	2 1/8	72	(68) 10d x 1 1/2"	7360	7360	7240	7360				
						32.74	32.74	32.21	32.74				
MST27			2 1/8	27	(26) 8d	2685	3090	2355	2710				
						11.94	13.75	10.48	12.06				
MST37		10	2 1/8	37 1/2	(38) 8d	3930	4515	3440	3960				
						17.48	20.08	15.30	17.62				
MST48			2 1/8	48	(50) 8d	5170	5945	4530	5210				
						23.00	26.45	20.15	23.18				
HRS416Z		10	3/4	16	(16) 1/4" x 1 1/2" SDS	2400	2760	2120	2440				
						10.68	12.28	9.43	10.85				
MST60			2 1/8	60	(64) 8d	6620	7610	5800	6670				
						29.45	33.85	25.80	29.67				
MST72		10	2 1/8	72	(78) 8d	8065	9135	7065	8125				
						35.88	40.64	31.43	36.14				

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.

2. Use half of the nails in each member being connected to achieve the listed resistances.

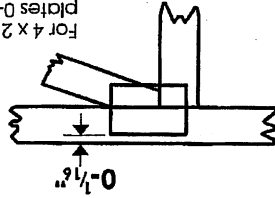
3. Nails: 10d = 0.148" dia. x 3" long, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long, 8d = 0.131" dia. x 2 1/2" long. See pp. 22–23 for other nail sizes and information.



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.



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



*Plate location details available in Mitek software or upon request.

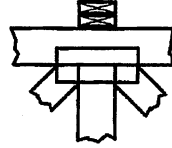
PLATE SIZE

4 X 4

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



Indicated by symbol shown and/or by text in the bracing section of the reaction section indicates joint (supports) occur. Icons vary but number where bearings occur.

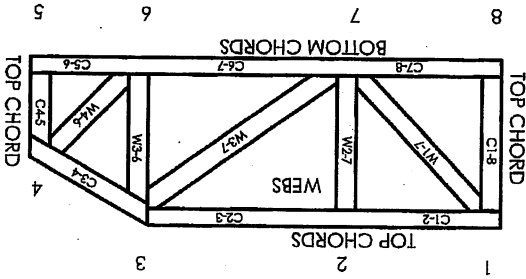


BEARING

Industry Standards:
 TFC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
 DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.
 BCSL: 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: MII-7473C rev. 10-08

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSL.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TFC.
7. Design assumes trusses will be suitably protected from the environment in accord with TFC.
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 TFC Quality Criteria.