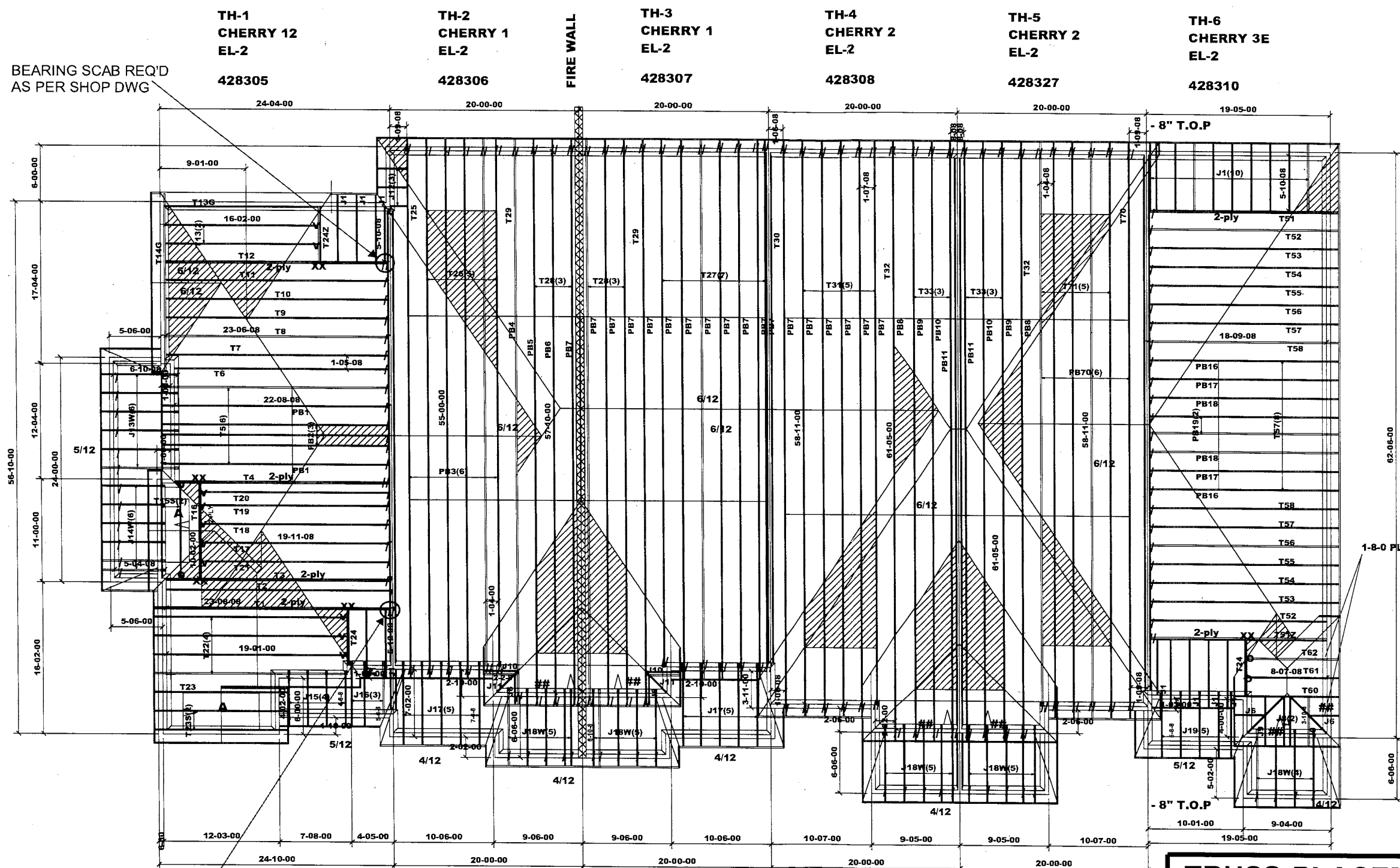


NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.



E22085161 - E22085185
E22085187 - E22085227
E22085230 - E22085241
E22085339 - E22085341

1-8-0 PLATE HEIGHT DIFF.



BEARING SCAB REQ'D AS PER SHOP DWG
9/12 ROOF PITCH UNLESS NOTED OTHERWISE
A- 12" RAISED CEILING
1-8-0 RAISE PLATE AND CEILING

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 = 33.4 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 26.7 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

HARDWARE:
LUS24 - (O)
LUS26DS - (V)
HGUS26-2 - (XX)
H25A- (I)
HTS16 - (T)
H8 - (H)

DENOTES:
CONVENTIONAL FRAMING

TRUSS PLACEMENT PLAN.

This is a truss placement plan only, NOT a final roof framing plan. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss drawings for each component identified on this placement plan.

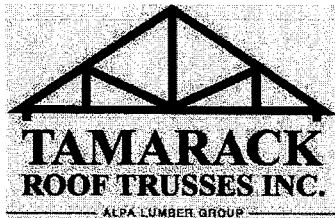
Please verify that all dimensions match the dimensions found on the job. The Building designer is responsible for the temporary/permanent bracing of the roof and floor system and its integration into the bracing of the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer unless otherwise noted in this plan. Building designer to review and approve this plan to ascertain conformity to his overall structural plan.



M15283

Job Track:	52956	Builder / Location:			Model / Elevation:		Mitek ver 8.5.3.233
Layout ID:	428322	GREEN PARK HOMES / CAMBRIDGE			BLOCK 121 / TH-1 ~ TH-6 (CHERRY)		
Plan Log:	206513	Project:			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.		
		BARLASSINA					
		Date: 2022-08-02	Designer: YPG				

DELIVERY SHIPLIST

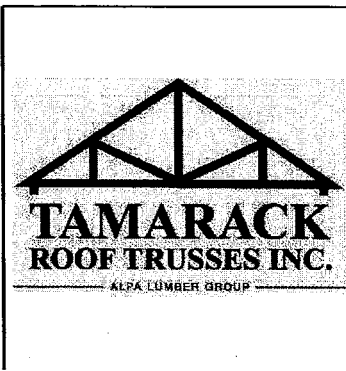


Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 119 , BLOCK 120
 Lot #: **Block 121 (TH-1)**
 Elevation: TH-25, TH-13 (CHERRY 12 , EL-2)

Job Track: 52956
 PlanLog: 206506
 Layout ID: 428305
 Ref #
 Page: 1 of 3
 Date: 08-16-2022
 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	T1 Half Hip Girder	9 /12	23-08-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	229.42 145.33		
	1	T2 Half Hip	9 /12	23-08-08	5-01-04	2 x 4		1-06-04 5-01-04	95.24 60.00		
	1 2-ply	T3 Half Hip Girder	9 /12	23-08-08	5-07-08	2 x 4 2 x 6		1-06-04 5-07-08	235.61 145.67		
	1 2-ply	T4 Half Hip Girder	9 /12	22-08-08	10-10-00	2 x 4 2 x 6		1-06-04 10-10-00	304.95 190.00		
	6	T5 Piggyback Base	9 /12	22-08-08	10-10-00	2 x 4	1-03-08	1-06-04 10-10-00	814.16 510.00		
	1	T6 Half Hip	9 /12	22-08-08	9-10-00	2 x 4		1-06-04 9-10-00	121.18 76.00		
	1	T7 Half Hip	9 /12	23-06-08	9-01-04	2 x 4		10-12 9-01-04	118.81 73.67		
	1	T8 Half Hip	9 /12	23-06-08	8-01-04	2 x 4		10-12 8-01-04	113.18 71.00		
	1	T9 Half Hip	9 /12	23-06-08	7-01-04	2 x 4		10-12 7-01-04	110.64 70.67		
	1	T10 Half Hip	9 /12	23-06-08	6-01-04	2 x 4		10-12 6-01-04	101.97 64.00		
	1	T11 Half Hip	9 /12	23-06-08	5-01-04	2 x 4		10-12 5-01-04	94.33 59.83		
	1 2-ply	T12 Half Hip Girder	9 /12	23-06-08	4-01-04	2 x 4 2 x 6		10-12 4-01-04	211.3 127.33		
	2	T13 Common	9 /12	16-02-00	7-03-04	2 x 4		10-12 1-06-04	139.14 89.67		
	1	T13G GABLE	9 /12	16-02-00	7-03-04	2 x 4		10-12 1-06-04	67.17 43.83		



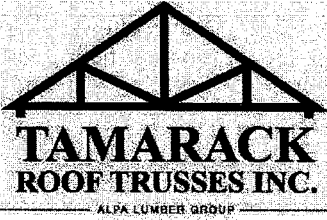
DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 119, BLOCK 120
 Lot #: *Block 121 (TH-1)*
 Elevation: TH-25, TH-13 (CHERRY 12, EL-2)

Job Track: 52956
 PlanLog: 206506
 Layout ID: 428305
 Ref #
 Page: 2 of 3
 Date: 08-16-2022
 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	T14G GABLE	6 /12	16-06-00	5-03-08	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	62.19 38.83		
	2	T15S Roof Special	9 /12	10-02-00	5-04-00	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	103.29 73.33		
	1 2-ply	T16 Half Hip Girder	9 /12	10-02-00	4-01-12	2 x 4 2 x 6		1-06-04 4-01-12	95.83 65.33		
	1	T17 Half Hip	9 /12	19-11-08	7-07-08	2 x 4		3-07-00 7-07-08	91.36 57.00		
	1	T18 Half Hip	9 /12	19-11-08	8-07-08	2 x 4		3-07-00 8-07-08	107.13 68.00		
	1	T19 Half Hip	9 /12	19-11-08	9-07-08	2 x 4		3-07-00 9-07-08	115.76 72.67		
	1	T20 Half Hip	9 /12	19-11-08	10-04-00	2 x 4		3-07-00 10-04-00	119.9 74.50		
	1	T21 Half Hip	9 /12	19-11-08	6-07-08	2 x 4		3-07-00 6-07-08	95.31 60.33		
	4	T22 Common	9 /12	19-01-00	8-08-02	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	367.61 232.00		
	1	T23 Common	9 /12	11-05-00	5-09-10	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	48.96 31.67		
	2	T23S Roof Special	9 /12	11-05-00	5-09-10	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	112.41 77.67		
	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	58.39 37.67		
	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	58.39 37.67		
	2	PB1 Piggyback	9 /12	10-03-08	1-00-00	2 x 4		1-00-00	47.72 31.33		

 TAMARACK ROOF TRUSSES INC. ALPA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: Block 121 (TH-1) Elevation: TH-25, TH-13 (CHERRY 12 , EL-2)	Job Track: 52956 PlanLog: 206506 Layout ID: 428305 Ref # Page: 3 of 3 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

Roof Trusses

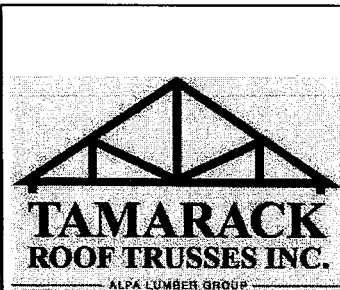
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	3	PB2 Piggyback	9 /12	10-03-08	2-00-00	2 x 4		2-00-00	99.06 66.00		
	6	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	100.77 64.00		
	6	J13W Jack-Open	5 /12	6-10-08	3-08-10	2 x 4	1-03-08	5-06 3-03-12	128.63 80.00		
	6	J14W Jack-Open	5 /12	5-04-08	3-01-02	2 x 4	1-03-08	5-06 2-08-04	91.81 60.00		
	4	J15 Jack-Open	5 /12	4-06-08	2-08-15	2 x 4	1-03-08	5-06 2-04-01	53.29 34.67		
	3	J16 Jack-Open	5 /12	5-06-08	3-01-15	2 x 4	1-03-08	5-06 2-09-01	47.09 30.00		

TOTAL # TRUSS= 75 TOTAL BFT OF ALL TRUSSES= 3019.67 BFT. TOTAL WEIGHT OF ALL TRSSES 4762.02 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
38	Hardware	H2.5A	
4	Hardware	HGUS26-2	
10	Hardware	LJS26DS	
2	Hardware	LUS24	

TOTAL NUMBER OF ITEMS= 54



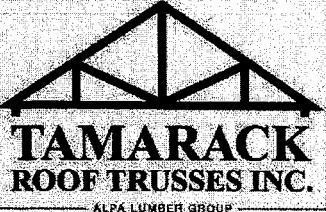
DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 119, BLOCK 120
 Lot #: *Block 121 (TH-2)*
 Elevation: TH-26, TH-14 (CHERRY 1, EL-2)

Job Track: 52956
 PlanLog: 206506
 Layout ID: 428306
 Ref #
 Page: 1 of 2
 Date: 08-16-2022
 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	T25 Piggyback Base Girder	6 /12	55-00-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	389.76 235.33		
	5	T26 Piggyback Base	6 /12	55-00-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1783.46 1076.67		
	3	T28 Piggyback Base	6 /12	57-10-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1145.32 712.00		
	1	T29 Piggyback Base Girder	6 /12	57-10-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	403.91 241.33		
	6	PB3 Piggyback	6 /12	13-08-00	3-05-00	2 x 4			197.69 121.00		
	1	PB4 Piggyback	6 /12	19-08-00	1-04-06	2 x 4			56.06 35.83		
	1	PB5 Piggyback	6 /12	19-08-00	2-10-06	2 x 4			56.53 36.83		
	1	PB6 Piggyback	6 /12	19-08-00	4-04-06	2 x 4			63.79 40.83		
	1	PB7 Piggyback	6 /12	19-08-00	4-11-00	2 x 4			57.58 35.67		
	1	J6 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 1-01	1-06-04 2-10-05	9.23 7.00		
	1	J10 Jack-Open	9 /12	2-02-08	3-02-02	2 x 4	1-03-08	1-06-04 3-02-02	10.47 7.67		
	1	J11 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 5-01	1-06-04 2-10-05	9.61 7.67		
	3	J12 Jack-Open	9 /12	1-09-08	2-10-06	2 x 4	1-03-08	1-06-04 2-10-06	27.43 21.00		
	5	J17 Jack-Open	4 /12	7-06-08	3-03-00	2 x 4	1-03-08	3-15 2-10-02	111.99 72.50		

DELIVERY SHIPLIST		
 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: Block 121 (TH-2) Elevation: TH-26,TH-14 (CHERRY 1,EL-2)	Job Track: 52956 PlanLog: 206506 Layout ID: 428306 Ref # Page: 2 of 2 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

Roof Trusses

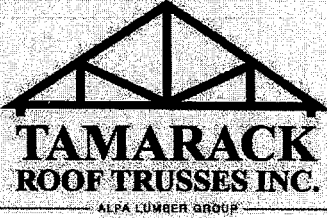
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	5	J18W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.62 60.83		

TOTAL # TRUSS= 36 TOTAL BFT OF ALL TRUSSES= 2712.16 BFT. TOTAL WEIGHT OF ALL TRSSES 4422.45 LBS

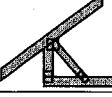
HARDWARE

QTY	TYPE	MODEL	LENGTH
45	Hardware	H2.5A	

TOTAL NUMBER OF ITEMS= 45

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: <i>Block 121 (TH-3)</i> Elevation: TH-27 , TH-15 (CHERRY 1, EL-2)	Job Track: 52956 PlanLog: 206506 Layout ID: 428307 Ref # Page: 1 of 1 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

Roof Trusses

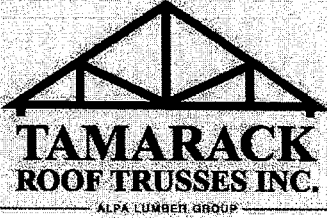
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	7	T27 Piggyback Base	6 /12	55-00-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	2445.02 1467.67		
	3	T28 Piggyback Base	6 /12	57-10-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1145.32 712.00		
	1	T29 Piggyback Base Girder	6 /12	57-10-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	403.91 241.33		
	11	PB7 Piggyback	6 /12	19-08-00	4-11-00	2 x 4			633.33 392.33		
	1	J6 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 1-01	1-06-04 2-10-05	9.23 7.00		
	1	J10 Jack-Open	9 /12	2-02-08	3-02-02	2 x 4	1-03-08	1-06-04 3-02-02	10.47 7.67		
	1	J11 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 5-01	1-06-04 2-10-05	9.61 7.67		
	5	J17 Jack-Open	4 /12	7-06-08	3-03-00	2 x 4	1-03-08	3-15 2-10-02	111.99 72.50		
	5	J18W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.62 60.83		

TOTAL # TRUSS= 35 TOTAL BFT OF ALL TRUSSES= 2969 BFT. TOTAL WEIGHT OF ALL TRSSES 4868.5 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
49	Hardware	H2.5A	

TOTAL NUMBER OF ITEMS= 49

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: <i>Block 121 (TH-4)</i> Elevation: TH-28 ,TH-16 (CHERRY 2,EL-2)	Job Track: 52956 PlanLog: 206506 Layout ID: 428308 Ref # Page: 1 of 1 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

Roof Trusses

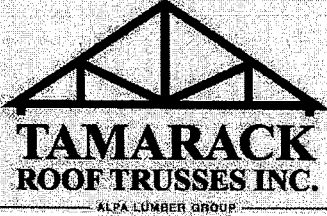
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	.LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T30 Piggyback Base	6 /12	58-11-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	399.03 241.33		
	5	T31 Piggyback Base	6 /12	58-11-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1970.6 1183.33		
	1	T32 Piggyback Base	6 /12	61-05-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	438.02 263.33		
	3	T33 Piggyback Base	6 /12	61-05-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1336.72 818.00		
	6	PB7 Piggyback	6 /12	19-08-00	4-11-00	2 x 4			345.45 214.00		
	1	PB8 Piggyback	6 /12	23-07-00	1-04-12	2 x 4			68.61 43.67		
	1	PB9 Piggyback	6 /12	23-07-00	2-10-12	2 x 4			68.38 43.50		
	1	PB10 Piggyback	6 /12	23-07-00	4-04-12	2 x 4			75.01 46.50		
	1	PB11 Piggyback	6 /12	23-07-00	5-10-12	2 x 4			69.91 44.33		
	5	J18W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.62 60.83		

TOTAL # TRUSS= 25 TOTAL BFT OF ALL TRUSSES= 2958.82 BFT. TOTAL WEIGHT OF ALL TRSSES 4871.34 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
45	Hardware	H2.5A	

TOTAL NUMBER OF ITEMS= 45

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 121 (CHERRY) Lot #: Elevation: TH-5 (CHERRY 2 ,EL-2)	Job Track: 52956 PlanLog: 206513 Layout ID: 428327 Ref # Page: 1 of 1 Date: 08-16-2022 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	T32 Piggyback Base	6 /12	61-05-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	438.02 263.33		
	3	T33 Piggyback Base	6 /12	61-05-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1336.72 818.00		
	1	T70 Piggyback Base	6 /12	58-11-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	397.41 240.33		
	5	T71 Piggyback Base	6 /12	58-11-00	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	2060.53 1271.67		
	1	PB8 Piggyback	6 /12	23-07-00	1-04-12	2 x 4			68.61 43.67		
	1	PB9 Piggyback	6 /12	23-07-00	2-10-12	2 x 4			68.38 43.50		
	1	PB10 Piggyback	6 /12	23-07-00	4-04-12	2 x 4			75.01 46.50		
	1	PB11 Piggyback	6 /12	23-07-00	5-10-12	2 x 4			69.91 44.33		
	6	PB70 Piggyback	6 /12	19-08-00	4-11-00	2 x 4			345.45 214.00		
	5	J18W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.62 60.83		

TOTAL # TRUSS= 25

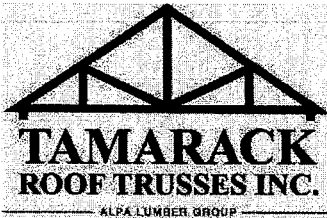
TOTAL BFT OF ALL TRUSSES= 3046.16 BFT.

TOTAL WEIGHT OF ALL TRSSES 4959.65 LBS

HARDWARE

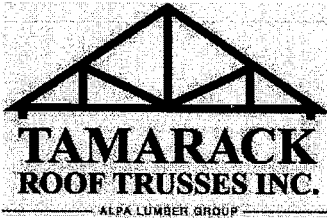
QTY	TYPE	MODEL	LENGTH
45	Hardware	H2.5A	

TOTAL NUMBER OF ITEMS= 45

DELIVERY SHIPLIST			
 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; vertical-align: top;"> Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: BLOCK 121 (TH-6) Elevation: TH-30 , TH-18 (CHERRY 3E,EL-2) </td> <td style="width: 40%; vertical-align: top;"> Job Track: 52956 Plan Log: 206506 Layout ID: 428310 Ref # Page: 1 of 2 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano </td> </tr> </table>	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: BLOCK 121 (TH-6) Elevation: TH-30 , TH-18 (CHERRY 3E,EL-2)	Job Track: 52956 Plan Log: 206506 Layout ID: 428310 Ref # Page: 1 of 2 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano
Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: BLOCK 121 (TH-6) Elevation: TH-30 , TH-18 (CHERRY 3E,EL-2)	Job Track: 52956 Plan Log: 206506 Layout ID: 428310 Ref # Page: 1 of 2 Date: 08-16-2022 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	T24Z1 Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T51 Half Hip Girder	9 /12	18-09-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	177.93 112.00		
	1 2-ply	T51Z Half Hip Girder	9 /12	18-09-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	177.93 112.00		
	2	T52 Half Hip	9 /12	18-09-08	5-01-04	2 x 4		1-06-04 5-01-04	150.17 97.00		
	2	T53 Half Hip	9 /12	18-09-08	6-01-04	2 x 4	1-03-08	1-06-04 6-01-04	166.98 106.67		
	2	T54 Half Hip	9 /12	18-09-08	7-01-04	2 x 4	1-03-08	1-06-04 7-01-04	176.84 113.33		
	2	T55 Half Hip	9 /12	18-09-08	8-01-04	2 x 4	1-03-08	1-06-04 8-01-04	191.55 121.67		
	2	T56 Half Hip	9 /12	18-09-08	9-01-04	2 x 4	1-03-08	1-06-04 9-01-04	202.89 127.00		
	10	T57 Half Hip	9 /12	18-09-08	10-01-04	2 x 4	1-03-08	1-06-04 10-01-04	1062.03 670.00		
	2	T58 Half Hip	9 /12	18-09-08	11-01-04	2 x 4	1-03-08	1-06-04 11-01-04	208.01 128.67		
	1	T60 Hip Girder	9 /12	8-06-00	4-05-02	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	40.88 26.67		
	1	T61 Common	9 /12	8-06-00	6-04-08	2 x 4	1-03-08 1-03-08	3-02-04 3-02-04	44.63 28.67		
	1	T62 Hip	9 /12	8-06-00	5-06-12	2 x 4	1-03-08 1-03-08	3-02-04 3-02-04	50.53 32.00		
	2	PB16 Piggyback	9 /12	7-04-03	2-00-00	2 x 4		2-00-00	45.61 31.00		

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 119 , BLOCK 120 Lot #: <u>BLOCK 121 (TH-6)</u> Elevation: TH-30 , TH-18 (CHERRY 3E,EL-2)	Job Track: 52956 PlanLog: 206506 Layout ID: 428310 Ref # Page: 2 of 2 Date: 08-16-2022 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
	2	PB17 Piggyback	9 /12	7-04-03	3-00-00	2 x 4		3-00-00	49.1 32.33		
	2	PB18 Piggyback	9 /12	7-04-03	4-00-00	2 x 4		4-00-00	53.72 36.00		
	2	PB19 Piggyback	9 /12	7-04-03	5-00-00	2 x 4		5-00-00	52.5 34.33		
	15	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	251.92 160.00		
	2	J6 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 1-01	1-06-04 2-10-05	18.46 14.00		
	2	J8 Jack-Open	9 /12	3-10-08	4-05-02	2 x 4	1-03-08	1-06-04 4-05-02	29.83 20.33		
	2	J9 Jack-Open	9 /12	1-09-07	2-10-05	2 x 4	1-03-08 2-01-01	1-06-04 2-10-05	23.19 16.67		
	4	J18W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	79.69 48.67		
	5	J19 Jack-Open	5 /12	5-08-08	3-02-13	2 x 4	1-03-08	4-01 2-08-09	76.47 46.67		

TOTAL # TRUSS= 69

TOTAL BFT OF ALL TRUSSES= 2153.35

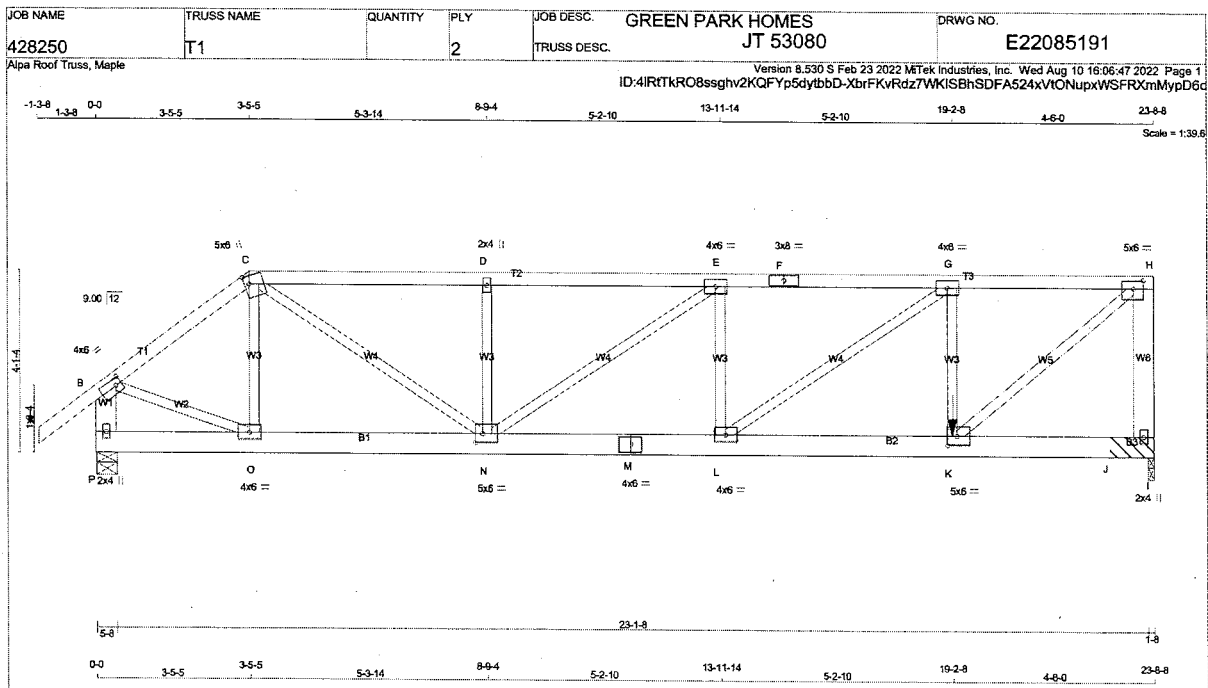
BFT.

TOTAL WEIGHT OF ALL TRSSES 3389.27 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
30	Hardware	H2.5A	
1	Hardware	HGUS26-2	
2	Hardware	LUS24	

TOTAL NUMBER OF ITEMS= 33



LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER DESCR.

A - C 2x4 DRY No.2 SPF

C - F 2x4 DRY No.2 SPF

F - H 2x4 DRY No.2 SPF

I - H 2x6 DRY No.2 SPF

P - B 2x6 DRY No.2 SPF

P - M 2x6 DRY No.2 SPF

M - I 2x6 DRY No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)

TOP CHORDS : (0.122"x3") SPIRAL NAILS

A-C 1 12 TOP

C-F 1 12 TOP

F-H 1 12 TOP

H-I 2 12 TOP

P-B 2 12 TOP

BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS

P-M 2 12 TOP

M-I 2 12 TOP

WEBS : (0.122"x3") SPIRAL NAILS

G-K 1 8 SIDE(285.2)

2x3 1 8

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT TYPE PLATES W LEN Y X

B TMWV-1 MT20 4.0 6.0 2.00 1.50

C TTWW-1 MT20 5.0 6.0 2.25 1.25

D TMWV-1 MT20 2.0 4.0

E TMWV-1 MT20 4.0 6.0

F TS-1 MT20 3.0 8.0

G TMWV-1 MT20 4.0 6.0

H TMWV-1 MT20 5.0 6.0 2.25 2.75

I BMV1+P MT20 2.0 4.0

K BMWV-1 MT20 5.0 6.0 2.50 2.50

L BMWV-1 MT20 4.0 6.0

M BS-1 MT20 4.0 6.0

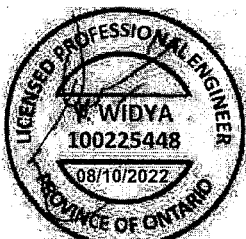
N BMWV-1 MT20 5.0 6.0 2.50 2.00

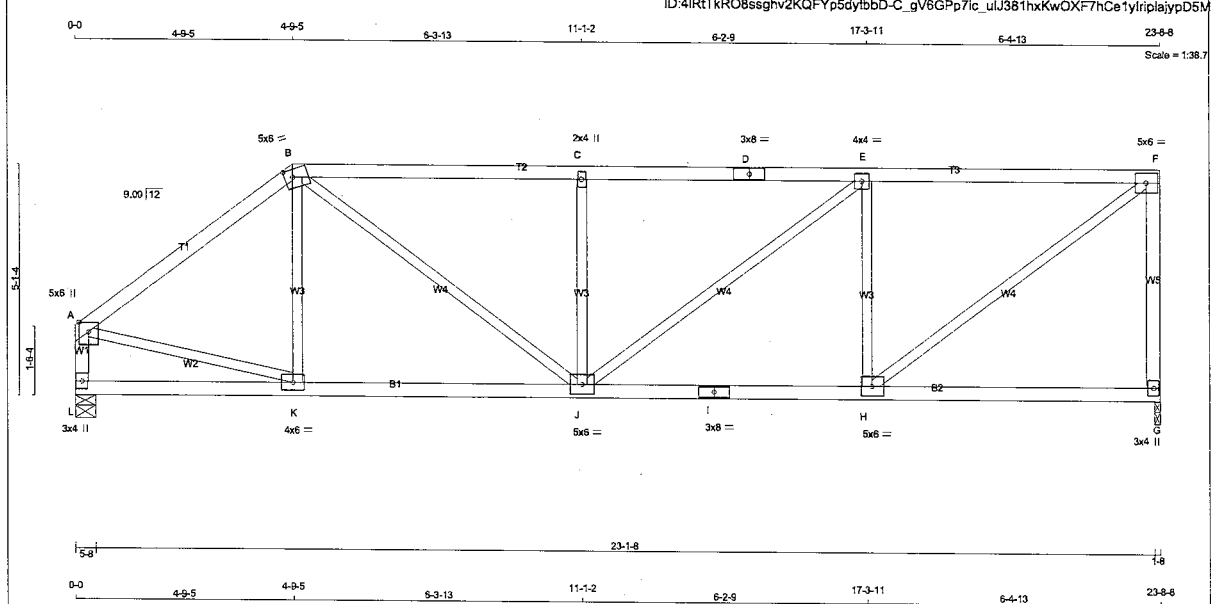
O BMWV-1 MT20 4.0 6.0

P BMV1+P MT20 2.0 4.0

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1/8\"/>

N. L. G. A. RULES				BUILDING DESIGNER										DESIGN CRITERIA			
CHORDS	SIZE		LUMBER	DESCR.	BEARINGS								SPECIFIED LOADS:				
A - B	2x4	DRY	No.2	SPF	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		TOP CH. LL =	26.7 PSF			
D - D	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		DL =	6.0 PSF			
D - F	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL =	0.0 PSF			
G - F	2x4	DRY	No.2	SPF	G	1348	0	1348	0	0	1-8	1-8	DL =	7.4 PSF			
L - A	2x4	DRY	No.2	SPF	L	1348	0	1348	0	0	5-8	1-8	TOTAL LOAD =	40.1 PSF			
L - I	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS										SPACING =		24.0 IN. C/C
I - G	2x4	DRY	No.2	SPF													
ALL WEBS EXCEPT DRY, SEASONED LUMBER.				2x3	DRY	No.2	SPF	1ST LCASE MAX./MIN. COMPONENT REACTIONS									
				JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL						
				G	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0						
				L	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0						

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 5.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. C/C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015
THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFLECTION (LL) = L/360 (0.79")
CALCULATED VERT. DEFLECTION (LL) = L/999 (0.07")
ALLOWABLE DEFLECTION (TL) = L/360 (0.79")
CALCULATED VERT. DEFLECTION (TL) = L/999 (0.13")

CSJ: TC=0.64/1.00 (C-E:1), BC=0.32/1.00 (H-J:1), WB=0.39/1.00 (F-H:1), SS=0.28/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

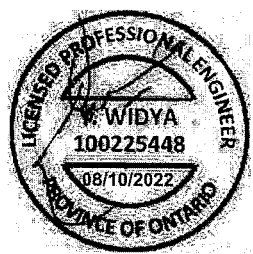
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

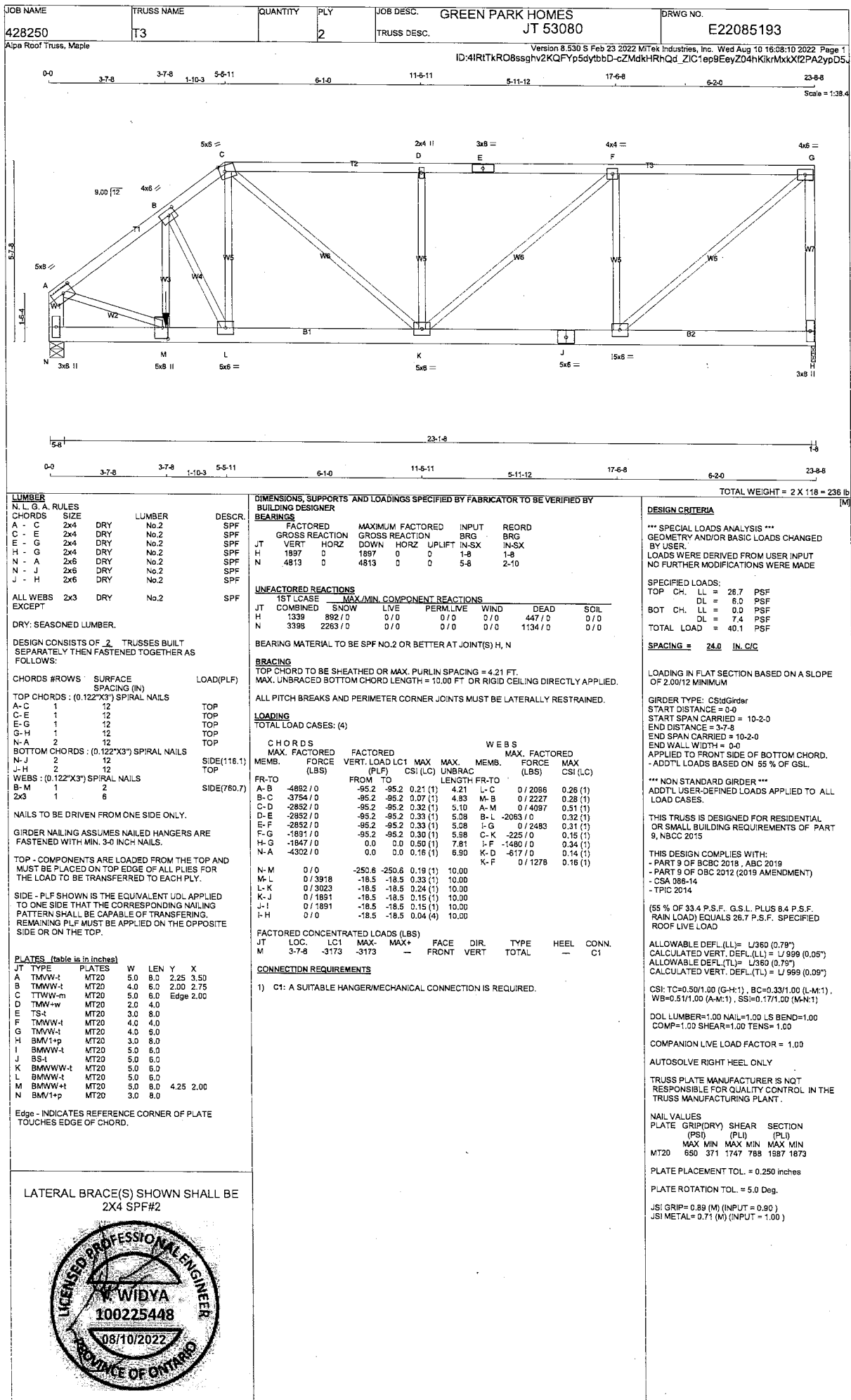
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

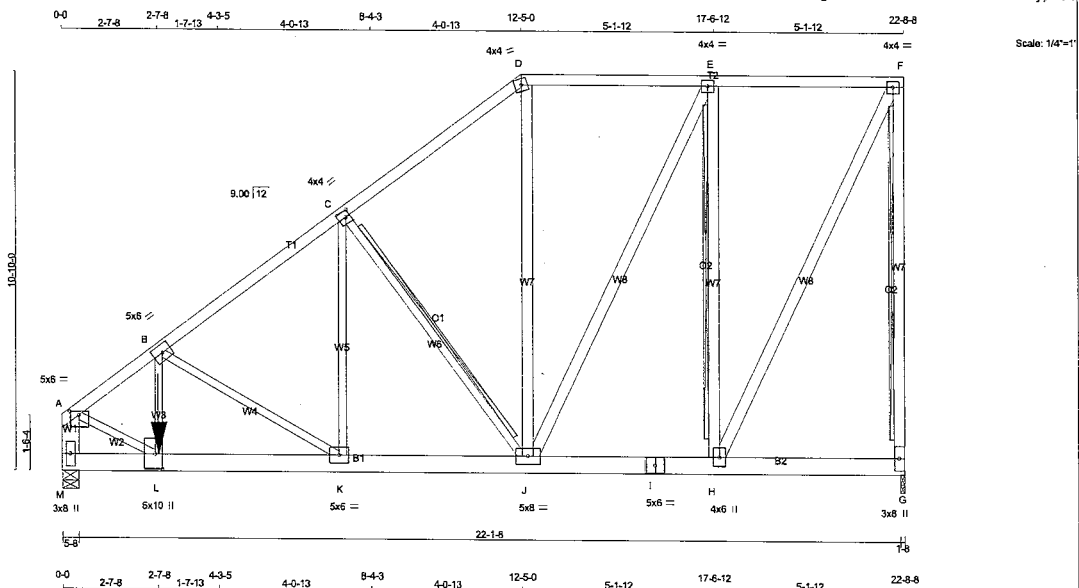
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (B) (INPUT = 0.90)
JSI METAL= 0.53 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2







LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES	A - D	2x4	DRY	No.2	SPF
	D - F	2x4	DRY	No.2	SPF
	G - F	2x4	DRY	No.2	SPF
	M - A	2x6	DRY	No.2	SPF
	M - I	2x6	DRY	No.2	SPF
	I - G	2x6	DRY	No.2	SPF
	ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
	J - D	2x4	DRY	No.2	SPF
	J - E	2x4	DRY	No.2	SPF
	H - E	2x4	DRY	No.2	SPF
	H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122'X3') SPIRAL NAILS		
A-D 1 12	TOP	
D-F 1 12	TOP	
F-G 1 12	TOP	
M-A 2 12	TOP	
BOTTOM CHORDS : (0.122'X3') SPIRAL NAILS		
M-I 2 11	SIDE(155.4)	
I-G 2 12	TOP	
WEBS : (0.122'X3') SPIRAL NAILS		
B-L 1 2	SIDE(699.6)	
2x3 1 6		
2x4 1 6		

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

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

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

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A TMVW-p	MT20	5.0	6.0	1.25	3.00	
B TMVW-t	MT20	5.0	6.0			
C TMVW-t	MT20	4.0	4.0	2.00	1.50	
D TTW-m	MT20	4.0	4.0			
E TMVW-t	MT20	4.0	4.0			
F TMVW-t	MT20	4.0	4.0			
G BMV1+p	MT20	3.0	8.0			
H BMVW-H	MT20	4.0	6.0			
I BS-t	MT20	5.0	6.0			
J BMVW-t	MT20	5.0	8.0			
K BMVW-t	MT20	5.0	6.0			
L BMVW-t	MT20	6.0	10.0	5.00	2.50	
M BMV1+p	MT20	3.0	8.0			

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	HORZ	DOWN	HORZ	UPLIFT
G	1693	0	1693	0
M	4671	0	4671	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE
G	1196	796 / 0
M	3298	2197 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x6 DRY SPF No.2 T-BRACE AT F-G, E-H
2x4 DRY SPF No.2 T-BRACE AT C-J

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

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

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
A-B	-4436 / 0	-95.2	-95.2	0.14 (1)	4.45	K-C	0 / 1178	0.15 (1)	
B-C	-2355 / 0	-95.2	-95.2	0.24 (1)	5.59	C-J	-1388 / 0	0.49 (1)	
C-D	-1382 / 0	-95.2	-95.2	0.21 (1)	6.25	J-D	0 / 445	0.04 (1)	
D-E	-1084 / 0	-95.2	-95.2	0.24 (1)	6.25	J-E	0 / 843	0.07 (1)	
E-F	-721 / 0	-95.2	-95.2	0.23 (1)	6.25	H-E	-1394 / 0	0.24 (1)	
G-F	-1651 / 0	0.0	0.0	0.29 (1)	7.81	H-F	0 / 1633	0.14 (1)	
M-A	-4272 / 0	0.0	0.0	0.15 (1)	5.93	L-B	0 / 1925	0.24 (1)	
M-L	0 / 0	-250.6	-250.6	0.12 (1)	10.00	A-L	0 / 3871	0.48 (1)	
L-K	0 / 3565	-18.5	-18.5	0.30 (1)	10.00	B-K	-1961 / 0	0.58 (1)	
K-J	0 / 1900	-18.5	-18.5	0.14 (1)	10.00				
J-I	0 / 721	-18.5	-18.5	0.06 (1)	10.00				
I-H	0 / 721	-18.5	-18.5	0.05 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.03 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)
JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE HEEL CONN.

L	2-7-8	-3173	-	FRONT	VERT	TOTAL	-	C1
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CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:	TOP CH.	LL	PSF
	DL	26.7	PSF
SPECIFIED LOADS:	BOT CH.	LL	PSF
	DL	0.0	PSF
	DL	7.4	PSF
	TOTAL LOAD	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.09/12 MINIMUM

GIRDER TYPE: CSldGlider
START DISTANCE = 0-0
START SPAN CARRIED = 10-2-0
END DISTANCE = 2-7-8
END SPAN CARRIED = 10-2-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSI.

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.29/1.00 (F-G-1), BC=0.30/1.00 (K-L-1), WB=0.58/1.00 (B-K-1), SS=0.13/1.00 (L-M-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

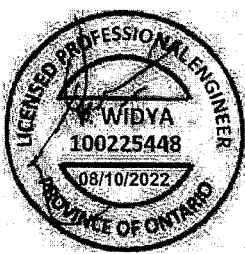
AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 768 1987 1873

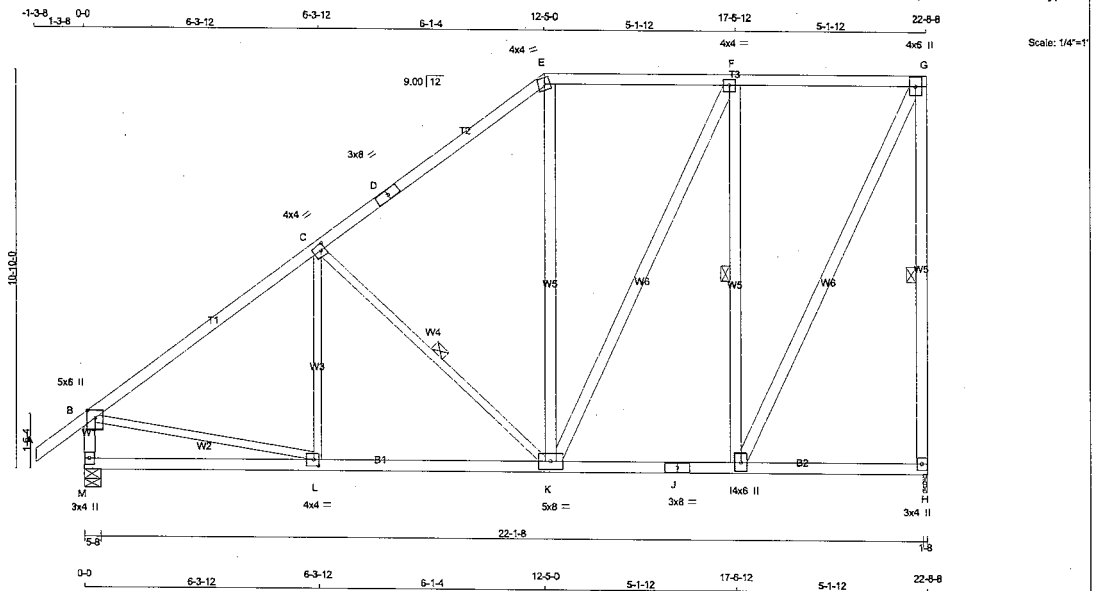
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.84 (F) (INPUT = 0.90)
JSI METAL= 0.54 (L) (INPUT = 1.00)



Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 M/Tek Industries, Inc. Wed Aug 10 16:08:16 2022 Page 1
ID:4IRtKRO8ssghv2KQFyp5dytbbD-Rjiv?LWS?tkiTVo9QL2CqG1hm1E2xcvbVkhOhypD5D



TOTAL WEIGHT = 6 X 135 = 814 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)			
JT TYPE	PLATES	W	LEN Y X
B TMWW+p	MT20	5.0	8.0 Edge
C TMWW-i	MT20	4.0	4.0 2.00 1.50
D TS-i	MT20	3.0	8.0
E TTW-m	MT20	4.0	4.0
F TMWW-i	MT20	4.0	4.0
G TMWW+p	MT20	4.0	6.0
H BMVW+p	MT20	3.0	4.0
I BMVW+i	MT20	4.0	6.0
J BS-i	MT20	3.0	8.0
K BMVW-i	MT20	5.0	8.0
L BMVW-i	MT20	4.0	4.0 2.00 1.50
M BMVW+p	MT20	3.0	4.0

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
H	1351	0	1351	0	0	1-8	1-8		
M	1440	0	1440	0	0	5-8	1-9		

UNFACTORED REACTIONS

1ST CASE		MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
H	959	607 / 0	0 / 0	0 / 0	0 / 0	352 / 0	0 / 0		
M	1016	681 / 0	0 / 0	0 / 0	0 / 0	335 / 0	0 / 0		

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

BRACING

FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.93 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. (PL)	CS1 (LC)	MEMB.	FORCE (LBS)	VERT. (PL)	CS1 (LC)
FR-TO				FR-TO			
A-B	0 / 39	-95.2	-95.2 0.13 (1)	10.00	L-C	-76 / 79	0.05 (1)
B-C	-1331 / 0	-95.2	-95.2 0.54 (1)	4.93	C-K	-538 / 0	0.27 (1)
C-D	-932 / 0	-95.2	-95.2 0.50 (1)	5.69	K-E	0 / 115	0.03 (4)
D-E	-932 / 0	-95.2	-95.2 0.50 (1)	5.69	K-F	0 / 392	0.06 (1)
E-F	-710 / 0	-102.7	-102.7 0.35 (1)	2.00	I-F	-1008 / 0	0.60 (1)
F-G	-542 / 0	-102.7	-102.7 0.35 (1)	2.00	I-G	0 / 1237	0.20 (1)
H-G	-1311 / 0	0.0	0.0 0.78 (1)	5.65	B-L	0 / 1119	0.25 (1)
M-B	-1392 / 0	0.0	0.0 0.15 (1)	6.90			
M-L	0 / 0	-18.5	-18.5 0.18 (4)	10.00			
L-K	0 / 1099	-18.5	-18.5 0.27 (4)	10.00			
K-J	0 / 542	-18.5	-18.5 0.16 (4)	10.00			
J-I	0 / 542	-18.5	-18.5 0.16 (4)	10.00			
I-H	0 / 0	-18.5	-18.5 0.11 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 5.00/12 AND 8.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2016

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/998 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CS1: TC=0.78/1.00 (G-H:1), BC=0.27/1.00 (K-L:4), WB=0.60/1.00 (F-I:1), SS1=0.26/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 550 371 1747 788 1987 1873

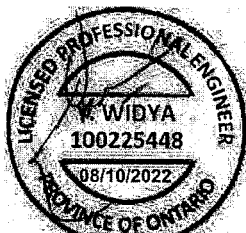
PLATE PLACEMENT TOL. = 0.250 inches

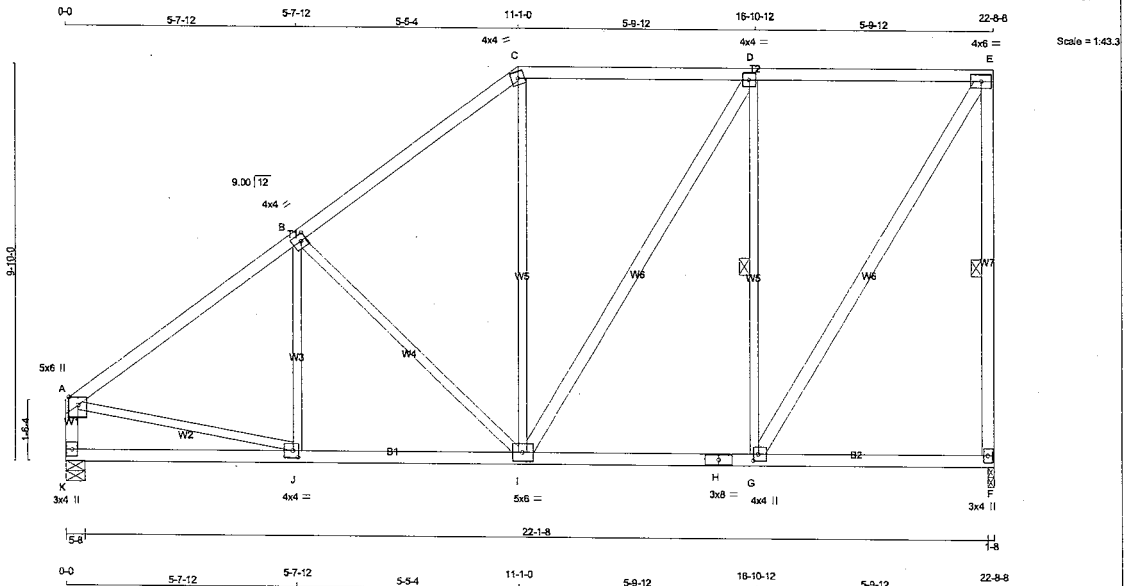
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (L) (INPUT = 0.90)

JSI METAL= 0.56 (S) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMW+p	MT20	5.0	6.0	Edge	
B	TMW-w	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMW-w	MT20	4.0	4.0		
E	TMW-w	MT20	4.0	6.0		
F	BMV+p	MT20	3.0	4.0		
G	BMW-w	MT20	4.0	4.0	2.00	1.50
H	BS-l	MT20	3.0	8.0		
I	BMW-w	MT20	5.0	6.0		
J	BMW-w	MT20	4.0	4.0	2.00	1.50
K	BMV+p	MT20	3.0	4.0		

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

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	
JT	VERT	HORZ	DOWN
F	1291	0	1-8
K	1291	0	1-8

UNFACTORED REACTIONS

1ST CASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
F	911	607 / 0
K	911	607 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CS1 (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CS1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-1317 / 0	-95.2	-95.2 0.58 (1)	J-B	-114 / 56	0.08	(1)
B-C	-1002 / 0	-95.2	-95.2 0.55 (1)	B-I	-441 / 0	0.54	(1)
C-D	-771 / 0	-95.2	-95.2 0.57 (1)	I-D	0 / 177	0.04	(4)
D-E	-636 / 0	-95.2	-95.2 0.58 (1)	I-D	0 / 285	0.04	(1)
F-E	-1248 / 0	0.0	0.0 0.58 (1)	G-D	-914 / 0	0.60	(1)
K-A	-1248 / 0	0.0	0.0 0.13 (1)	G-E	0 / 1215	0.20	(1)
K-J	0 / 0	-18.5	-18.5 0.14 (4)	A-J	0 / 1108	0.25	(1)
J-I	0 / 1084	-18.5	-18.5 0.24 (1)				
I-H	0 / 636	-18.5	-18.5 0.20 (4)				
H-G	0 / 635	-18.5	-18.5 0.20 (4)				
G-F	0 / 0	-18.5	-18.5 0.15 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.75")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CS1: TC=0.59/1.00 (A-B:1), BC=0.24/1.00 (I-J:1), WB=0.60/1.00 (D-G:1), SS=0.27/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

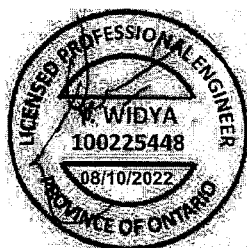
NAIL VALUES
PLATE GRIP(ORY) SHEAR SECTION (PS) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL= 0.52 (A) (INPUT = 1.00)

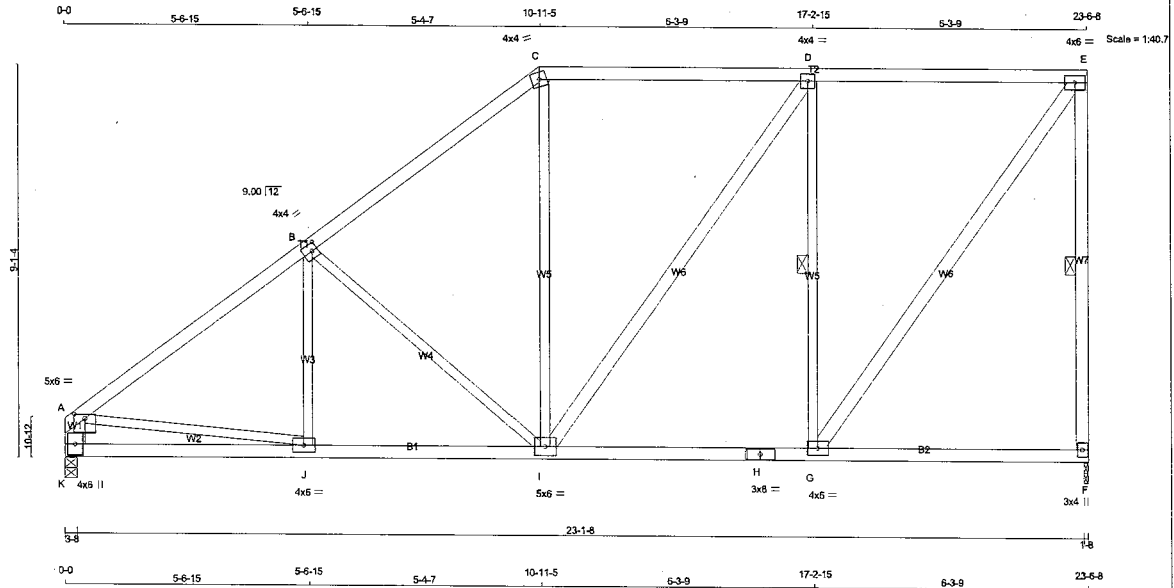
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME T7	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES	TRUSS DESC. JT 53080	DRWG NO. E22085197
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Alpine Roof Truss, Maple

Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:08:22 2022 Page 1
ID:4IRtKRO8ssghv2KQFyp5dytbbD-FH4AGObDbJUsB2yyWgSSR5W4gApXendVIXy2cLypD57



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

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	5.0	6.0	1.25	3.00
B	TMVW-i	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMVW-i	MT20	4.0	4.0		
E	TMVW-i	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMVW-i	MT20	4.0	6.0		
H	BS-i	MT20	3.0	6.0		
I	BMVWW-i	MT20	5.0	6.0		
J	BMVW-i	MT20	4.0	6.0		
K	BMV1+p	MT20	4.0	6.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	VERT	HORZ	DOWN	HORZ
F	1338	0	1338	0
K	1338	0	1338	0

UNFACTORED REACTIONS	1ST CASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW
F	945	629 / 0
K	945	629 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING				
TOTAL LOAD CASES: (4)				

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED (PLF) CSI (LBS)	MAX. UNBRAC (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LBS)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	-1564 / 0	-95.2	-95.2 0.60 (1)	4.55	I-B	-20 / 85	0.03 (4)
B-C	-1155 / 0	-95.2	-95.2 0.55 (1)	5.15	B-I	-516 / 0	0.53 (1)
C-D	-834 / 0	-95.2	-95.2 0.69 (1)	5.27	I-C	0 / 254	0.06 (1)
D-E	-764 / 0	-95.2	-95.2 0.88 (1)	5.62	I-D	0 / 227	0.04 (1)
E-F	-1291 / 0	0.0	0.0 0.50 (1)	5.58	G-D	-930 / 0	0.50 (1)
F-K	-1295 / 0	0.0	0.0 0.08 (1)	7.81	G-E	0 / 1309	0.21 (1)
					A-J	0 / 1768	0.22 (1)
K-J	0 / 0	-18.5	-18.5 0.13 (4)	10.00			
I-J	0 / 1281	-18.5	-18.5 0.27 (4)	10.00			
I-H	0 / 764	-18.5	-18.5 0.24 (4)	10.00			
H-G	0 / 764	-18.5	-18.5 0.24 (4)	10.00			
G-F	0 / 0	-18.5	-18.5 0.18 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TRC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.78")
CALCULATED VERT. DEFL.(LL) = U/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = U/999 (0.09")
CSI: TC=0.69/1.00 (C-D-1), BC=0.27/1.00 (D-E-1), WB=0.53/1.00 (B-1-1), SS=0.23/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

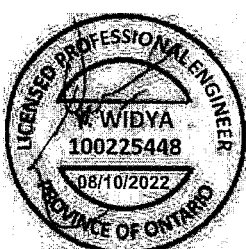
PLATE PLACEMENT TOL. = 0.250 inches

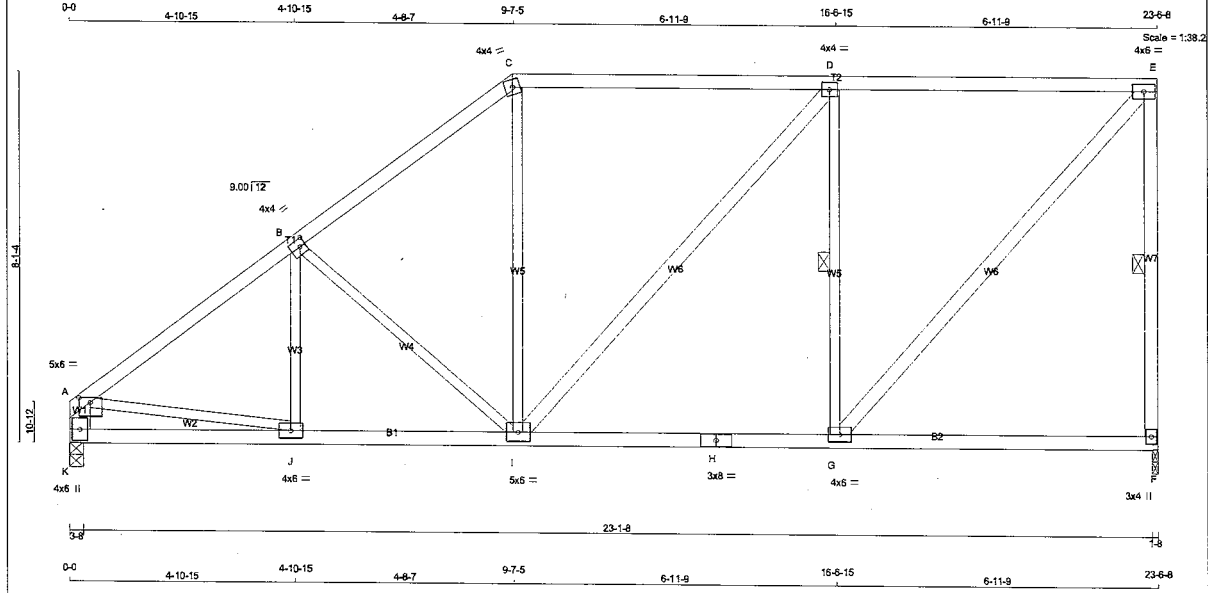
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.84 (E) (INPUT = 0.90)

JSI METAL= 0.32 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY										TOTAL WEIGHT = 113 lb																																													
N. L. G. A. RULES				BUILDING DESIGNER																																																							
CHORDS				SIZE				LUMBER				DESCR.				<u>BEARINGS</u>				<u>DESIGN CRITERIA</u>																																							
A - C				2x4				DRY				No.2				SPF				FACTORED				MAXIMUM FACTORED				INPUT				REQD				SPECIFIED LOADS:																							
C - E				2x4				DRY				No.2				SPF				GROSS REACTION				BRG				BRG				TOP CH. LL = 26.7 PSF																											
F - E				2x4				DRY				No.2				SPF				VERT				DOWN				HORZ				UPLIFT				IN-SX				IN-SX				BRG				LL = 6.0 PSF											
K - A				2x6				DRY				No.2				SPF				F				1338				0				DL				0				1-8				1-8				BOT CH. LL = 0.0 PSF											
K - H				2x4				DRY				No.2				SPF				K				1338				0				DL				0				3-8				1-8				7.4 PSF											
H - F				2x4				DRY				No.2				SPF																												TOTAL LOAD = 40.1 PSF															
ALL WEBS				2x3				DRY				No.2				SPF				<u>UNFACTORED REACTIONS</u>																																							
EXCEPT																																																											
I - D				2x4				DRY				No.2				SPF				JT				COMBINED				SNOW				LIVE				PERM.LIVE				WIND				DEAD				SOIL											
G - E				2x4				DRY				No.2				SPF				F				945				629 / 0				0 / 0				0 / 0				0 / 0				315 / 0				0 / 0											
																				K				945				629 / 0				0 / 0				0 / 0				0 / 0				315 / 0				0 / 0											
DRY: SEASONED LUMBER.																		BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F. K																		THIS TRUSS IS DESIGNED FOR RESIDENTIAL																							

DRY: SEASONED LUMBER.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBC 2015, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.78")

CALCULATED VERT. DEFL.(LL) = U/999 (0.04")

ALLOWABLE DEFL.(TL) = L/360 (0.78")

CALCULATED VERT. DEFL.(TL) = U/999 (0.09")

CSI: TC=0.87/1.00 (D-G:1), BC=0.30/1.00 (G-I:4), WB=0.37/1.00 (D-G:1), SH=0.32/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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 MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (S) (INPUT = 0.90)

JSI METAL= 0.33 (H) (INPUT = 1.00)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1582 / 0	-95.2 -95.2 0.44 (1)	4.74	J-B	-58 / 58	0.02 (4)	
B-C	-1258 / 0	-95.2 -95.2 0.41 (1)	5.21	B-I	-418 / 0	0.31 (1)	
C-D	-982 / 0	-95.2 -95.2 0.87 (1)	4.52	I-C	0 / 319	0.07 (1)	
D-E	-928 / 0	-95.2 -95.2 0.86 (1)	4.53	I-D	0 / 83	0.01 (1)	
F-E	-1287 / 0	0.0 0.0 0.38 (1)	5.69	G-D	-896 / 0	0.37 (1)	
K-A	-1298 / 0	0.0 0.0 0.08 (1)	7.81	G-E	0 / 1389	0.22 (1)	
				A-J	0 / 1300	0.29 (1)	
K-J	0 / 0	-18.5 -18.5 0.09 (4)	10.00				
J-I	0 / 1291	-18.5 -18.5 0.27 (1)	10.00				
I-H	0 / 928	-18.5 -18.5 0.30 (4)	10.00				
H-G	0 / 928	-18.5 -18.5 0.30 (4)	10.00				
G-F	0 / 0	-18.5 -18.5 0.23 (4)	10.00				

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 FT.

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

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

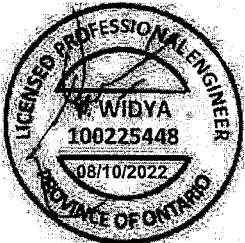
1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-F, D-G.

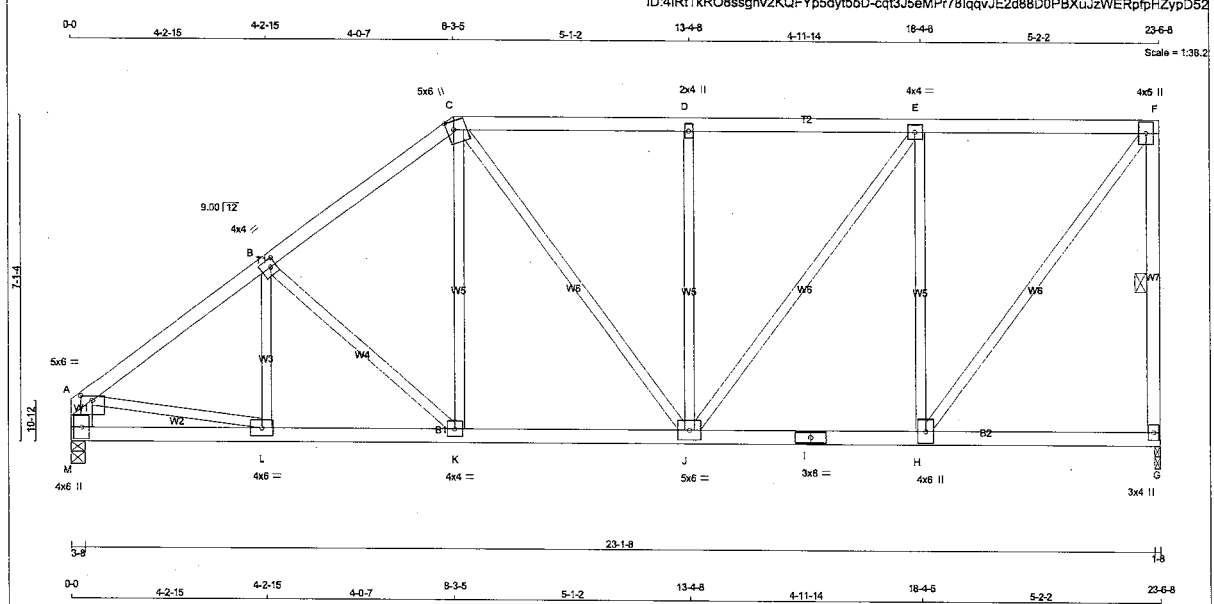
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 111 lb

LUMBER				BUILDING DESIGNER								DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS								SPECIFIED LOADS:			
CHORDS	SIZE		DESCR.	FACTORED				MAXIMUM FACTORED				INPUT	REQRD		
				GROSS REACTION				GROSS REACTION				BRG	BRG		
A - C	2x4	DRY	No.2	SPF	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX				
C - F	2x4	DRY	No.2	SPF	JT										
G - F	2x4	DRY	No.2	SPF	G	1338	0	1338	0	1-8	1-8				
M - A	2x6	DRY	No.2	SPF	M	1338	0	1338	0	3-8	1-8				
M - I	2x4	DRY	No.2	SPF											
I - G	2x4	DRY	No.2	SPF											
				TOTAL LOAD = 40.1 PSF								TOTAL LOAD = 40.1 PSF			

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

UNFACTORED REACTIONS				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, M			
1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	945	629 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0
M	945	629 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1593 / 0	-95.2 -35.2	0.32 (1)	L-B	-97 / 36	0.02 (1)	
B-C	-1394 / 0	-95.2 -35.2	0.30 (1)	B-K	-320 / 0	0.17 (1)	
C-D	-1172 / 0	-95.2 -35.2	0.35 (1)	K-C	0 / 308	0.07 (1)	
D-E	-1172 / 0	-95.2 -35.2	0.37 (1)	A-L	0 / 1307	0.23 (1)	
E-F	-836 / 0	-95.2 -35.2	0.35 (1)	H-F	0 / 1381	0.31 (1)	
G-F	-1299 / 0	0.0 0.0	0.30 (1)	C-J	0 / 182	0.04 (1)	
M-A	-1302 / 0	0.0 0.0	0.08 (1)	H-E	-993 / 0	0.87 (1)	
				J-D	-519 / 0	0.45 (1)	
				J-E	0 / 570	0.13 (1)	
M-L	0 / 0	-18.5 -18.5	0.07 (4)				
L-K	0 / 1295	-18.5 -18.5	0.25 (1)				
K-J	0 / 1063	-18.5 -18.5	0.22 (1)				
J-I	0 / 836	-18.5 -18.5	0.20 (1)				
I-H	0 / 836	-18.5 -18.5	0.20 (1)				
H-G	0 / 0	-18.5 -18.5	0.11 (4)				

ALLOWABLE DEFL. (LL) = L/360 (0.78")
CALCULATED VERT. DEFL. (LL) = L/999 (0.05")
ALLOWABLE DEFL. (TL) = L/360 (0.78")
CALCULATED VERT. DEFL. (TL) = L/999 (0.09")

CS: TC=0.37/1.00 (D-E:1), BC=0.25/1.00 (K-L:1), WB=0.87/1.00 (E-H:1), SS=0.23/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

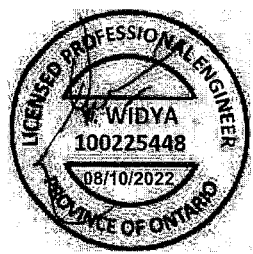
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLD) (PLD)

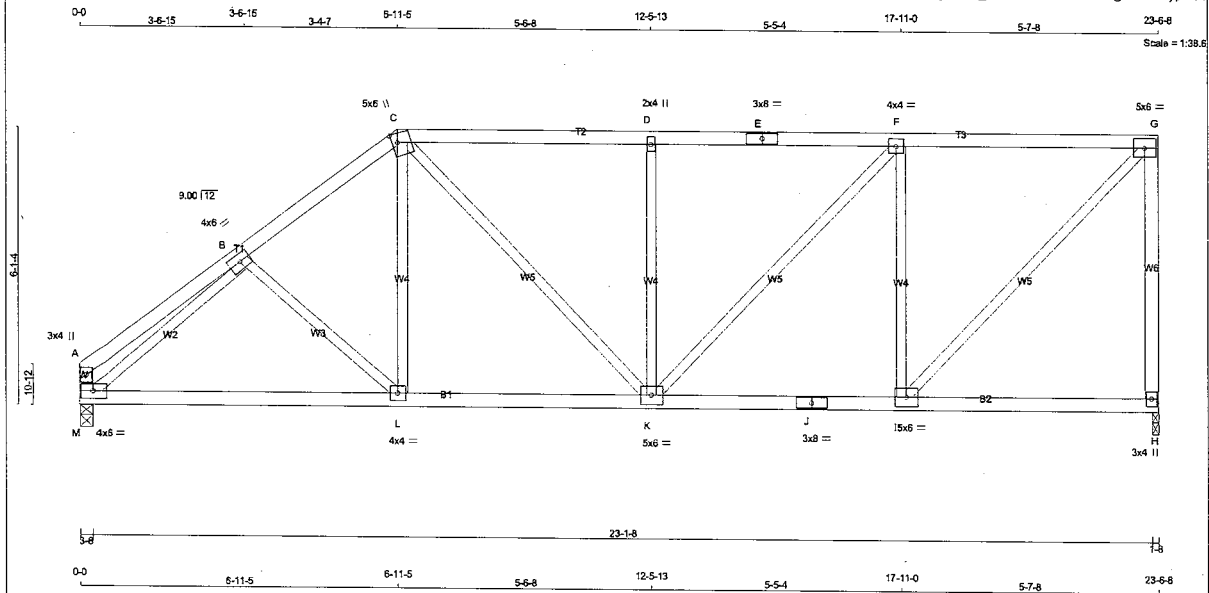
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

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

JSI GRIP= 0.80 (H) (INPUT = 0.90)
JSI METAL= 0.38 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	SPF
C - E	2x4	DRY	SPF
E - G	2x4	DRY	SPF
H - J	2x4	DRY	SPF
M - A	2x4	DRY	SPF
M - J	2x4	DRY	SPF
J - H	2x4	DRY	SPF
ALL WEBS	2x3	DRY	SPF
EXCEPT			
DRY, SEASONED LUMBER.			

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	3.0	4.0		
B	TMVW-i	MT20	4.0	6.0		
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMVW-w	MT20	2.0	4.0		
E	TS-i	MT20	3.0	8.0		
F	TMVW-i	MT20	4.0	4.0		
G	TMVW-i	MT20	5.0	6.0		
H	BMV+p	MT20	3.0	4.0		
I	BMVW-i	MT20	5.0	6.0		
J	BS-i	MT20	3.0	8.0		
K	BMVWW-i	MT20	5.0	6.0		
L	BMVW-i	MT20	4.0	4.0		
M	BMVW-i	MT20	4.0	8.0		

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
H	1338	0	1338	0
M	1338	0	1338	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT	COMBINED	SNOW
H	945	629 / 0
M	945	629 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.93 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE	FACTORED	MAX	MEMB.	FORCE	FACTORED	MAX
	(LBS)	VERT. LOAD	LC1 MAX				
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 21	-95.2	-95.2 0.17 (1)	B-L	-162 / 0	0.06 (1)	0.06 (1)
B-C	-1461 / 0	-95.2	-95.2 0.20 (1)	L-C	0 / 244	0.06 (1)	0.06 (1)
C-D	-1401 / 0	-95.2	-95.2 0.44 (1)	I-G	0 / 1502	0.34 (1)	0.34 (1)
D-E	-1401 / 0	-95.2	-95.2 0.45 (1)	C-K	0 / 370	0.08 (1)	0.08 (1)
E-F	-1401 / 0	-95.2	-95.2 0.45 (1)	I-F	-951 / 0	0.58 (1)	0.58 (1)
F-G	-1044 / 0	-95.2	-95.2 0.43 (1)	K-D	-565 / 0	0.33 (1)	0.33 (1)
H-G	-1296 / 0	0.0	0.0 0.94 (1)	K-F	0 / 522	0.12 (1)	0.12 (1)
M-A	-130 / 0	0.0	0.0 0.01 (1)	M-B	-1711 / 0	0.60 (1)	0.60 (1)
M-L	0 / 1263	-18.5	-18.5 0.31 (1)				
L-K	0 / 1146	-18.5	-18.5 0.30 (4)				
K-J	0 / 1044	-18.5	-18.5 0.24 (1)				
J-I	0 / 1044	-18.5	-18.5 0.24 (1)				
I-H	0 / 0	-18.5	-18.5 0.14 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
LL	26.7	PSF
BOT CH.	LL	PSF
LL	0.0	PSF
LL	7.4	PSF
TOTAL LOAD	40.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFLECT (LL) = L/360 (0.78")

CALCULATED VERT. DEFLECT (LL) = L/999 (0.06")

ALLOWABLE DEFLECT (TL) = L/360 (0.78")

CALCULATED VERT. DEFLECT (TL) = L/999 (0.11")

CSI: TC=0.84/1.00 (G-H:1), BC=0.31/1.00 (L-M:1), WB=0.60/1.00 (B-M:1), SSI=0.25/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

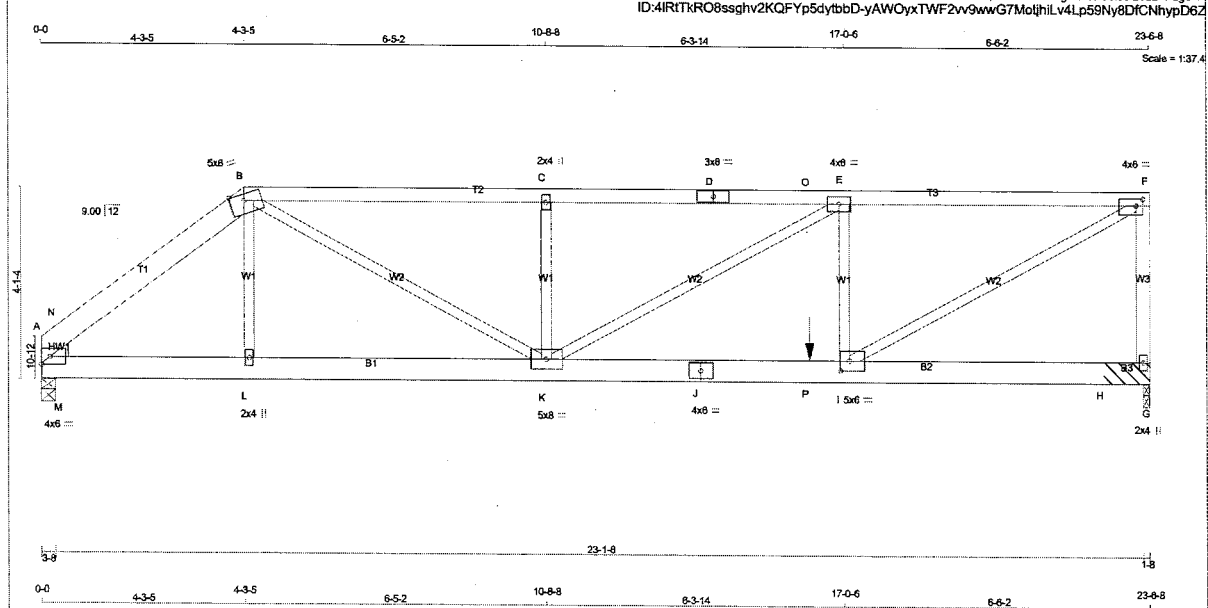
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (M) (INPUT = 0.90)

JSI METAL= 0.38 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 2 X 106 = 211 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - B	2x6	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x6	DRY	No.2	SPF
A - J	2x6	DRY	No.2	SPF
J - G	2x6	DRY	No.2	SPF

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

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

CHORDS #ROWS	SURFACE	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-B 2	12	TOP
B-D 1	12	TOP
D-F 1	12	SIDE(48.1)
F-G 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
A-J 2	12	TOP
J-G 2	12	SIDE(10.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMBH14	4.0	6.0		Edge
B	TTWW-m	5.0	8.0		Edge 3.50
C	TMW-w	2.0	4.0		
D	TS-1	3.0	8.0		
E	TMW-w	4.0	6.0		
F	TMW-w	4.0	6.0	1.75	1.75
G	BMV1-p	2.0	4.0		
I	BMW-w	5.0	6.0	2.50	2.25
J	BS-1	4.0	6.0		
K	BMW-w	5.0	8.0		
L	BMW-w	2.0	4.0		

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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG	HEEL WEDGE
JT VERT	DOWN	UP	IN-SX	
G 3064 0	0 0	1-8	1-8 & BLOCK	
A 1928 0	0 0	3-8	1-8	2x4 L

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE
G 2163 1441/0	0/0	0/0
A 1361 907/0	0/0	0/0

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

2x6 DRY SPF NO.2 BEARING BLOCK 12" LONG AT JT. G ATTACHED TO FRONT SIDE WITH 3 ROWS OF (0.122"x3") SPIRAL NAILS SPACED 4" C.C. 6 NAILS TOTAL.

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO				FR-TO			
A-N	-3079 / 0	-95.2	-95.2 0.14 (1)	L-B	0 / 80	0.02 (4)	
N-B	-2529 / 0	-95.2	-95.2 0.14 (1)	I-F	0 / 5005	0.62 (1)	
B-C	-3912 / 0	-95.2	-95.2 0.40 (1)	B-K	0 / 2244	0.28 (1)	
C-D	-3912 / 0	-95.2	-95.2 0.64 (1)	I-E	-868 / 0	0.11 (1)	
D-O	-3912 / 0	-95.2	-95.2 0.64 (1)	K-C	-564 / 0	0.07 (1)	
O-E	-3912 / 0	-187.4	-187.4 0.64 (1)	K-E	-500 / 0	0.26 (1)	
E-F	-4343 / 0	-187.4	-187.4 0.75 (1)	M-N	0 / 509	0.00 (1)	
G-F	-3001 / 0	0.0	0.0 0.37 (1)				
A-M	0 / 1962	-18.5	-18.5 0.21 (1)				
M-L	0 / 1962	-18.5	-18.5 0.21 (1)				
L-K	0 / 1962	-18.5	-18.5 0.19 (1)				
K-J	0 / 4343	-18.5	-18.5 0.54 (1)				
J-P	0 / 4343	-18.5	-18.5 0.54 (1)				
P-I	0 / 4343	-36.4	-36.4 0.54 (1)				
I-H	0 / 0	-36.4	-36.4 0.13 (1)				
H-G	0 / 0	-36.4	-36.4 0.13 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
P	16-3-8	-1517	-1517		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	26.7	
BOT CH.	LL	PSF
DL	0.0	
DL	7.4	
TOTAL LOAD	40.1	

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-3-5
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON: 55% OF G.S.L.
LOADS APPLIED TO FIRST 7-3-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.78")

CALCULATED VERT. DEFL.(LL)	ALLOWABLE DEFL.(LL)
1/999 (0.11")	L/360 (0.78")
CALCULATED VERT. DEFL.(TL)	ALLOWABLE DEFL.(TL)
1/999 (0.20")	L/999 (0.20")

CSI: TC=0.75/1.00 (E-F:1), BC=0.54/1.00 (I-K:1), WB=0.62/1.00 (F-I:1), SS=0.48/1.00 (I-K:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

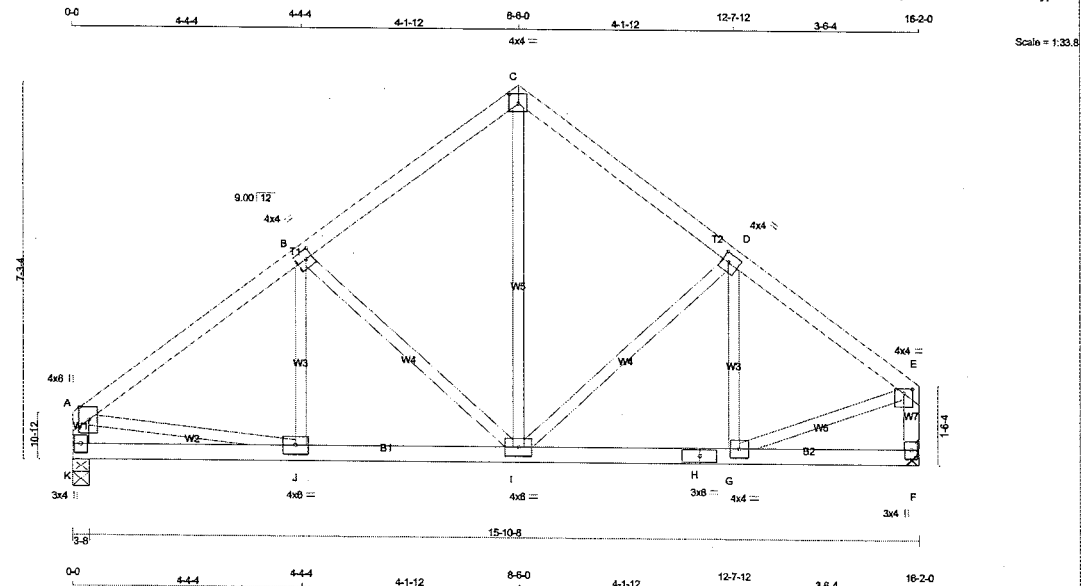
JSI GRIP= 0.88 (I) (INPUT = 0.90)
JSI METAL= 0.76 (J) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MTEK Industries, Inc. Wed Aug 10 16:08:35 2022 Page 1
ID:4IRtKRO8ssghv2KQFYp5dybbD-NNM4_r1NXI70F2SRnv8VTgYQZPH8BkoPH2bEY5ypD4w



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

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMWW-t	MT20	4.0	4.0	2.00	1.50
E	TMWW-p	MT20	4.0	4.0	1.00	2.00
F	BMV+p	MT20	3.0	4.0		
G	BMWW-t	MT20	4.0	4.0		
H	BS-t	MT20	3.0	8.0		
I	BMWW-t	MT20	4.0	6.0		
J	BMWW-t	MT20	4.0	6.0		
K	BMV+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
K	919	0	0	3-8
F	919	0	0	1-8

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

UNFACTORED REACTIONS

UNIT POSITIVE REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	649	432/0	0/0	0/0	0/0	217/0	0/0
F	649	432/0	0/0	0/0	0/0	217/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX
FR-TO		FORCE (LBS)	(PLF)	CSF (LC)	UNBRAC	LENGTH	FR-TO		FORCE (LBS)	(PLF)	CSF (LC)	UNBRAC	LENGTH
A-B	-999 / 0	-95.2	-95.2	0.23 (1)	5.99	J-B	-24 / 63	0.02 (4)					
B-C	-701 / 0	-95.2	-95.2	0.22 (1)	6.25	B-I	-387 / 0	0.21 (1)					
C-D	-696 / 0	-95.2	-95.2	0.19 (1)	6.25	I-C	0 / 501	0.11 (1)					
D-E	-657 / 0	-95.2	-95.2	0.16 (1)	6.25	I-D	-233 / 0	0.13 (1)					
E-F	-682 / 0	0.0	0.0	0.09 (1)	7.81	G-D	-168 / 9	0.04 (1)					
K-A	-684 / 0	0.0	0.0	0.09 (1)	7.81	G-E	0 / 748	0.17 (1)					
K-J	0 / 0	-18.5	-18.5	0.07 (4)	10.00	A-J	0 / 829	0.19 (1)					
J-I	0 / 822	-18.5	-18.5	0.17 (1)	10.00								
I-H	0 / 709	-18.5	-18.5	0.15 (1)	10.00								
H-G	0 / 709	-18.5	-18.5	0.15 (1)	10.00								
G-F	0 / 0	-18.5	-18.5	0.06 (4)	10.00								

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.54")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
ALLOWABLE DEFL.(TL) = $L/360$ (0.54")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.04")

CSF: TC=0.23/1.00 (A-B-1), BC=0.17/1.00 (I-J-1), WB=0.21/1.00 (B-I-1), SS=0.16/1.00 (A-B-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

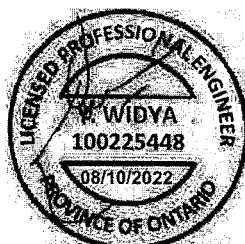
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1967 1873

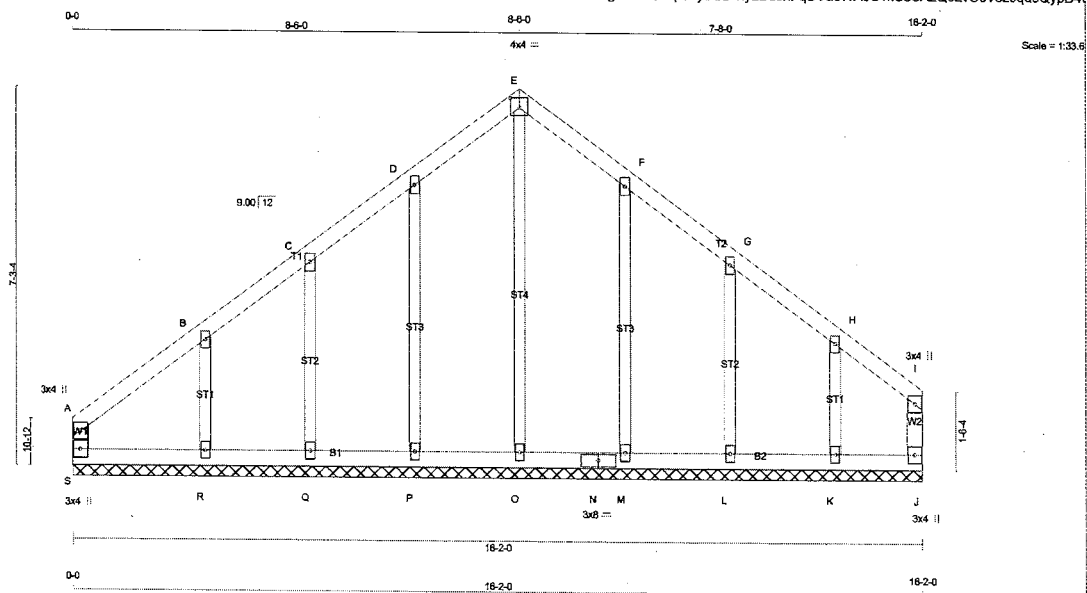
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.50 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER		DESCR	
S - A	2x4	DRY	No.2	SPF	
A - E	2x4	DRY	No.2	SPF	
E - I	2x4	DRY	No.2	SPF	
I - L	2x4	DRY	No.2	SPF	
S - N	2x4	DRY	No.2	SPF	
N - J	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER					
GABLE STUDS SPACED AT 2'-0" O.C.					

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMV+p	MT20	3.0	4.0		
B, C, D, F, G, H					
B - TMW+w	MT20	2.0	4.0		
E - TTW+p	MT20	4.0	4.0	2.25	2.00
I - TMV+p	MT20	3.0	4.0		
J - BMV1+p	MT20	3.0	4.0		
K, L, M, O, P, Q, R					
K - BMW1+w	MT20	2.0	4.0		
N - BS-1	MT20	3.0	8.0		
S - BMV1+p	MT20	3.0	4.0		

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. UNBRACED LENGTH (IN)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)
FR-TO					FR-TO		
S-A	-139 / 0	0.0	0.0 0.04 (1)	7.81	O-E	-162 / 0	0.15 (1)
A-B	-48 / 0	-95.2	-95.2 0.06 (1)	6.25	P-D	-193 / 0	0.10 (1)
B-C	-47 / 0	-95.2	-95.2 0.06 (1)	6.25	Q-C	-177 / 0	0.05 (1)
C-D	-35 / 0	-95.2	-95.2 0.04 (1)	6.25	R-B	-219 / 0	0.04 (1)
D-E	-32 / 0	-95.2	-95.2 0.05 (1)	6.25	M-F	-190 / 0	0.10 (1)
E-F	-32 / 0	-95.2	-95.2 0.05 (1)	6.25	L-G	-192 / 0	0.05 (1)
F-G	-37 / 0	-95.2	-95.2 0.05 (1)	6.25	K-H	-160 / 0	0.03 (1)
G-H	-39 / 0	-95.2	-95.2 0.05 (1)	6.25			
H-I	-60 / 0	-95.2	-95.2 0.04 (1)	6.25			
J-I	-106 / 0	0.0	0.0 0.04 (1)	7.81			
S-R	0 / 41	-18.5	-18.5 0.03 (4)	10.00			
R-Q	0 / 33	-18.5	-18.5 0.03 (4)	10.00			
Q-P	0 / 29	-18.5	-18.5 0.02 (4)	10.00			
P-O	0 / 26	-18.5	-18.5 0.02 (4)	10.00			
O-N	0 / 26	-18.5	-18.5 0.02 (4)	10.00			
N-M	0 / 26	-18.5	-18.5 0.02 (4)	10.00			
M-L	0 / 29	-18.5	-18.5 0.02 (4)	10.00			
L-K	0 / 34	-18.5	-18.5 0.02 (4)	10.00			
K-J	0 / 40	-18.5	-18.5 0.03 (1)	10.00			

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.06/1.00 (A-B-1), BC=0.03/1.00 (J-K-1), WB=0.15/1.00 (E-O-1), SS=0.08/1.00 (A-B-1).

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

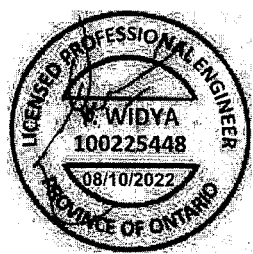
PLATE PLACEMENT TOL. = 0.250 inches

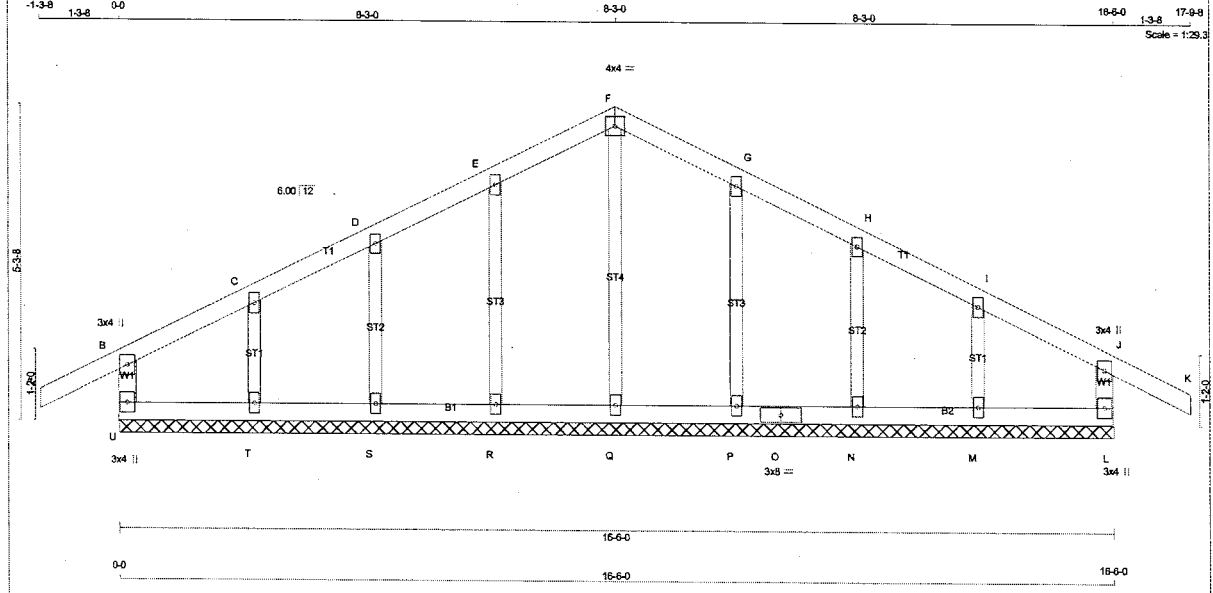
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (E) (INPUT = 0.90)

JSI METAL= 0.12 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS

U - B	2x4	DRY	No.2	SPF
A - F	2x4	DRY	No.2	SPF
F - K	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
U - O	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT	2'-0" OC.			

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
 THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)
BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

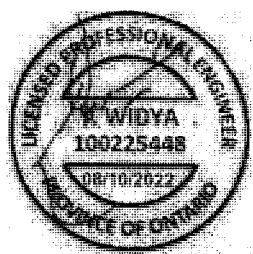
DESIGN CRITERIA
 SPECIFIED LOADS:
 TOP CH. LL = 26.7 PSF
 DL = 6.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.4 PSF
 TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. CC
 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

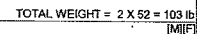
PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
B TMV+p	MT20	3.0	4.0	
C, D, E, G, H, I				
C TMW+p	MT20	2.0	4.0	
F TTW+p	MT20	4.0	4.0	
J TMV+p	MT20	3.0	4.0	
L BMV1+p	MT20	3.0	4.0	
M, N, P, Q, R, S, T				
M BMW1+p	MT20	2.0	4.0	
O BS-4	MT20	3.0	8.0	
U BMV1+p	MT20	3.0	4.0	

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX.	MAX.	WEBS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX.	MAX.
MEMB.	FORCE	(PLF)	(LBS)		CSI (LC)	UNBRAC	MEMB.	FORCE	(LBS)	CSI (LC)			
FR-TO							FR-TO						
U-B	-248 / 0	0.0	0.0	0.02 (1)	7.81		Q-F	-187 / 0	0.08 (1)				
A-B	0 / 29	-95.2	-95.2	0.12 (1)	10.00		R-E	-193 / 0	0.05 (1)				
B-C	-28 / 0	-95.2	-95.2	0.06 (1)	6.25	S-D	-186 / 0	0.04 (1)					
C-D	-20 / 0	-95.2	-95.2	0.05 (1)	6.25	T-C	-195 / 0	0.03 (1)					
D-E	-14 / 0	-95.2	-95.2	0.04 (1)	6.25	P-G	-193 / 0	0.05 (1)					
E-F	-11 / 0	-95.2	-95.2	0.05 (1)	6.25	N-H	-186 / 0	0.04 (1)					
F-G	-11 / 0	-95.2	-95.2	0.05 (1)	6.25	M-I	-195 / 0	0.03 (1)					
G-H	-14 / 0	-95.2	-95.2	0.04 (1)	6.25								
H-I	-20 / 0	-95.2	-95.2	0.05 (1)	6.25								
I-J	-28 / 0	-95.2	-95.2	0.06 (1)	6.25								
J-K	0 / 29	-95.2	-95.2	0.12 (1)	10.00								
L-J	-248 / 0	0.0	0.0	0.02 (1)	7.81								
U-T	0 / 24	-18.5	-18.5	0.02 (4)	10.00								
T-S	0 / 17	-18.5	-18.5	0.02 (4)	10.00								
S-R	0 / 13	-18.5	-18.5	0.02 (4)	10.00								
R-Q	0 / 10	-18.5	-18.5	0.02 (4)	10.00								
Q-P	0 / 10	-18.5	-18.5	0.02 (4)	10.00								
P-O	0 / 13	-18.5	-18.5	0.02 (4)	10.00								
O-N	0 / 13	-18.5	-18.5	0.02 (4)	10.00								
N-M	0 / 17	-18.5	-18.5	0.02 (4)	10.00								
M-L	0 / 24	-18.5	-18.5	0.02 (4)	10.00								

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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD
 CSI: TC=0.12/1.00 (A-B:1), BC=0.02/1.00 (T-U:4), WB=0.08/1.00 (F-O:1), SSI=0.09/1.00 (A-B:1)
 DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10
 COMPANION LIVE LOAD FACTOR = 1.00
 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 650 371 1747 788 1987 1873
 PLATE PLACEMENT TOL. = 0.250 inches
 PLATE ROTATION TOL. = 5.0 Deg.
 JSI GRIP= 0.39 (F) (INPUT = 0.90)
 JSI METAL= 0.08 (J) (INPUT = 1.00)

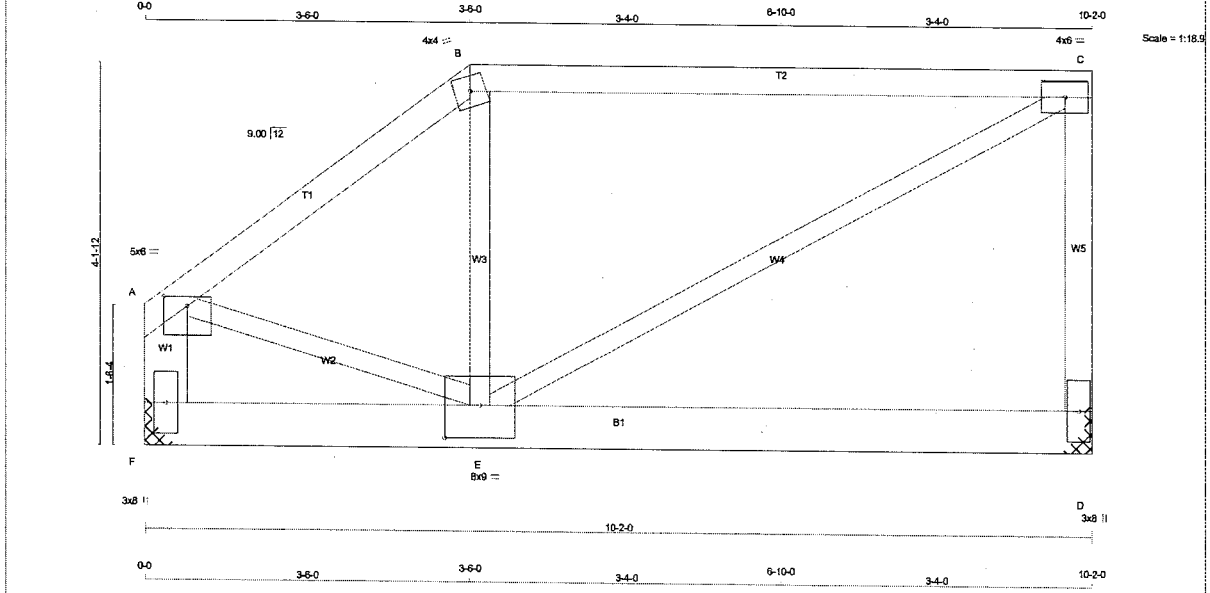
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





JSI GRIP= 0.83 (B) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)

N-M	0/24	-18.5	-18.5	0.02 (4)	10.00
M-L	0/16	0.0	0.0	0.04 (1)	10.00
L-C	0/43	0.0	0.0	0.04 (1)	10.00
L-K	0/622	-18.5	-18.5	0.14 (1)	10.00
K-J	0/622	-18.5	-18.5	0.14 (1)	10.00
I-J	0/16	0.0	0.0	0.04 (1)	10.00
J-E	0/43	0.0	0.0	0.04 (1)	10.00
I-H	0/24	-18.5	-18.5	0.02 (4)	10.00



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY										TOTAL WEIGHT = 2 X 48 = 96 lb	
N. L. G. A. RULES					BUILDING DESIGNER										[M]	
CHORDS	SIZE		LUMBER	DESCR.	BEARINGS										DESIGN CRITERIA	
A - B	2x4	DRY	No.2	SPF	FACTORED					MAXIMUM FACTORED					SPECIFIED LOADS:	
B - C	2x4	DRY	No.2	SPF	GROSS REACTION					BRG					TOP CH. LL = 26.7 PSF	
D - C	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	DL = 6.0 PSF			
F - A	2x6	DRY	No.2	SPF	D	3173	0	3173	0	0	MECHANICAL		BOT CH. LL = 0.0 PSF			
F - D	2x6	DRY	No.2	SPF	F	3173	0	3173	0	0	MECHANICAL		DL = 7.4 PSF			
ALL WEBS					A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D, F. MINIMUM										TOTAL LOAD = 40.1 PSF	
EXCEPT																

DESIGN CRITERIA				UNFACTORED REACTIONS			
SPECIFIED LOADS:				1ST CASE MAX/MIN COMPONENT REACTIONS			
TOP CH.	LL	=	26.7 PSF	JT	COMBINED	SNOW	LIVE
BOT CH.	LL	=	6.0 PSF	D	2240	1492 / 0	0 / 0
TOTAL LOAD	=	40.1 PSF		F	2240	1492 / 0	0 / 0
SPACING = 24.0 IN. C/C							

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM				BRACING			
GIRDER TYPE: CSD Girder				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.13 FT.			
START DISTANCE = 0'-0"				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.			
START SPAN CARRIED = 19'-11-8"							
END DISTANCE = 10'-2-0"							
END SPAN CARRIED = 19'-11-8"							
END WALL WIDTH = 0'-0"							
APPLIED TO FRONT SIDE OF BOTTOM CHORD.							
-ADDT. LOADS BASED ON 55 % OF GSL							

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015				LOADING			
THIS DESIGN COMPLIES WITH:				TOTAL LOAD CASES: (4)			
-PART 9 OF CBC 2015, ABC 2019							
-PART 9 OF CBC 2012 (2019 AMENDMENT)							
-CSA 086-14							
-TPIC 2014							

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO				FR-TO			
A-B	-3010 / 0	-95.2	-95.2	E-B	0 / 1325	0.16 (1)	0.16 (1)
B-C	-2477 / 0	-95.2	-95.2	E-C	0 / 2868	0.36 (1)	0.36 (1)
D-C	-1758 / 0	0.0	0.0	A-E	0 / 2507	0.31 (1)	0.31 (1)
F-A	-2698 / 0	0.0	0.0				
F-E	0 / 0	-529.0	-529.0				
E-D	0 / 0	-529.0	-529.0				

ALLOWABLE DEFL. (LL) = L/360 (0.34")				NAIL VALUES			
CALCULATED VERT. DEFL. (LL) = L/999 (0.11")				PLATE GRIP (DRY) SHEAR SECTION			
ALLOWABLE DEFL. (TL) = L/360 (0.34")				(PSI) (PLI) (PLI)			
CALCULATED VERT. DEFL. (TL) = L/598 (0.20")				MAX MIN MAX MIN MAX MIN			
				MT20 650 371 1747 786 1987 1873			

PLATES (table is in inches)				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00			
JT TYPE	PLATES	W	LEN Y X	COMP=1.00 SHEAR=1.00 TENS=1.00			
A	MTWV-p	MT20	5.0 6.0 1.25 3.00				
B	TTW-m	MT20	4.0 4.0 4.0				
C	MTWV-l	MT20	4.0 6.0				
D	BMV1-p	MT20	3.0 8.0				
E	BMWVW-l	MT20	8.0 9.0 4.25 4.50				
F	BMV1-p	MT20	3.0 8.0				

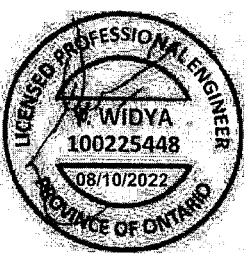
COMPANION LIVE LOAD FACTOR = 1.00				AUTOSOLVE RIGHT HEEL ONLY			

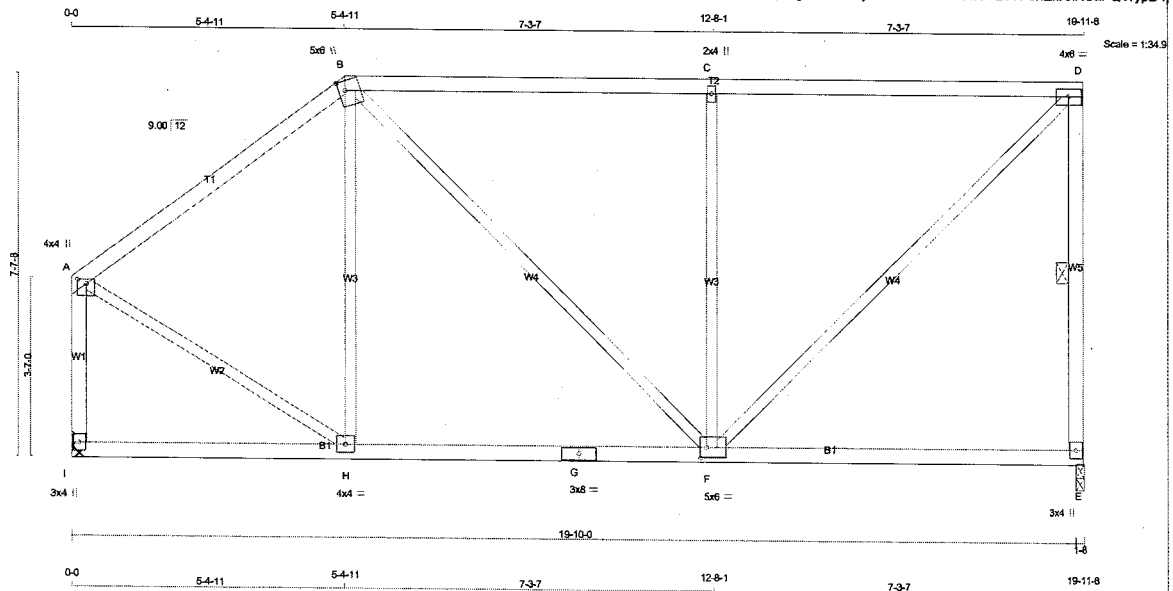
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.				NAIL VALUES			

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

JSI GRIP= 0.79 (C) (INPUT = 0.90)				JSI METAL= 0.32 (B) (INPUT = 1.00)			

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2							





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	SPF
B - D	2x4	DRY	SPF
E - D	2x4	DRY	SPF
I - A	2x4	DRY	SPF
I - G	2x4	DRY	SPF
G - E	2x4	DRY	SPF
ALL WEBS	2x3	DRY	SPF
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMW+p	MT20	4.0	4.0	1.00 2.00
B	TTWW+m	MT20	5.0	6.0	2.25 1.50
C	TMW+w	MT20	2.0	4.0	
D	TMW-l	MT20	4.0	6.0	
E	BMW+p	MT20	3.0	4.0	
F	BMWWW-l	MT20	5.0	6.0	2.50 1.50
G	BS-l	MT20	3.0	8.0	
H	BMW-l	MT20	4.0	4.0	
I	BMW+p	MT20	3.0	4.0	

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	BRG	BRG
VERT	DOWN	UPLIFT	IN-SX
E	1135 0	1135 0	1-8
I	1135 0	1135 0	1-8

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

UNFACTORED REACTIONS

1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM LIVE WIND DEAD SOIL
E	801	534 / 0 0 / 0 0 / 0 0 / 0 267 / 0 0 / 0
I	801	534 / 0 0 / 0 0 / 0 0 / 0 267 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.47 FT.

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PL) (LC) UNBRAC	MEMB.	FORCE (LBS) (LC)
FR-TO	-781 / 0	-95.2 -95.2 0.52 (1)	FR-TO	-244 / 13
A-B	-815 / 0	-95.2 -95.2 0.93 (1)	H-B	0 / 276
B-C	-815 / 0	-95.2 -95.2 0.93 (1)	F-C	-862 / 0
C-D	-815 / 0	-95.2 -95.2 0.93 (1)	F-D	0 / 1153
E-D	-1080 / 0	0.0 0.0 0.28 (1)	A-H	0 / 725
I-A	-1080 / 0	0.0 0.0 0.24 (1)		
I-H	0 / 0	-18.5 -18.5 0.16 (4)		
H-G	0 / 620	-18.5 -18.5 0.29 (4)		
G-F	0 / 620	-18.5 -18.5 0.29 (4)		
F-E	0 / 0	-18.5 -18.5 0.24 (4)		

DESIGN CRITERIA

SPECIFIED LOADS:

TDP	CH.	LL	PSF
	DL	= 6.0	PSF
	DL	= 7.4	PSF
	TOTAL LOAD	= 40.1	PSF

SPACING = 24.0 IN. GIC

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.67")

CALCULATED VERT. DEFL. (LL) = $L/999$ (0.03")

ALLOWABLE DEFL. (TL) = $L/360$ (0.67")

CALCULATED VERT. DEFL. (TL) = $L/999$ (0.10")

CSI: TC=0.93/1.00 (C-D-1), BC=0.29/1.00 (F-H-4), WB=0.92/1.00 (C-F-1), SSI=0.34/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

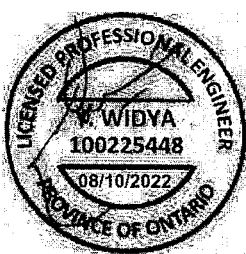
PLATE PLACEMENT TOL. = 0.250 inches

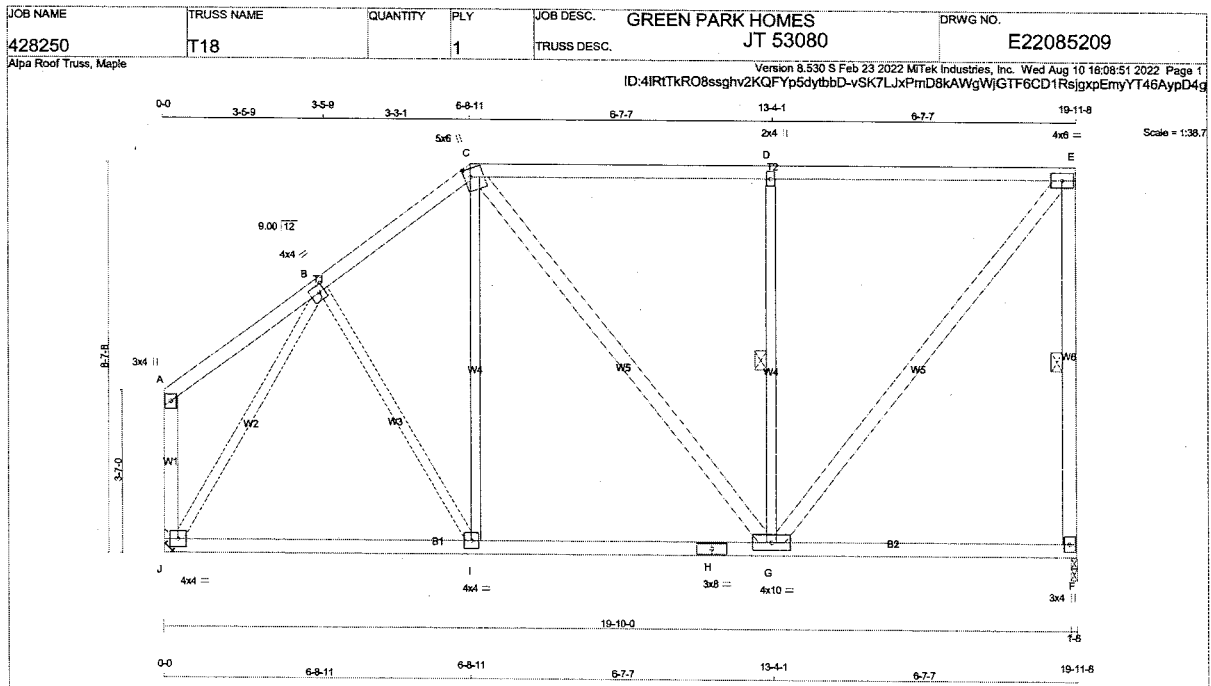
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (A) (INPUT = 0.90)

JSI METAL= 0.28 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 107 LBS

LUMBER				DESCR.	
N. L. G. A. RULES				BUILDING DESIGNER	
CHORDS SIZE				BEARINGS	
A - C	2x4	DRY	No.2	SPF	FACTORED
C - E	2x4	DRY	No.2	SPF	GROSS REACTION
F - E	2x4	DRY	No.2	SPF	JT VERT HORZ
J - A	2x4	DRY	No.2	SPF	F 1135 0
J - H	2x4	DRY	No.2	SPF	J 1135 0
H - F	2x4	DRY	No.2	SPF	
ALL WEBS 2x3 DRY No.2				SPF	A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT J. MINIMUM BEARING LENGTH AT JOINT J = 1-8.
EXCEPT					
C - G	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	3.0	4.0	
B	TMVW-I	MT20	4.0	4.0	2.00 1.50
C	TTWW+m	MT20	5.0	6.0	2.25 1.50
D	TMVW+w	MT20	2.0	4.0	
E	TMVW-L	MT20	4.0	6.0	
F	BMV+tp	MT20	3.0	4.0	
G	BMVWW-t	MT20	4.0	10.0	
H	BS-I	MT20	3.0	8.0	
I	BMVW-t	MT20	4.0	4.0	
J	BMVW-I	MT20	4.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					
BEARINGS					
	FACTORED	MAXIMUM FACTORED	INPUT	REQD	
	GROSS REACTION	GROSS REACTION	BRG	BRG	
JT	VERT HORZ	DOWN HORZ	UPLIFT	IN-SX	IN-SX
F	1135 0	1135 0	0	1-8	1-8
J	1135 0	1135 0	0	MECHANICAL	

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

UNFACTORED REACTIONS						
1ST LCASE	MAX MIN COMPONENT REACTIONS					
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	801 534/0	0/0	0/0	0/0	267/0	0/0
J	801 534/0	0/0	0/0	0/0	267/0	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 = 5.64 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0/22	-95.2 -95.2	0.17 (1)	10.00	B-I	0/114	0.03 (4)
B-C	-797/0	-95.2 -95.2	0.18 (1)	6.25	I-C	0/88	0.03 (4)
C-D	-674/0	-95.2 -95.2	0.74 (1)	5.64	C-G	0/89	0.01 (1)
D-E	-674/0	-95.2 -95.2	0.75 (1)	5.64	G-D	-783/0	0.37 (1)
F-E	-1084/0	0.0 0.0	0.37 (1)	6.07	G-E	0/1080	0.17 (1)
J-A	-125/0	0.0 0.0	0.03 (1)	7.81	J-B	-1110/0	0.88 (1)
J-I	0/560	-18.5 -18.5	0.23 (4)	10.00			
I-H	0/819	-18.5 -18.5	0.24 (4)	10.00			
H-G	0/619	-18.5 -18.5	0.24 (4)	10.00			
G-F	0/0	-18.5 -18.5	0.18 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C.C.

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/380 (0.67")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.75/1.00 (D-E-1), BC=0.24/1.00 (G-I-4), WB=0.88/1.00 (B-J-1), SSI=0.31/1.00 (D-E-1)

DOL LUMBER=1.00 NAIL=1.00 L.S BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

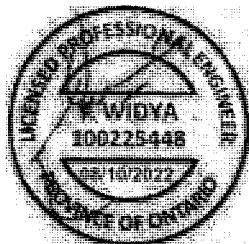
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

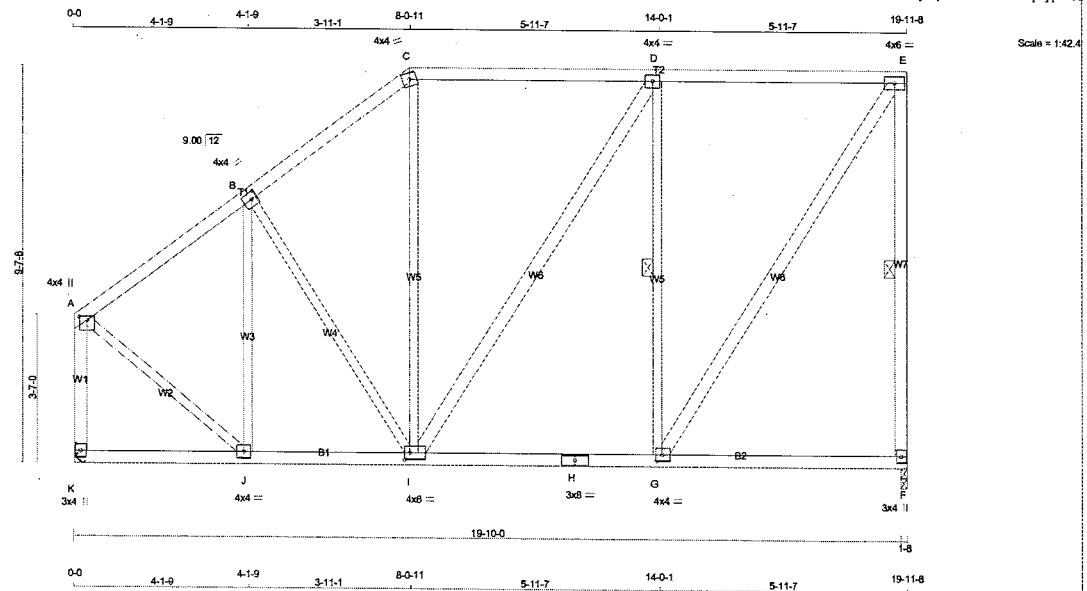
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (B) (INPUT = 0.90)
JSI METAL= 0.34 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
A TMW+p	MT20	4.0	4.0	1.00 2.00
B TMW+t	MT20	4.0	4.0	2.00 1.50
C TTW-m	MT20	4.0	4.0	
D TMW-w	MT20	4.0	4.0	
E TMW-t	MT20	4.0	6.0	
F BMV-t	MT20	3.0	4.0	
G BMW-t	MT20	4.0	4.0	2.00 1.75
H BS-t	MT20	3.0	8.0	
I BMW-w	MT20	4.0	6.0	2.00 1.50
J BMW-t	MT20	4.0	4.0	
K BMV-t	MT20	3.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	BRG	BRG
F	VERT	DOWN	IN-SX	IN-SX
K	HORIZ	UP	1-S	1-S
			MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE PERM
F	801	534 / 0	0 / 0
K	801	534 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LBS)	MAX. UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-TO						FR-TO			
A-B	-746 / 0	-95.2	-95.2	0.27 (1)	6.25	J-B	-408 / 0	0.30 (1)	10.00
B-C	-754 / 0	-95.2	-95.2	0.27 (1)	6.25	B-I	-59 / 0	0.07 (1)	10.00
C-D	-598 / 0	-95.2	-95.2	0.59 (1)	6.25	I-C	0 / 91	0.03 (4)	10.00
D-E	-561 / 0	-95.2	-95.2	0.59 (1)	6.25	I-D	0 / 61	0.01 (1)	10.00
E-F	-1091 / 0	0.0	0.0	0.48 (1)	6.05	G-D	-747 / 0	0.46 (1)	10.00
K-A	-1103 / 0	0.0	0.0	0.24 (1)	7.54	G-E	0 / 1039	0.17 (1)	10.00
K-J	0 / 0	-18.5	-18.5	0.07 (4)	10.00	A-J	0 / 787	0.18 (1)	10.00
J-I	0 / 619	-18.5	-18.5	0.14 (1)	10.00				
I-H	0 / 561	-18.5	-18.5	0.21 (4)	10.00				
H-G	0 / 561	-18.5	-18.5	0.21 (4)	10.00				
G-F	0 / 0	-18.5	-18.5	0.17 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 26.7 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.67")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.59/1.00 (C-D-1), BC=0.21/1.00 (G-I-4), WB=0.46/1.00 (D-G-1), SSI=0.28/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

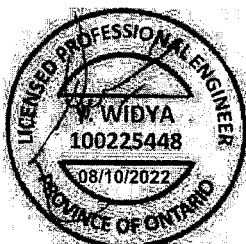
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 786

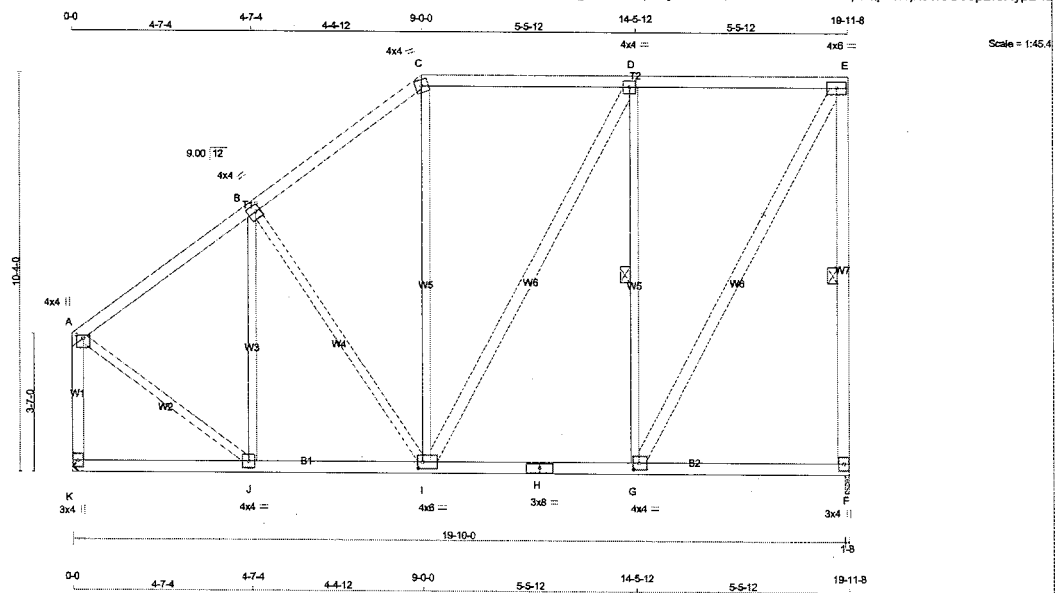
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (G) (INPUT = 0.80)
JSI METAL= 0.27 (G) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
F - E	2x4	DRY	No.2
K - A	2x4	DRY	No.2
K - H	2x4	DRY	No.2
H - F	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
I - D	2x4	DRY	No.2
G - E	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV+p	MT20	4.0	4.0	1.00	2.00
B	TMWV-i	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWV-i	MT20	4.0	4.0		
E	TMWV-i	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWV-i	MT20	4.0	4.0	2.00	1.75
H	BS-i	MT20	3.0	8.0		
I	BMWVW-i	MT20	4.0	6.0	2.00	1.50
J	BMWV-i	MT20	4.0	4.0		
K	BMV1+p	MT20	3.0	4.0		

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	DOWN	HORZ
F	1135	0	1135
K	1135	0	1135

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

UNFACTORED REACTIONS

1ST LC CASE	MAX. MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
F	801	534 / 0 0 / 0 0 / 0 0 / 0 267 / 0 0 / 0
K	801	534 / 0 0 / 0 0 / 0 0 / 0 267 / 0 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.
1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-F, D-G.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 MAX (PLF) CSI (LC)	MEMB. UNBRACED LENGTH FR-TO	FORCE (LBS) MAX CSI (LC)
FR-TO		FROM TO		
A-B	-769 / 0	-95.2 -95.2 0.35 (1) 6.25	J-B	-358 / 0 0.31 (1)
B-C	-734 / 0	-95.2 -95.2 0.34 (1) 6.25	B-I	-142 / 0 0.20 (1)
C-D	-561 / 0	-95.2 -95.2 0.49 (1) 6.25	I-C	0 / 78 0.03 (4)
D-E	-492 / 0	-95.2 -95.2 0.49 (1) 6.25	I-D	0 / 148 0.02 (1)
F-E	-1094 / 0	0.0 0.0 0.58 (1) 6.05	G-D	-777 / 0 0.57 (1)
K-A	-1100 / 0	0.0 0.0 0.24 (1) 7.55	G-E	0 / 1020 0.16 (1)
K-J	0 / 0	-18.5 -18.5 0.09 (4) 10.00	A-J	0 / 783 0.18 (1)
J-I	0 / 639	-18.5 -18.5 0.15 (1) 10.00		
I-H	0 / 492	-18.5 -18.5 0.18 (4) 10.00		
H-G	0 / 492	-18.5 -18.5 0.18 (4) 10.00		
G-F	0 / 0	-18.5 -18.5 0.14 (4) 10.00		

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.67")
CALCULATED VERT. DEFL.(TL) = L/959 (0.05")

CSI: TC=0.58/1.00 (E-F:1), BC=0.18/1.00 (G-I:4), WB=0.57/1.00 (D-G:1), SSI=0.25/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

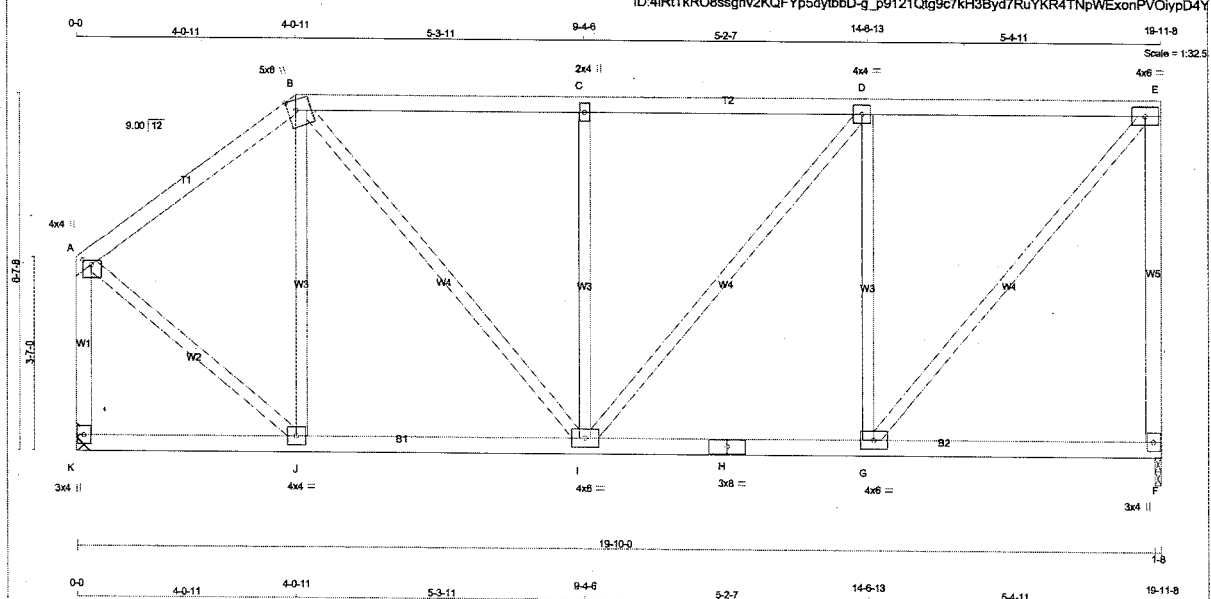
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (G) (INPUT = 0.90)

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
B - E	2x4	DRY	No.2
F - E	2x4	DRY	No.2
K - A	2x4	DRY	No.2
K - H	2x4	DRY	No.2
H - F	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMW+p	MT20	4.0	4.0	1.00 2.00
B	TTWW+m	MT20	5.0	6.0	2.25 1.75
C	TMW+w	MT20	2.0	4.0	
D	TMW-w	MT20	4.0	4.0	
E	TMW-w	MT20	4.0	6.0	
F	BMV1+p	MT20	3.0	4.0	
G	BMW-w	MT20	4.0	6.0	
H	BS-1	MT20	3.0	8.0	
I	BMW-w	MT20	4.0	6.0	
J	BMW-w	MT20	4.0	4.0	
K	BMV1+p	MT20	3.0	4.0	

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
F	1135	0	1135	0
K	1135	0	1135	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
F	801	534 / 0
K	801	534 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.84 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)
FR-TO				FR-TO			
A-B	-745 / 0	-95.2	-95.2 0.28 (1)	J-B	-365 / 0	0.28 (1)	0.28 (1)
B-C	-934 / 0	-95.2	-95.2 0.37 (1)	A-J	0 / 755	0.17 (1)	0.17 (1)
C-D	-935 / 0	-95.2	-95.2 0.39 (1)	G-E	0 / 1184	0.26 (1)	0.26 (1)
D-E	-755 / 0	-95.2	-95.2 0.38 (1)	H-I	0 / 538	0.12 (1)	0.12 (1)
F-E	-1094 / 0	0.0	0.0 1.00 (1)	G-D	-775 / 0	0.56 (1)	0.56 (1)
K-A	-1107 / 0	0.0	0.0 0.24 (1)	I-C	-542 / 0	0.39 (1)	0.39 (1)
				I-D	0 / 283	0.06 (1)	0.06 (1)
K-J	0 / 0	-18.5	-18.5 0.10 (4)				
J-I	0 / 588	-18.5	-18.5 0.15 (1)				
I-H	0 / 755	-18.5	-18.5 0.19 (1)				
H-G	0 / 755	-18.5	-18.5 0.19 (1)				
G-F	0 / 0	-18.5	-18.5 0.13 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
LL	26.7	PSF
BOT CH.	LL	PSF
LL	0.0	PSF
DL	7.4	PSF
TOTAL LOAD	40.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.67")

CALCULATED VERT. DEFL.(LL) = U 999 (0.03")

ALLOWABLE DEFL.(TL) = L/360 (0.67")

CALCULATED VERT. DEFL.(TL) = U 999 (0.06")

CSI: TC=1.00/1.00 (E-F-1), BC=0.19/1.00 (G-H-1), WB=0.56/1.00 (D-G-1), SS=0.24/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

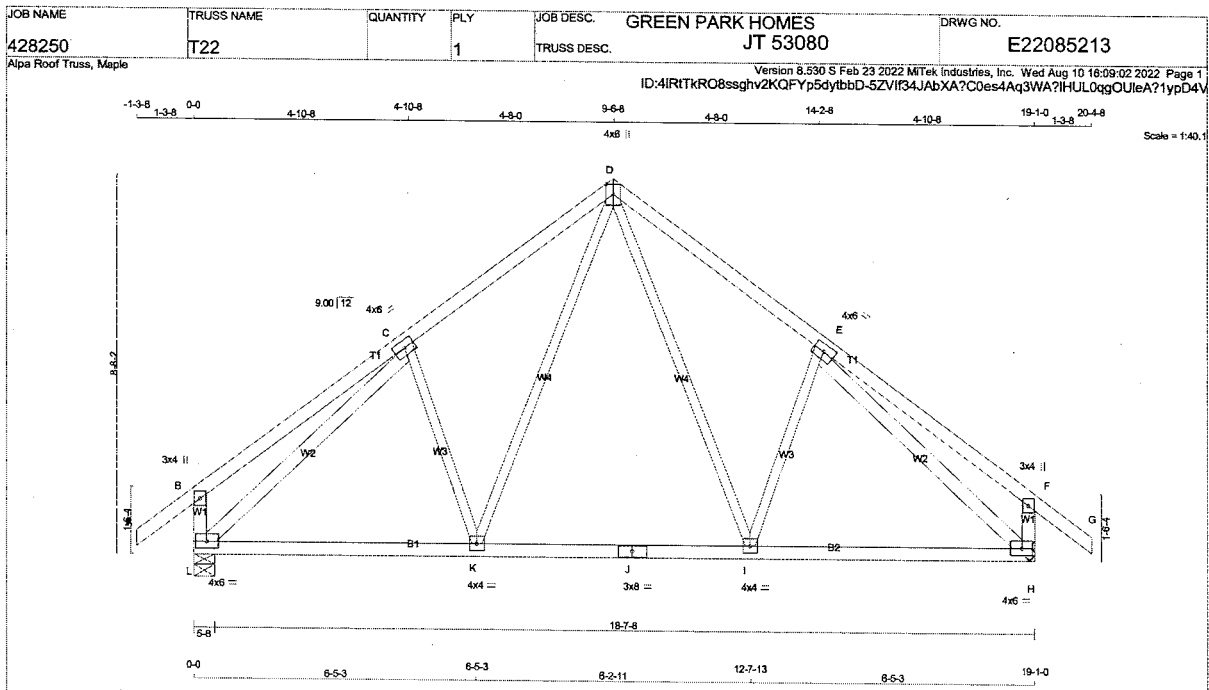
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (E) (INPUT = 0.90)

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

LATERAL BRACE(S) SHOWN SHALL BE 2x4 SPF#2

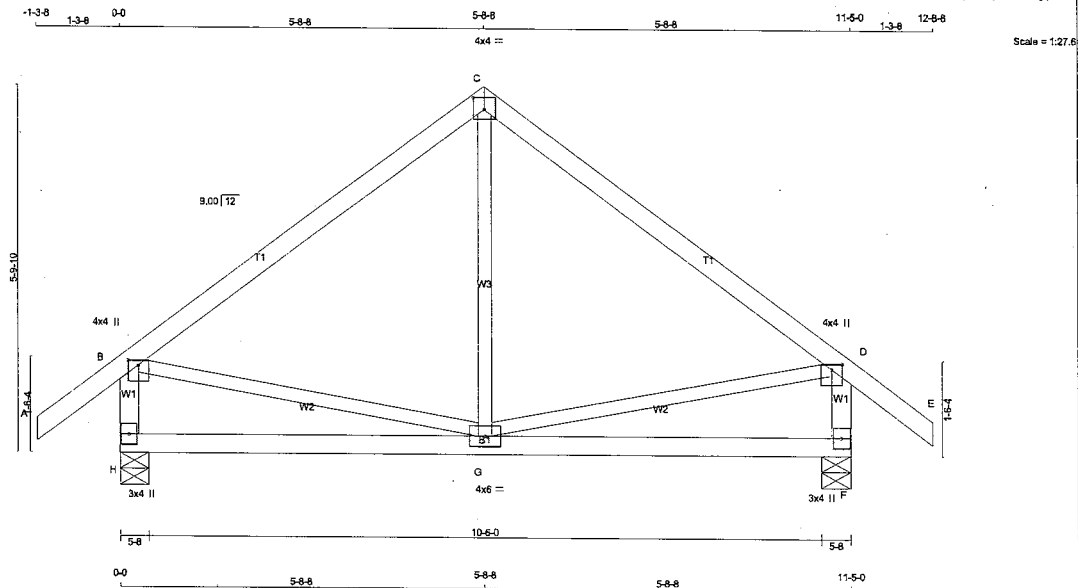




LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER												TOTAL WEIGHT = 4 X 92 = 368 lb			
N. L. G. A. RULES				BEARINGS												DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	SPF	FACTORED	MAXIMUM	FACTORED	INPUT	REQD				SPECIFIED LOADS:						
A - D	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG					TOP CH. LL = 26.7 PSF						
D - G	2x4	DRY	No.2	SPF	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		DL = 6.0 PSF						
L - B	2x4	DRY	No.2	SPF	L	1216	0	1216	0	5-8	1-8		BOT CH. LL = 0.0 PSF						
H - F	2x4	DRY	No.2	SPF	H	1216	0	1216	0	MECHANICAL			DL = 7.4 PSF						
L - J	2x4	DRY	No.2	SPF									TOTAL LOAD = 40.1 PSF						
J - H	2x4	DRY	No.2	SPF															
ALL WEBS EXCEPT				SPF									SPACING = 24.0 IN. C/C						
L - C	2x4	DRY	No.2	SPF									THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015						
E - H	2x4	DRY	No.2	SPF									THIS DESIGN COMPLIES WITH:						
DRY: SEASONED LUMBER.												- PART 9 OF CBC 2019, ABC 2019							
												- PART 9 OF CBC 2012 (2019 AMENDMENT)							
												- CSA 086-14							
												- TPIC 2014							
												(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD							
												ALLOWABLE DEFL.(LL) = L/360 (0.64")							
												CALCULATED VERT. DEFL.(LL) = L/999 (0.03")							
												ALLOWABLE DEFL.(TL) = L/360 (0.64")							
												CALCULATED VERT. DEFL.(TL) = L/999 (0.07")							
												CSI TC=0.36/1.00 (B-C:1), BC=0.24/1.00 (K-L:4), WB=0.71/1.00 (C-L:1), SSI=0.18/1.00 (C-D:1)							
												DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 CDM=1.10 SHEAR=1.10 TENS=1.10							
												COMPANION LIVE LOAD FACTOR = 1.00							
												AUTOSOLVE HEELS OFF							
												TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.							
												NAIL VALUES							
												PLATE GRIP(DRY) SHEAR SECTION							
												(PSI) (PLI) (PLI)							
												MAX MIN MAX MIN MAX MIN							
												MT20 650 371 1747 788 1987 1873							
												PLATE PLACEMENT TOL. = 0.250 inches							
												PLATE ROTATION TOL. = 5.0 Deg.							
												JSI GRIP= 0.85 (E) (INPUT = 0.90)							
												JSI METAL= 0.29 (E) (INPUT = 1.00)							

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/10/2022
PROVINCE OF ONTARIO



Scale = 1:27.6

TOTAL WEIGHT = 49 lb (M/F)

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TM/VV+p	MT20	4.0	4.0	1.00	2.00
C TTW+p	MT20	4.0	4.0	2.25	2.00
D TM/VV+p	MT20	4.0	4.0	1.00	2.00
F BM/V1+p	MT20	3.0	4.0		
G BM/VVW-t	MT20	4.0	6.0		
H BM/V1+p	MT20	3.0	4.0		

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
H	780	0	780	0
F	780	0	780	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
H	548	379 / 0	0 / 0
F	548	379 / 0	0 / 0

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

BRACINGS

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	FORCE	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX	UNBRAC	MEMB.	FORCE	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX	UNBRAC
		(LBS)		(PLF)														
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	G-C	-17 / 94	0.03 (4)										
B-C	-439 / 0	-95.2	-95.2	0.40 (1)	8.25	B-G	0 / 359	0.08 (1)										
C-D	-439 / 0	-95.2	-95.2	0.40 (1)	8.25	G-D	0 / 359	0.08 (1)										
D-E	0 / 39	-95.2	-95.2	0.13 (1)	10.00													
H-B	-740 / 0	0.0	0.0	0.08 (1)	7.81													
F-D	-740 / 0	0.0	0.0	0.08 (1)	7.81													
H-G	0 / 0	-18.5	-18.5	0.17 (4)	10.00													
G-F	0 / 0	-18.5	-18.5	0.17 (4)	10.00													

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
DL	=	6.0	PSF	
BOT CH.	LL	=	0.0	PSF
DL	=	7.4	PSF	
TOTAL LOAD	=	40.1	PSF	

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.38")
CALCULATED VERT. DEFL.(LL) = U/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = U/999 (0.03")

CSI: TC=0.40/1.00 (C-D-1), BC=0.17/1.00 (F-G-4), WB=0.08/1.00 (D-G-1), SS=0.17/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

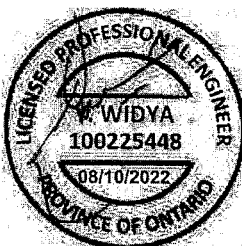
PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)
MAX	MIN	MAX
MT20	650	371
	1747	788
	1987	1873

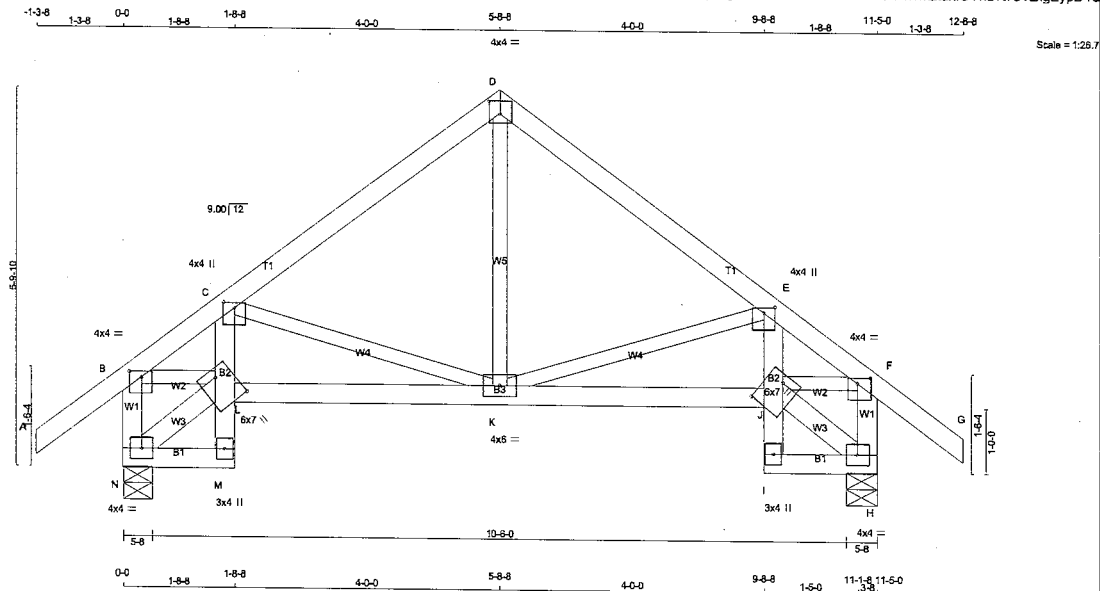
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (D) (INPUT = 0.90)
JSI METAL= 0.17 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	P.LATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	4.0	1.00	2.25
C	TMVW+p	MT20	4.0	4.0	1.00	2.00
D	TTW-p	MT20	4.0	4.0	2.25	2.00
E	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	TMVW-p	MT20	4.0	4.0	1.00	2.25
H	BMVW-1	MT20	4.0	4.0		
I	BMV-p	MT20	3.0	4.0		
J	BMVWVW-w	MT20	6.0	7.0	3.00	5.50
K	BMVWVW-t	MT20	4.0	6.0		
L	BMVWVW-w	MT20	6.0	7.0	3.00	5.50
M	BMV-p	MT20	3.0	4.0		
N	BMVW-1	MT20	4.0	4.0		

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	DOWN	UP/LIFT
N	780	0	5-8
H	780	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
N	548	379 / 0
H	548	379 / 0

PERM. LIVE WIND DEAD SOIL
0 / 0 0 / 0 170 / 0 0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE	VERT. LOAD LC1	MEMB.	FORCE
FR-TO	(LBS)	(PLF)	FR-TO	(LBS)
A-B	0 / 39	-95.2	K-D	0 / 257
B-C	-892 / 0	-95.2	K-E	-365 / 0
C-D	-520 / 0	-95.2	C-K	-365 / 0
D-E	-520 / 0	-95.2	N-L	-35 / 0
E-F	-892 / 0	-95.2	B-L	0 / 723
F-G	0 / 39	-95.2	J-H	-35 / 0
N-B	-745 / 0	0.0	J-F	0 / 723
H-F	-745 / 0	0.0		
N-M	0 / 28	-18.5		
M-L	0 / 16	0.0		
L-C	0 / 46	0.0		
L-K	0 / 750	-18.5		
K-J	0 / 750	-18.5		
J-I	0 / 16	0.0		
I-E	0 / 46	0.0		
I-H	0 / 28	-18.5		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.4 PSF

TOTAL LOAD = 40.1 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 NBC 2015, 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.38")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.01")
ALLOWABLE DEFL. (TL) = $L/360$ (0.38")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CSI: TC=0.20/1.00 (D-E-1), BC=0.17/1.00 (J-K-1), WB=0.16/1.00 (F-H-1), SS=0.14/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

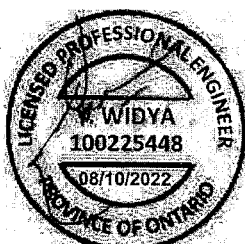
PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788 1987 1873

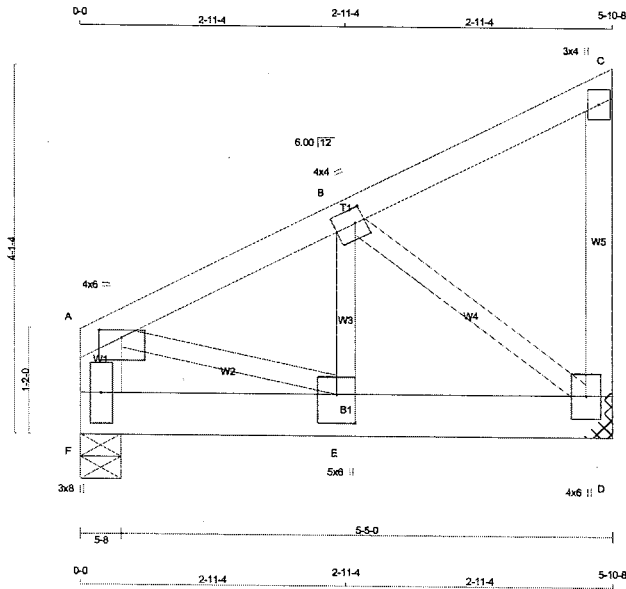
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER	SIZE	LUMBER	DESCR.
N. L. G. A. RULES			
CHORDS	SIZE		
F - A	2x6	DRY	SPF
A - C	2x4	DRY	SPF
D - C	2x4	DRY	SPF
F - D	2x6	DRY	SPF
ALL WEBS	2x3	DRY	SPF
DRY: SEASONED LUMBER.			

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F-A	12	TOP
A-C	12	TOP
C-D	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F-D	9	SIDE(242.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-p	MT20	4.0	6.0	1.00	3.00
B	TMWW-t	MT20	4.0	4.0	2.00	1.25
C	TMWW-p	MT20	3.0	4.0		
D	BMWW-t+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0	3.75	2.50
F	BMWW-t+p	MT20	3.0	8.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
F	1760	0	1760	0
D	1760	0	1760	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1243	828 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0
D	1243	828 / 0	0 / 0	0 / 0	0 / 0	415 / 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 = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	MEMB.	FORCE	MAX.	WEBS	MAX. FACTORED	MEMB.	FORCE	MAX.
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	FORCE	MAX
FR-TO	(LBS)	FROM TO	CSI (LC)	UNBRAC	LENGTH	FR-TO	(LBS)	CSI (LC)		
F-A	-1139 / 0	0.0	0.0	0.04 (1)	7.81	A-E	0 / 1386	0.17 (1)		
A-B	-1488 / 0	-95.2	-95.2	0.06 (1)	6.25	E-B	0 / 1386	0.17 (1)		
B-C	-117 / 0	-95.2	-95.2	0.05 (1)	6.25	B-D	-1687 / 0	0.20 (1)		
D-C	-116 / 0	0.0	0.0	0.01 (1)	7.81					
F-E	0 / 0	-504.1	-504.1	0.14 (1)	10.00					
E-D	0 / 1340	-504.1	-504.1	0.23 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: C3rdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 19-1-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 19-1-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
-ADDTL LOADS BASED ON 55 % OF GSL.

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
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL (LL) = L/360 (0.20")
CALCULATED VERT. DEFL (LL) = L/999 (0.01")
ALLOWABLE DEFL (TL) = L/360 (0.20")
CALCULATED VERT. DEFL (TL) = L/999 (0.02")

CSI TC=0.06/1.00 (A-B:1), BC=0.23/1.00 (D-E:1), WB=0.20/1.00 (B-D:1), SSI=0.29/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

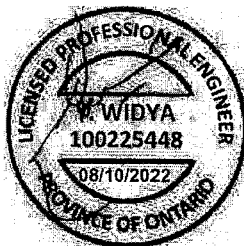
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

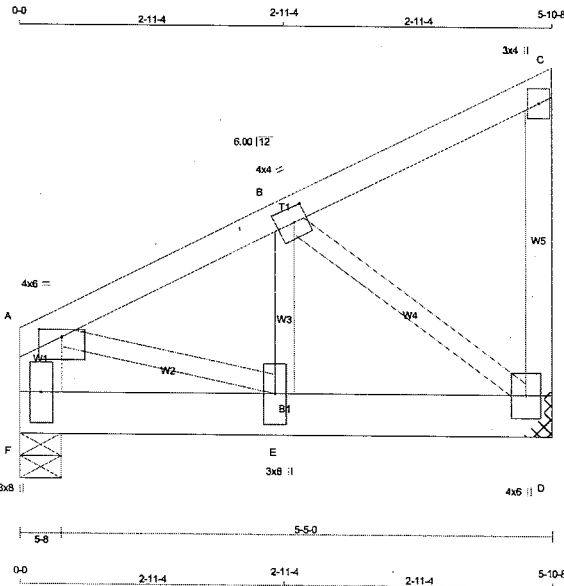
JSI GRIP= 0.67 (B) (INPUT = 0.90)
JSI METAL= 0.30 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MTEK Industries, Inc. Wed Aug 10 16:09:12 2022 Page 1
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Scale = 1:19.5

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

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

CHORDS #ROWS	SURFACE	LOAD(PLF)
TOP CHORDS : (0.122'X3') SPIRAL NAILS	SPACING (IN)	
F - A	2	TOP
A - C	1	TOP
C - D	1	TOP
BOTTOM CHORDS : (0.122'X3') SPIRAL NAILS		
F - D	2	SIDE(201.3)
WEBS : (0.122'X3') SPIRAL NAILS		
2x3	1	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-p	MT20	4.0	6.0	1.00	3.00
B	TMWV-w	MT20	4.0	4.0	2.00	1.75
C	TMV+p	MT20	3.0	4.0		
D	BMWV1+p	MT20	4.0	6.0		
E	BMWV-w	MT20	3.0	8.0		
F	BMV1+p	MT20	3.0	8.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
F	1517	0	1517	0
D	1517	0	1517	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
F	1071	713 / 0
D	1071	713 / 0

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

BRACINGS

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH FR-TO				
F-A	-967 / 0	0.0	0.0	A-E	0 / 1195	0.15 (1)	
A-B	-1280 / 0	-95.2	0.06 (1)	E-B	0 / 1129	0.14 (1)	
B-C	-111 / 0	-95.2	0.09 (1)	B-D	-1454 / 0	0.17 (1)	
D-C	-114 / 0	0.0	0.01 (1)				
F-E	0 / 0	-421.2	0.12 (1)				
E-D	0 / 1195	-421.2	0.19 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. CC

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 16-2-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 16-2-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL. LOADS BASED ON 55 % OF G.S.L.

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.06/1.00 (A-B:1), BC=0.19/1.00 (D-E:1), WB=0.17/1.00 (B-D:1), SS=0.24/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

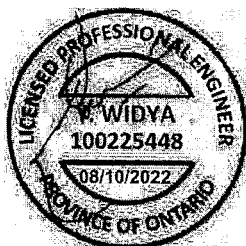
NAIL VALUES
PLATE GRIP (DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

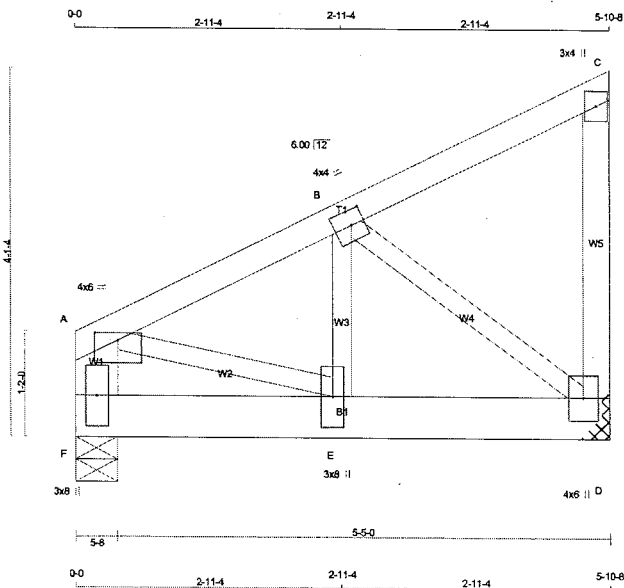
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.79 (E) (INPUT = 0.90)
JSI METAL = 0.35 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F-A 2 12	TOP	
A-C 1 12	TOP	
C-D 1 12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F-D 2 12	SIDE(92.4)	
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

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

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

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A TMVW-p	MT20	4.0	6.0	1.00	3.00	
B TMVW-t	MT20	4.0	4.0	2.00	1.75	
C TMVW-p	MT20	3.0	4.0			
D BMVW1+p	MT20	4.0	6.0			
E BMVW-t	MT20	3.0	8.0			
F BMV1+p	MT20	3.0	8.0			

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	HORZ	DOWN	HORZ	UPLIFT
F 877	0	877	0	5-8
D 877	0	877	0	1-8
				MECHANICAL

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

UNFACTORED REACTIONS	1ST LOASE	MAX/MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM.LIVE
F 619	412 / 0	0 / 0	0 / 0
D 619	412 / 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 = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1	MAX. MEMB. FORCE (LBS)	MAX. FACTORED
FR-TO		FROM TO	LENGTH FR-TO	
F-A	-621 / 0	0.0 0.0 0.02 (1)	7.81	A-E 0 / 692
A-B	-735 / 0	-95.2 -95.2 0.07 (1)	6.25	E-B 0 / 507
B-C	-13 / 0	-95.2 -95.2 0.07 (1)	6.25	B-D -842 / 0
D-C	-110 / 0	0.0 0.0 0.01 (1)	7.81	
F-E	0 / 0	-203.3 -203.3 0.06 (1)	10.00	
E-D	0 / 669	-203.3 -203.3 0.10 (1)	10.00	

TOTAL WEIGHT = 2 X 29 = 58 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. GC

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 8-6-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 8-6-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADTTL. LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.07/1.00 (A-B:1), BC=0.10/1.00 (D-E:1), WB=0.10/1.00 (B-D:1), SS=0.11/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

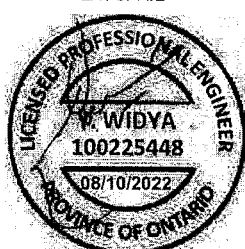
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (E) (INPUT = 0.90)
JSI METAL= 0.20 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME Alpa Roof Truss, Maple	TRUSS NO. T25	QUANTITY 1	JOB DESC. GREEN PARK HOMES	DRAWING NO. JT 53080	DATE E22085219
Version 8.530 S Feb 23 2022 MITek Structures, Inc. Wed Aug 10 16:09:18 2022 Page 1 ID:4IRtTKRO8ssghv2KQFYpdybbD-deTL0YGLPWVwEioRSauqWkmsm1kkAEW0ZsyD4F					

Scale = 1/32"

LUMBER

N L G A RULES	CHORDS	SIZE	LUMBER	DESCR.	SPF
A - C	2x6	DRY	2100F 1.8E	SPF	
C - E	2x6	DRY	2100F 1.8E	SPF	
D - G	2x6	DRY	2100F 1.8E	SPF	
G - I	2x6	DRY	2100F 1.8E	SPF	
I - L	2x6	DRY	2100F 1.8E	SPF	
L - N	2x6	DRY	2100F 1.8E	SPF	
N - R	2x6	DRY	2100F 1.8E	SPF	
R - AC	2x6	DRY	2100F 1.8E	SPF	
AC - V	2x6	DRY	2100F 1.8E	SPF	
V - Q	2x6	DRY	2100F 1.8E	SPF	

REINFORCING MEMBERS

MEMBER	SIZE	LUMBER	DESCR.	SPF
HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF

ALL WEBS 2x4 DRY No.2 SPF

EXCEPT

- C - AF 2x4 DRY 2100F 1.8E SPF
- D - AE 2x4 DRY 2100F 1.8E SPF
- E - AD 2x4 DRY 2100F 1.8E SPF
- H - AA 2x4 DRY 2100F 1.8E SPF

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TBMW+1	MT20	10.0	12.0	3.75	
C TTWW+M	MT20	10.0	12.0	3.50	3.75
D TWMM+	MT20	6.0	7.0	2.50	2.25
E TTWM	MT20	8.0	9.0	5.00	3.75
F TBMW++	MT20	6.0	6.0	2.75	1.50
G TS-	MT20	5.0	8.0		
H TMW+-	MT20	5.0	6.0	2.50	1.75
I TTWM-m	MT20	8.0	10.0	3.00	4.50
J TMW+m	MT20	3.0	6.0		
K TBMW++	MT20	4.0	6.0		
L TTWM-m	MT20	8.0	9.0	Edge	3.25
M TBMW+	MT20	5.0	6.0		
N TS-	MT20	5.0	6.0		
P TBMW+-	MT20	8.0	9.0	4.00	4.00
Q TBMW+1	MT20	10.0	12.0	3.75	Edge
S TBMW+w	MT20	3.0	6.0		
T U W					
T BMMW+	MT20	4.0	6.0		
V BS-	MT20	6.0	7.0		
X BMMW+	MT20	5.0	6.0		
Y BS-	MT20	6.0	7.0		
Z BMMW++	MT20	5.0	6.0		
AA BMMW+	MT20	5.0	6.0	2.75	2.50
AB BMMW+	MT20	5.0	6.0	2.50	2.25
AC BS-	MI16	5.0	17.5		
AD BMMW+	MT20	6.0	10.0	2.50	3.00
AE BMMW+	MT20	6.0	7.0	2.50	2.25
AF BMMW+	MT20	6.0	10.0	2.50	3.75
AG BMM+w	MT20	3.0	6.0		

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

WIDYA
100225448
08/10/2022
PROVINCE OF ONTARIO

DESIGN CRITERIA

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

DESIGN CRITERIA

- LEFT SETBACK = 3'-4"-12
- RIGHT SETBACK = 17'-8-0
- END SETBACK = 2'-0-0
- END WALL WIDTH = 0'-0
- CORNER FRAMING TYPE: CONVENTIONAL
- APPLIED TO FRONT SIDE
- ADD TL LOADS BASED ON 100 % OF GSL
- LOADS APPLIED TO FIRST 9'-4"-12 OF SPAN MEASURED FROM THE LEFT.

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

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
- (80% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD
- ALLOWABLE DEFL.(LL)= L/360 (1.83")
- CALCULATED VERT. DEFL.(LL)= U/999 (0.54")
- ALLOWABLE DEFL.(TL)= L/180 (3.67")
- CALCULATED VERT. DEFL.(TL)= U/868 (0.76")
- TSI= TC=0.43/1.00 (D-E), BC=0.95/1.00 (AD-AE), WB=0.89/1.00 (H-AA-2), SS=0.29/1.00 (K-L-3)
- COL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 DOMP=1.00 SHEAR=1.00 TENS=1.00
- SNOW LOAD IMPORTANCE FACTOR = 1.00
- WIND LOAD IMPORTANCE FACTOR = 1.00
- LIVE LOAD IMPORTANCE FACTOR = 1.00
- COMPANION LIVE LOAD FACTOR = 1.00
- AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY)	PLATE GRIP(WET)	MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747	788	1987
MI16	438	302	2547	1256	4283

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428250	T25		1	GREEN PARK HOMES JT 53080	E22085219(2)

Alpa Roof Truss, Maple

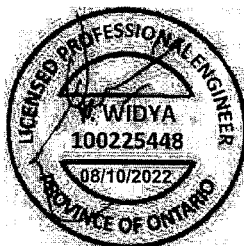
Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:09:21 2022 Page 2
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CONNECTION REQUIREMENTS

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, $C_p C_g$, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

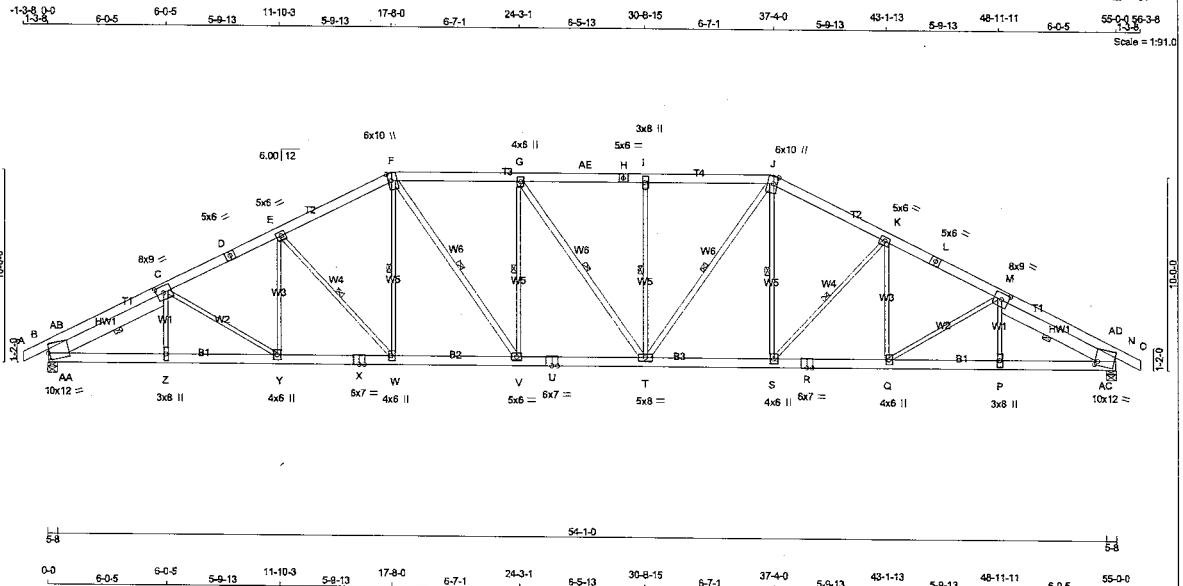
LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428250	T27		1	TRUSS DESC.	JT 53080	E22085221

Alpa Roof Truss, Maple

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LUMBER	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - O	2x6	DRY	No.2	SPF
O - X	2x6	DRY	No.2	SPF
X - U	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - N	2x6	DRY	No.2	SPF

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

ALL WEBS EXCEPT F - V 2x4 DRY No.2
G - T 2x4 DRY No.2
T - J 2x4 DRY No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)	TYPE	PLATES	W	LEN	Y	X
JT	MBMW1-m	MT20	10.0	12.0	4.75	0.50
B	MBMW1-m	MT20	8.0	9.0	4.00	4.00
C	MBMW1-m	MT20	8.0	9.0	4.00	4.00
D, H, L						
D	TS-1	MT20	5.0	6.0		
E	MBMW1-m	MT20	5.0	6.0		
F	TTWW1-m	MT20	6.0	10.0	Edge	2.25
G	MBMW1-m	MT20	4.0	5.0		
H	MBMW1-m	MT20	3.0	6.0		
J	TTWW1-m	MT20	6.0	10.0	Edge	2.25
K	MBMW1-m	MT20	5.0	6.0		
M	MBMW1-m	MT20	8.0	9.0	4.00	4.00
N	MBMW1-m	MT20	10.0	12.0	2.25	1.50
P	MBMW1-m	MT20	3.0	6.0		
Q, S, W, Y						
R	BS-1	MT20	4.0	6.0		
T	MBMW1-m	MT20	5.0	6.0		
V	MBMW1-m	MT20	5.0	6.0		
Z	MBMW1-m	MT20	3.0	6.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
B	4684	0	4684	141
N	4684	0	4684	0

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 214 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 214 LBS. FACTORED UPLIFT

PROVIDE FOR 141 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM. LIVE
B	3457	2028	0	578
N	3457	2028	0	578

HORIZONTAL REACTIONS	B	0	0	0	101	101	0	0	0	0
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BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, N

BRACING
FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.87 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

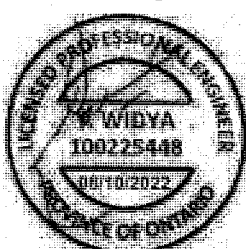
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-W, F-W, F-V, G-V, G-T, H-T, J-T, J-S, K-S, C-AA, M-AC.

LOADING
TOTAL LOAD CASES: (16)

CHORDS	MEMB.	MAX. FACTORED	FORCE	VERT.	LOAD	LC1	MAX	MAX.	UNBRAC	WEBS	MEMB.	MAX. FACTORED	FORCE	MAX	CS1	LC2
FR-TO										FR-TO						
A-B	0/1	-120.3	-120.3	0.09	(2)	10.00	Z-C	0/284	0.07	(17)						
B-AB	-5498/189	-120.3	-120.3	0.32	(1)	3.52	C-Y	-403/138	0.35	(2)						
AB-C	-3678/243	-120.3	-120.3	0.26	(2)	4.28	Y-E	0/451	0.10	(5)						
C-D	-7216/300	-120.3	-120.3	0.60	(1)	2.87	E-W	-1280/217	0.67	(2)						
D-E	-7216/300	-120.3	-120.3	0.50	(1)	2.87	W-F	-80/1211	0.27	(2)						
E-F	-6476/276	-120.3	-120.3	0.54	(1)	3.09	F-V	-68/1588	0.26	(3)						
F-G	-6595/247	-132.8	-132.8	0.67	(1)	2.00	V-G	-1043/140	0.65	(3)						
G-AE	-6595/247	-132.8	-132.8	0.67	(1)	2.00	G-T	-1012/895	0.73	(2)						
AE-H	-6595/247	-132.8	-132.8	0.67	(1)	2.00	T-I	-1043/128	0.65	(3)						
H-I	-6595/247	-132.8	-132.8	0.67	(1)	2.00	T-J	-64/1580	0.25	(2)						
I-J	-6595/246	-132.8	-132.8	0.65	(1)	2.00	S-J	-81/1216	0.27	(3)						
J-K	-6477/276	-120.3	-120.3	0.54	(1)	3.09	S-K	-1279/217	0.67	(3)						
K-L	-7216/300	-120.3	-120.3	0.60	(1)	2.87	K	0/450	0.10	(6)						
L-M	-7216/300	-120.3	-120.3	0.60	(1)	2.87	Q-M	-404/138	0.35	(3)						
M-AD	-3678/243	-120.3	-120.3	0.26	(3)	4.28	P-M	0/285	0.07	(17)						
AD-N	-5498/189	-120.3	-120.3	0.32	(1)	3.52	AA-AB	0/2393	0.00	(1)						
N-O	0/1	-120.3	-120.3	0.09	(3)	10.00	AA-C	-4084/63	0.45	(1)						
B-AA	-268/3285	-39.5	-39.5	0.41	(1)	6.25	AC-AD	-4085/64	0.45	(1)						
AA-Z	-320/6640	-39.5	-39.5	0.88	(1)	6.25										
Z-Y	-321/6637	-39.5	-39.5	0.87	(1)	6.25										
Y-X	-214/6468	-39.5	-39.5	0.85	(1)	6.25										
X-W	-214/6468	-39.5	-39.5	0.85	(1)	6.25										
W-V	-70/5772	-39.5	-39.5	0.77	(1)	6.25										
V-U	-22/6596	-39.5	-39.5	0.86	(1)	6.25										
U-T	-22/6596	-39.5	-39.5	0.86	(1)	6.25										
T-S	0/5773	-39.5	-39.5	0.77	(1)	10.00										
S-R	-73/6468	-39.5	-39.5	0.86	(1)	6.25										
R-Q	-73/6468	-39.5	-39.5	0.86	(1)	6.25										
Q-P	-181/6637	-39.5	-39.5	0.87	(1)	6.25										
P-AC	-180/6641	-39.5	-39.5	0.88	(1)	6.25										
AC-N	-127/3285	-39.5	-39.5	0.41	(1)	6.25										

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF 17.5 PSF AT (30-40) FT-N-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpG, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM) INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-N-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 6.00/12 AND RESPECTIVE HILL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

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

THIS DESIGN COMPLIES WITH:
- PART 4 OF NBCC 2015, ABC 2019
- PART 4 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.35")
ALLOWABLE DEFL.(TL) = L/750 (0.37")
CALCULATED VERT. DEFL.(TL) = L/999 (0.51")

CS1: TC=0.67/1.00 (F-G-1), BC=0.88/1.00 (Z-AA-1), WB=0.73/1.00 (G-T-2), SS1=0.36/1.00 (F-G-2)

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

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

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (M) (INPUT = 0.90)
JSI METAL= 0.86 (U) (INPUT = 1.00)

JOB NAME	TRUSS NO.	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428250	T29	1		TRUSS DESC.	JT 53080	E22085223

Alpa Roof Truss, Maple

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Scale = 1/8\"

LUMBER	N.L.G.A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF	
F - F	2x6	DRY	No.2	SPF	
H - H	2x6	DRY	No.2	SPF	
J - J	2x6	DRY	No.2	SPF	
L - L	2x6	DRY	No.2	SPF	
O - Q	2x6	DRY	No.2	SPF	
R - P	2x6	DRY	No.2	SPF	
B - AD	2x6	DRY	2100F 1.8E	SPF	
AD - AA	2x6	DRY	2100F 1.8E	SPF	
AA - X	2x6	DRY	2100F 1.8E	SPF	
X - T	2x6	DRY	2100F 1.8E	SPF	
T - N	2x4	DRY	No.2	SPF	
S - R	2x6	DRY	2100F 1.8E	SPF	

REINFORCING MEMBERS	HW1	2x8	DRY	No.2	SPF
ALL WEBS	2x4	DRY	No.2	SPF	
EXCEPT	U - S	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	TYPE	PLATES	W	LEN	Y	X
B	TBMWV1-I	MT20	10.0	12.0	3.50	
C	TMWVV-t	MT20	6.0	10.0	2.25	4.25
D	TS-4	MT20	5.0	6.0		
E	TMWV-t	MT20	4.0	6.0		
F	TTWV-m	MT20	6.0	9.0	4.25	3.00
G	TMWV-t	MT20	4.0	6.0		
H	TS-4	MT20	5.0	6.0		
I	TMW+w	MT20	2.0	4.0		
J	TTWV+m	MT20	8.0	9.0	Edge 3.25	
K	TMWV-t	MT20	4.0	6.0	2.00	2.50
L	TTWV-m	MT20	6.0	10.0	3.25	4.25
M	TMWVV-t	MT20	6.0	10.0	2.50	4.50
N	TMV+p	MT20	2.0	4.0		
O	DTW+m	MT20	5.0	8.0		
P	TMWV-t	MT20	6.0	10.0	2.25	5.00
R	BMV+1	MT20	8.0	9.0	Edge 3.50	
S	BMVWWW-t	MT20	10.0	16.0	5.00	8.25
T	BMV+p	MT20	2.0	4.0		
U	BMWV-t	MT20	6.0	10.0	3.00	3.75
V	BMWV+t	MT20	5.0	6.0	2.00	1.75
W	BMWV-t	MT20	4.0	6.0	2.00	2.75
X	BS-1	MT18HS	6.0	14.0		
Y	BMWV+t	MT20	4.0	6.0	2.50	2.00
Z	BMWVV-t	MT20	5.0	8.0	2.50	2.00
AA	BS-1	MT18HS	6.0	14.0		
AB	BMWV+t	MT20	4.0	6.0	2.75	1.75
AC	BMWV-t	MT20	4.0	6.0		
AD	BS-1	MT20	6.0	7.0		
AE	BMWV-t	MT20	4.0	6.0		
AF	BMV+w	MT20	2.0	4.0		

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

ENGINEER'S SEAL:
WIDYA
100225448
08/10/2022
PROVINCE OF ONTARIO

DESIGN CRITERIA

DESIGNED TO BEVERLY BY

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT HORZ	DOWN HORZ UPLIFT IN-SX	IN-SX	
B 4789 0	4789 182 -372 5-8	5-3	
R 4836 0	4836 0 -392 5-8	5-8	

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 372 LBS. FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT R FOR 392 LBS. FACTORED UPLIFT

PROVIDE FOR 182 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE	SNOW	MAX/MIN COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL	
B 3527	2128 / 0	607 / 0 0 / 0 219 / -775 792 / 0 0 / 0
R 3561	2152 / 0	611 / 0 0 / 0 171 / -793 798 / 0 0 / 0

HORIZONTAL REACTIONS

S	—	0 / 0	0 / 0	0 / 0	130 / -78	0 / 0	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIDG CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2

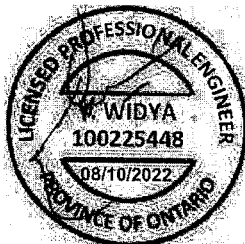
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428250	T29		1	GREEN PARK HOMES JT 53080	E22085223(2)
Alpa Roof Truss, Maple		Version 8.530 S Feb 23 2022 MITek Industries, Inc. Wed Aug 10 16:09:41 2022 Page 2			
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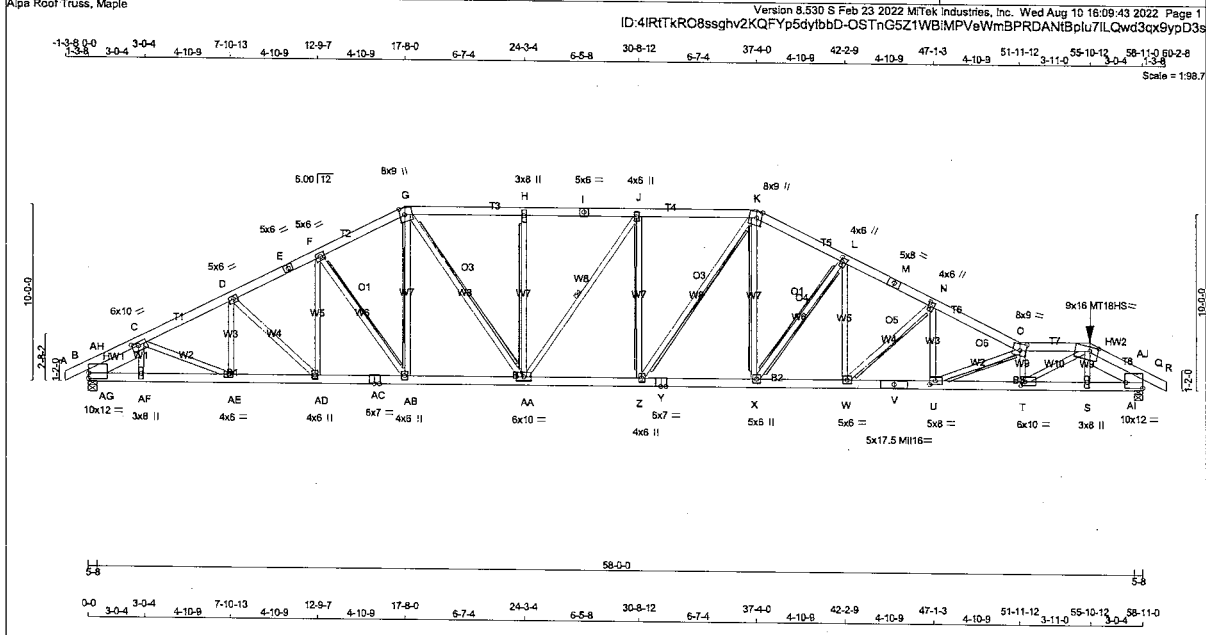
CONNECTION REQUIREMENTS

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

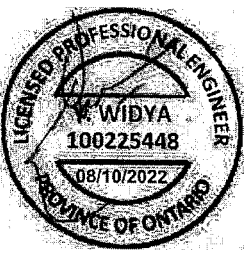
WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM), INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE, TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2





LUMBER N. L. G. A. RULES CHORDS SIZE A - E 2x6 DRY No.2 SPF E - G 2x6 DRY No.2 SPF G - I 2x6 DRY No.2 SPF I - K 2x6 DRY No.2 SPF K - M 2x6 DRY 1650F 1.5E SPF M - O 2x6 DRY 1650F 1.5E SPF O - P 2x6 DRY 1650F 1.5E SPF P - R 2x6 DRY No.2 SPF R - AC 2x6 DRY 2100F 1.8E SPF AC - Y 2x6 DRY 2100F 1.8E SPF Y - V 2x6 DRY 2100F 1.8E SPF V - Q 2x6 DRY 2100F 1.8E SPF REINFORCING MEMBERS HW1 2x8 DRY No.2 SPF HW2 2x8 DRY No.2 SPF ALL WEBS 2x4 DRY No.2 SPF EXCEPT T - P 2x4 DRY 1650F 1.5E SPF DRY, SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED INPUT REQD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX B 5007 0 5007 141 -217 5-8 5-7 Q 5022 0 5022 0 -261 5-8 5-7 PROVIDE ANCHORAGE AT BEARING JOINT B FOR 217 LBS. FACTORED UPLIFT PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 261 LBS. FACTORED UPLIFT PROVIDE FOR 141 LBS. FACTORED HORIZONTAL REACTION AT JOINT B UNFACTORED REACTIONS 1ST LCASE MAX/MIN COMBINED REACTIONS JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL B 3896 2168 / 0 619 / 0 0 / 0 91 / -740 911 / 0 0 / 0 Q 3705 2185 / 0 619 / 0 0 / 0 107 / -765 901 / 0 0 / 0 HORIZONTAL REACTIONS B 0 / 0 0 / 0 0 / 0 101 / -101 0 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q BRACING FOR SECTION G-K, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT. FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.50 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 8.25 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 LATERAL BRACE(S) AT 1/2 LENGTH OF J-A-A. 2x4 DRY SPF No.2 T-BRACE AT F-A-B, G-A-B, K-X, N-W, O-U, K-Z, G-A-A, J-Z, H-A-A 2x4 DRY SPF No.2 H-BRACE AT L-X FASTEN T AND L-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS AT 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. LOADING TOTAL LOAD CASES: (18) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. FACTORED (PLF) CSI (LBS) MAX. UNBRACED MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. FACTORED (PLF) CSI (LBS) FR-TO FROM TO LENGTH FR-TO FROM TO A-B 0 / 1 -120.3 -120.3 0.10 (2) 10.00 AF-C 0 / 254 0.04 (4) B-AH -5429 / 224 -120.3 -120.3 0.22 (1) 3.51 C-AE 0 / 1002 0.18 (1) AH-C -3491 / 164 -120.3 -120.3 0.13 (2) 4.48 AE-D -250 / 84 0.06 (8) C-D -8061 / 310 -120.3 -120.3 0.64 (1) 2.62 D-AD -599 / 133 0.34 (2) D-E -7745 / 308 -120.3 -120.3 0.80 (1) 2.72 AD-F -27 / 575 0.10 (2) E-F -7745 / 308 -120.3 -120.3 0.80 (1) 2.72 F-AB -1218 / 209 0.56 (2) F-G -7137 / 288 -120.3 -120.3 0.54 (1) 2.89 AB-G -94 / 1258 0.22 (2) G-H -7409 / 252 -132.8 -132.8 0.83 (1) 2.00 X-K -136 / 2157 0.38 (3) H-I -7409 / 252 -132.8 -132.8 0.85 (1) 2.00 X-L -2321 / 261 0.85 (3) I-J -7409 / 252 -132.8 -132.8 0.85 (1) 2.00 W-L -88 / 1799 0.32 (3) J-K -7635 / 291 -132.8 -132.8 0.88 (1) 2.00 W-N -2417 / 223 0.84 (3) K-L -7684 / 345 -120.3 -120.3 0.30 (1) 3.45 U-N -36 / 1820 0.32 (1) L-M -9240 / 400 -120.3 -120.3 0.35 (1) 3.17 U-O -3528 / 232 0.57 (1) M-N -9240 / 400 -120.3 -120.3 0.35 (1) 3.17 T-O -4005 / 221 0.48 (1) N-O -11115 / 469 -120.3 -120.3 0.48 (1) 2.78 T-P -278 / 7433 0.95 (1) O-P -12918 / 577 -120.3 -120.3 0.47 (1) 2.50 S-P 0 / 579 0.12 (1) P-AJ -3451 / 215 -120.3 -120.3 0.12 (1) 4.47 Z-K -85 / 1385 0.24 (2) AJ-Q -5289 / 242 -120.3 -120.3 0.20 (1) 3.64 G-AA -80 / 1932 0.34 (3) Q-R 0 / 1 -120.3 -120.3 0.10 (3) 10.00 Z-J -908 / 140 0.52 (9) AA-H -1053 / 129 0.62 (2) B-AG -235 / 3123 -39.5 -39.5 0.26 (1) 6.25 AA-J -1380 / 801 0.99 (3) AG-AF -340 / 6312 -39.5 -39.5 0.43 (1) 6.25 P-AI -4699 / 174 0.39 (1) AF-AE -342 / 6303 -39.5 -39.5 0.39 (1) 6.25 AG-AH -74 / 2702 0.00 (1) AE-AD -290 / 7221 -39.5 -39.5 0.43 (1) 6.25 AG-AC -4429 / 148 0.36 (1) AD-AC -193 / 6932 -39.5 -39.5 0.42 (1) 6.25 AI-AJ -49 / 2542 0.00 (1) AC-AB -193 / 6932 -39.5 -39.5 0.42 (1) 6.25 AB-AA -74 / 6373 -39.5 -39.5 0.39 (1) 6.25 AA-Z 0 / 7635 -39.5 -39.5 0.45 (1) 10.00 Z-Y 0 / 7039 -39.5 -39.5 0.42 (1) 10.00 Y-X 0 / 7039 -39.5 -39.5 0.42 (1) 10.00 X-W -133 / 8268 -39.5 -39.5 0.49 (1) 6.25 W-V -295 / 9967 -39.5 -39.5 0.57 (1) 6.25 V-U -295 / 9967 -39.5 -39.5 0.57 (1) 6.25 U-T -507 / 13183 -39.5 -39.5 0.94 (1) 6.25 T-S -252 / 6502 -39.5 -39.5 0.59 (1) 6.25 S-AI -253 / 6457 -39.5 -39.5 0.48 (1) 6.25 AI-Q -127 / 3064 -39.5 -39.5 0.30 (1) 6.25 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX. MAX+ FACE DIR. TYPE HEEL CONN. P 55-10-12 -35 -36 7 FRONT VERT TOTAL C1 CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED. TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2 (8)			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 35.1 PSF DL = 8.0 PSF BOT CH. LL = 10.5 PSF DL = 7.4 PSF TOTAL LOAD = 59.0 PSF SPACING = 24.0 IN. C/C LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F. LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 GIRDER TYPE: CPrimeHip LEFT SETBACK = 17-8.0 RIGHT SETBACK = 3-0.4 END SETBACK = 2-0.0 END WALL WIDTH = 0-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE -ADDTL. LOADS BASED ON 100 % OF GSL LOADS APPLIED TO FIRST 3-0.4 OF SPAN MEASURED FROM THE RIGHT. THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015 THIS DESIGN COMPLIES WITH: -PART 4 OF CBC 2018, ABC 2019 -PART 4 OF OBC 2012 (2019 AMENDMENT) -CSA 086-14 -TPIC 2014 DESIGN ASSUMPTIONS -SLOPE REDUCTION FACTOR USED -PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED. (80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL. (LL) = L/360 (1.96") CALCULATED VERT. DEFL. (LL) = L/999 (0.54") ALLOWABLE DEFL. (TL) = L/800 (3.53") CALCULATED VERT. DEFL. (TL) = L/916 (0.77") CSI: TC=0.88/1.00 (J-K:1), BC=0.94/1.00 (T-U:1), WB=0.99/1.00 (J-A-A:3), SSI=0.39/1.00 (J-K:3) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 SNOW LOAD IMPORTANCE FACTOR = 1.00 WIND LOAD IMPORTANCE FACTOR = 1.00 LIVE LOAD IMPORTANCE FACTOR = 1.00 COMPANION LIVE LOAD FACTOR = 1.00 AUTOSOLVE HEELS OFF TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873 MT18HS 586 403 2455 1382 3163 3004 MT16 438 302 2547 1256 4283 1816 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP = 0.89 (C) (INPUT = 0.90) JSI METAL = 0.99 (Y) (INPUT = 1.00)		
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428250	T30		1	GREEN PARK HOMES JT 53080	E22085224(2)
Alpe Roof Truss, Maple					

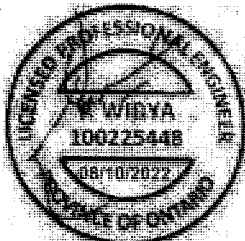
Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:08:47 2022 Page 2
ID:4IRtKRO8ssghv2KQFYp5dytbbD-GEI5ScXaQCou6YH?1UNQ0XZBQgg36K0rF124wypD3c

CONNECTION REQUIREMENTS

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

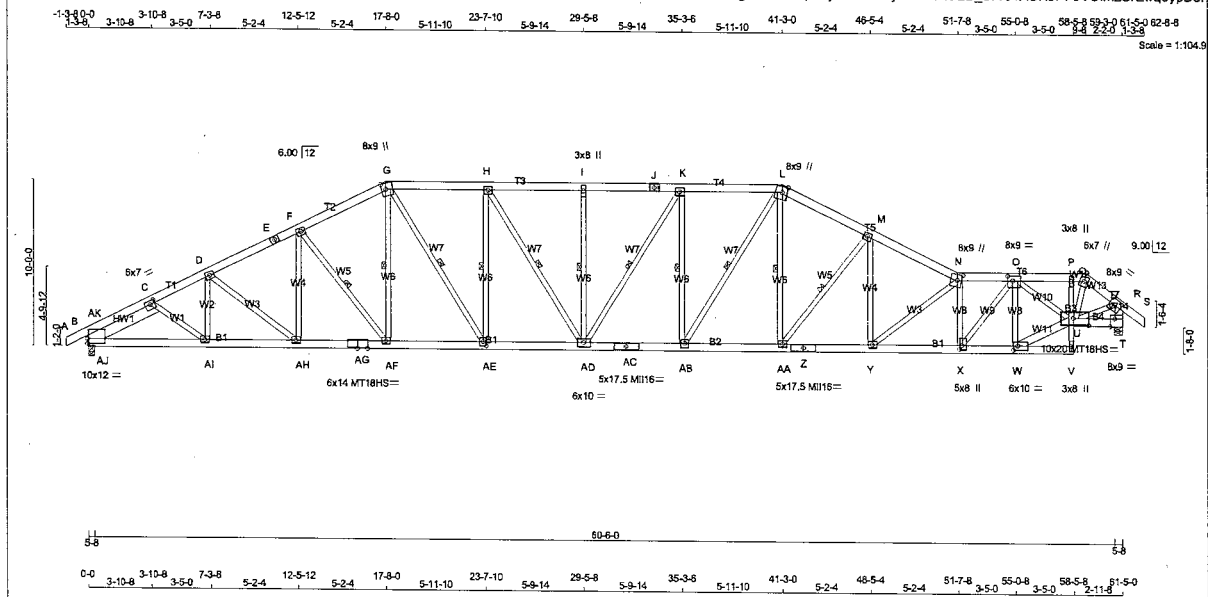
WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pg} , BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM); INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2); BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE; TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2



Alpa Roof Truss, Maple

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LUMBER			
N.L.G.A. RULES	CHORDS	SIZE	LUMBER
A - E	2x6	DRY	No.2
E - G	2x6	DRY	No.2
G - J	2x6	DRY	No.2
J - L	2x6	DRY	No.2
L - N	2x6	DRY	No.2
N - Q	2x6	DRY	No.2
Q - S	2x6	DRY	No.2
S - R	2x6	DRY	No.2
T - AG	2x6	DRY	No.2
AG - AC	2x6	DRY	2100F 1.8E
AC - Z	2x6	DRY	2100F 1.8E
Z - V	2x6	DRY	2100F 1.8E
V - T	2x4	DRY	No.2
U - T	2x6	DRY	2100F 1.8E

REINFORCING MEMBERS			
HW1	2x8	DRY	No.2

ALL WEBS 2x4 DRY No.2 SPF
EXCEPT
W - U 2x6 DRY No.2 SPF

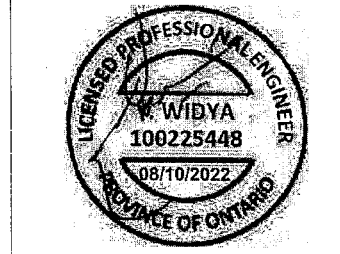
DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B	TMBMW1-I	MT20	10.0	12.0 3.50
C	TMBMW1-I	MT20	6.0	7.0 2.25 3.50
D, F, H, K, M				
D	TMBMW1-I	MT20	5.0	8.0
E	TS-I	MT20	5.0	8.0
F	TTWW+m	MT20	8.0	9.0 4.25 3.00
G	TTWW+m	MT20	3.0	8.0
H	TS-I	MT20	5.0	8.0
I	TTWW+m	MT20	8.0	9.0 Edge 3.25
J	TTWW+m	MT20	8.0	9.0 Edge 3.50
K	TTWW+m	MT20	8.0	9.0 3.50 3.50
L	TTWW+m	MT20	3.0	8.0
M	TTWW+m	MT20	6.0	7.0
N	TTWW+m	MT20	8.0	9.0 4.00 4.25
O	TTWW+m	MT20	8.0	9.0 Edge 3.50
P	TTWW+m	MT20	8.0	9.0 3.50 3.50
Q	TTWW+m	MT20	3.0	8.0
R	TTWW+m	MT20	6.0	7.0
S	TTWW+m	MT20	8.0	9.0 4.00 4.25
T	TTWW+m	MT20	8.0	9.0 Edge 3.50
U	TTWW+m	MT20	8.0	9.0 3.50 3.50
V	TTWW+m	MT20	3.0	8.0
W	TTWW+m	MT20	6.0	7.0
X	TTWW+m	MT20	8.0	9.0 4.00 4.25
Y	TTWW+m	MT20	8.0	9.0 Edge 3.50
Z	TTWW+m	MT20	8.0	9.0 3.50 3.50
AA	TTWW+m	MT20	3.0	8.0
AB	TTWW+m	MT20	6.0	7.0
AC	TTWW+m	MT20	8.0	9.0 4.00 4.25
AD	TTWW+m	MT20	8.0	9.0 Edge 3.50
AE	TTWW+m	MT20	8.0	9.0 3.50 3.50
AF	TTWW+m	MT20	3.0	8.0
AG	TTWW+m	MT20	6.0	7.0

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

WARNING: THE UNUSUALLY LONG SPAN AND/OR CONFIGURATION OF THIS TRUSS REQUIRES THAT EXTREME CARE BE USED IN ITS APPLICATION. USE PROPER TRANSPORTATION, UNLOADING AND ERECTION METHODS. ASSURE THAT ALL REQUIRED WEB LATERAL BRACING IS COMMUNICATED TO THE BUILDING CONTRACTOR. ENSURE THAT OVERALL BUILDING BRACING IS DESIGNED BY A QUALIFIED ENGINEER, ARCHITECT OR BUILDING DESIGNER.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY TRUSS ERECTION AND INSTALLATION MUST BE SUPERVISED BY A PROFESSIONAL ENGINEER OR OTHER QUALIFIED PERSON.

BEARINGS			
FACTORED	GROSS REACTION	MAXIMUM FACTORED	INPUT
JT	VERT	HORIZ	UPLIFT
B	5227	0	5227
T	5219	0	5219

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 218 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT T FOR 246 LBS. FACTORED UPLIFT

PROVIDE FOR 182 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS			
1ST CASE	MAX. MIN. COMPONENT REACTIONS		
JT	COMBINED	SNOW	LIVE
B	3860	2253 / 0	645 / 0
T	3853	2255 / 0	645 / 0

HORIZONTAL REACTIONS
B - 0 / 0
T - 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, T
BEARING SIZE FACTOR = 1.15 AT JNT(S) B, T (BASED ON SUPPORT DEPTH = 1-8)

BRACING
FOR SECTION G-L, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-AF, G-AF, L-AA, M-AA, L-AB, G-AE, K-AB, H-AE, K-AD, H-AD, I-AD.

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

LOADING
TOTAL LOAD CASES: (18)

CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO	FROM	TO	CS (LC)
A-B	0 / 1	-120.3	-120.3 0.08 (2)
B-AK	-6007 / 154	-120.3	-120.3 0.26 (1)
AK-C	-3925 / 173	-120.3	-120.3 0.17 (1)
C-D	-8452 / 320	-120.3	-120.3 0.47 (1)
D-E	-8224 / 308	-120.3	-120.3 0.63 (1)
E-F	-8224 / 308	-120.3	-120.3 0.63 (1)
F-G	-7596 / 280	-120.3	-120.3 0.56 (1)
G-H	-7889 / 263	-132.8	-132.8 0.72 (1)
H-I	-8251 / 220	-132.8	-132.8 0.75 (1)
I-J	-8251 / 220	-132.8	-132.8 0.75 (1)
J-K	-8291 / 220	-132.8	-132.8 0.75 (1)
K-L	-8141 / 295	-132.8	-132.8 0.75 (1)
L-M	-8154 / 331	-120.3	-120.3 0.58 (1)
M-N	-8335 / 368	-120.3	-120.3 0.68 (1)
N-O	-9444 / 438	-120.3	-120.3 0.55 (1)
O-P	-5436 / 287	-120.3	-120.3 0.29 (1)
P-Q	-5466 / 289	-120.3	-120.3 0.26 (1)
Q-R	-5647 / 272	-120.3	-120.3 0.18 (1)
R-S	0 / 53	-120.3	-120.3 0.09 (3)
T-R	-5158 / 287	0.0	0.0 0.33 (1)

WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO	FROM	TO	CS (LC)
C-AI	0 / 847	0.0	0.14 (1)
AI-D	-317 / 53	0.0	0.06 (8)
D-AH	-476 / 120	0.0	0.28 (2)
AH-F	-7 / 478	0.0	0.08 (2)
F-AE	-1219 / 212	0.0	0.44 (2)
AE-G	-64 / 1210	0.0	0.19 (2)
AA-L	-123 / 1825	0.0	0.29 (3)
AA-M	-2005 / 248	0.0	0.72 (3)
Y-M	-32 / 1286	0.0	0.21 (3)
Y-N	-1633 / 161	0.0	0.86 (3)
X-N	-3602 / 151	0.0	0.76 (1)
X-O	-106 / 4480	0.0	0.72 (1)
W-O	-3077 / 150	0.0	0.65 (1)
W-U	-252 / 7525	0.0	0.69 (1)
O-U	-1708 / 75	0.0	0.33 (1)
U-Q	-126 / 3107	0.0	0.50 (1)
U-R	-150 / 4749	0.0	0.76 (1)
AB-L	-45 / 1643	0.0	0.26 (2)
G-AE	-55 / 2092	0.0	0.34 (1)
AE-K	-1147 / 115	0.0	0.51 (2)
AE-H	-1529 / 123	0.0	0.58 (1)
AD-K	-755 / 1189	0.0	0.49 (3)
H-AD	-455 / 1546	0.0	0.29 (9)
AD-I	-712 / 59	0.0	0.32 (1)
AE-AK	0 / 2860	0.0	0.00 (1)
AE-C	-4451 / 162	0.0	0.50 (1)

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

TOTAL WEIGHT = 2 X 438 = 876 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 58.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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

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

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (2.05")
CALCULATED VERT. DEFL.(LL) = L/999 (0.51")
ALLOWABLE DEFL.(TL) = L/180 (4.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.73")

CSI: TC=0.75/1.00 (K-K1), BC=0.58/1.00 (X-Y1), WB=0.95/1.00 (N-Y3), SSI=0.33/1.00 (K-L3)

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

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

AUTOSOLVE HEELS OFF

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

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

MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
MT18HS 585 403 2455 1382 3163 3004
MT16 438 302 2547 1255 4283 1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

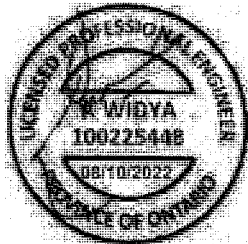
JSI GRIP=0.90 (X) (INPUT = 0.90)

JSI METAL=0.99 (X) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428250	T32		1	GREEN PARK HOMES JT 53080	E22085226(2)
Alpa Roof Truss, Maple				Version 8.530 S Feb 23 2022 M&T Tek Industries, Inc. Wed Aug 10 16:08:57 2022 Page 2 ID:4IRtKrO8ssghv2KQFYp5dytbbD-z9J4CkPpDVSNSfCa7fko7yleSACPWU8pSaQLypD3e	

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (0-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, Cp/Cg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2

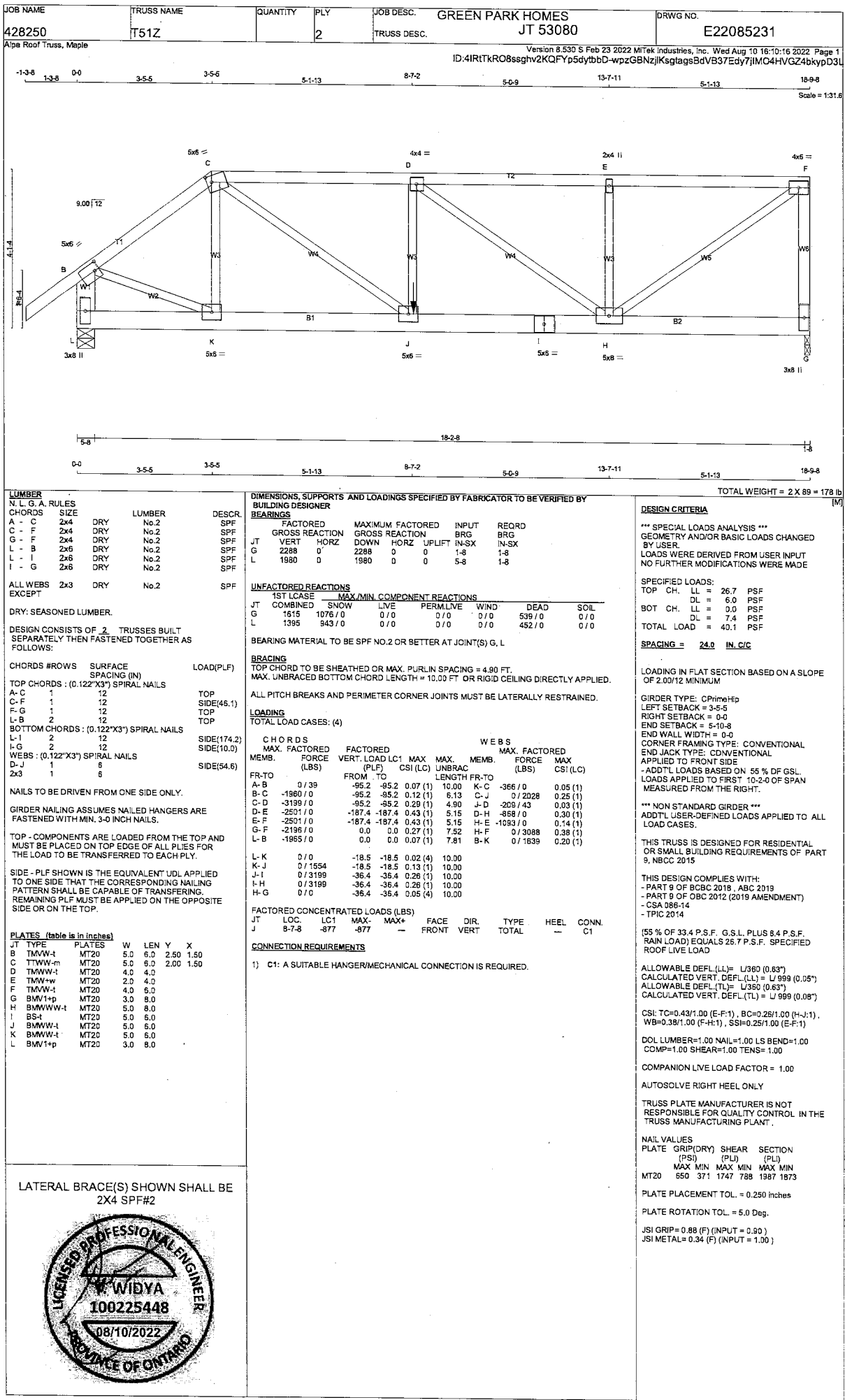


[illegible]

JOB NAME 428250	TRUSS NAME T51	QUANTITY 2	PLY 3	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085230
Alpa Roof Truss, Maple					
Version 8.530 S Feb 23 2022 M/Tek Industries, Inc. Wed Aug 10 16:10:13 2022 Page 1 ID:4IRITkRO8ssghv2KQFYp5dytbbD-VEH7ZLxSPU606xHWUyURVc6zvj9S1wrpILQ?PypD3C					

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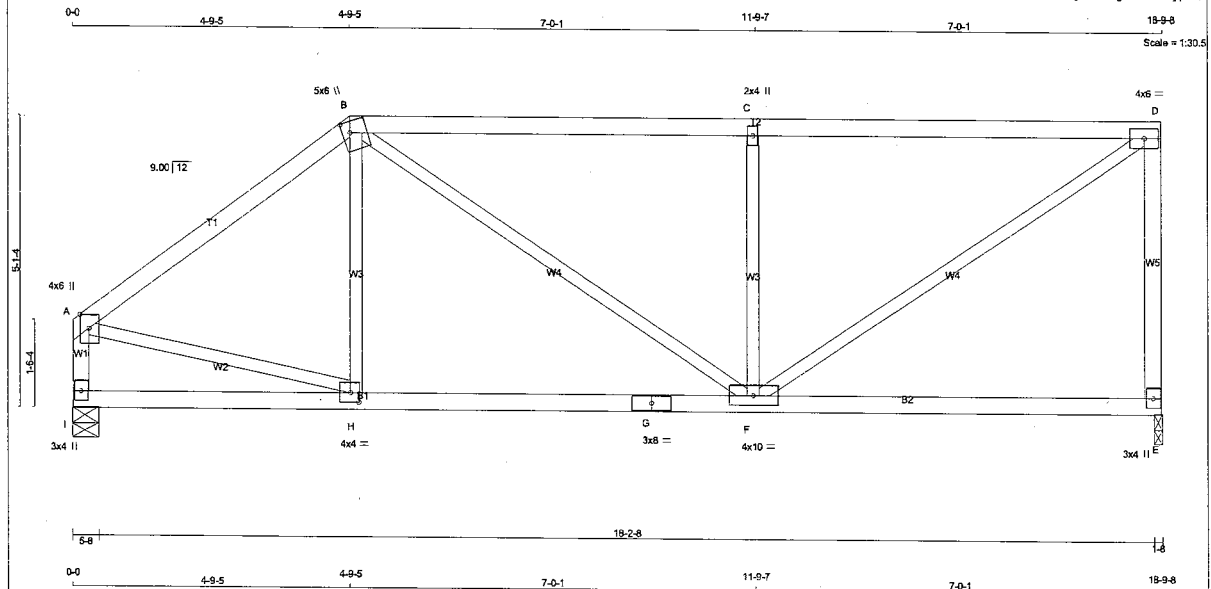
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				TOTAL WEIGHT = 2 X 89 = 178 lb			
LUMBER							
N L.G.A. RULES	SIZE	LUMBER	DESCR.				
A - C	2x4	DRY	No.2				
C - F	2x4	DRY	No.2				
F - B	2x4	DRY	No.2				
L - B	2x6	DRY	No.2				
L - I	2x6	DRY	No.2				
I - G	2x6	DRY	No.2				
ALL WEBS EXCEPT							
2x3 DRY No.2 SPF							
DRY, SEASONED LUMBER.							
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:							
CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)							
TOP CHORDS : (0.122"x3") SPIRAL NAILS							
A-C	1	12	SIDE(61.0)				
C-F	1	12	SIDE(46.1)				
F-G	1	12	TOP				
L-B	2	12	TOP				
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS							
L-I	2	12	SIDE(10.0)				
I-G	2	12	SIDE(10.0)				
WEBS : (0.122"x3") SPIRAL NAILS							
K-C	1	6	SIDE(16.3)				
2x3	1	6					
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.							
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.							
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.							
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.							
PLATES (table in inches)							
JT TYPE	PLATES	W	LEN	Y	X		
B	TMWW-t	MT20	5.0	6.0	2.50	1.50	
C	TTWW-t	MT20	5.0	6.0	2.25	1.50	
D	TMWW-t	MT20	4.0	4.0			
E	TMWW-w	MT20	2.0	4.0			
F	TMWW-l	MT20	4.0	6.0			
G	BMV1+p	MT20	3.0	8.0			
H	BMWWW-t	MT20	5.0	8.0			
I	BS-I	MT20	5.0	6.0			
J	BSWW-t	MT20	4.0	6.0			
K	BSWW-t	MT20	5.0	6.0			
L	BMV1+p	MT20	3.0	8.0			
FACTORED CONCENTRATED LOADS (LBS)							
JT LOC.	LC1 MAX.	MAX*	FACE	DIR.	TYPE	HEEL	CONN.
C 3-5-5	-239	-239	--	FRONT	VERT	--	C1
CONNECTION REQUIREMENTS							
1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.							
DESIGN CRITERIA							
SPECIFIED LOADS:							
TOP CH. LL = 26.7 PSF							
RIGHT SETBACK = 0-0							
END SETBACK = 5-10-8							
CORNER FRAMING TYPE: CONVENTIONAL							
END JACK TYPE: CONVENTIONAL							
APPLIED TO FRONT SIDE							
- ADDTL LOADS BASED ON .55 % OF GSL.							
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM							
GIRDER TYPE: CPrimeHip							
LEFT SETBACK = 3-5-5							
RIGHT SETBACK = 0-0							
END SETBACK = 5-10-8							
CORNER FRAMING TYPE: CONVENTIONAL							
END JACK TYPE: CONVENTIONAL							
APPLIED TO FRONT SIDE							
- ADDTL LOADS BASED ON .55 % OF GSL.							
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2015							
THIS DESIGN COMPLIES WITH:							
- PART 9 OF CBC2015, ABC 2019							
- PART 9 OF OBC 2012 (2019 AMENDMENT)							
- CSA 086-14							
- TPIC 2014							
(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD							
ALLOWABLE DEFL.(LL)= L/350 (0.53")							
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")							
ALLOWABLE DEFL.(TL)= L/360 (0.63")							
CALCULATED VERT. DEFL.(TL)= L/999 (0.07")							
CSI: TC=0.41/1.00 (C-D:1), BC=0.22/1.00 (H-J:1), WB=0.34/1.00 (F-H:1), SS=0.25/1.00 (C-D:1)							
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00							
COMPANION LIVE LOAD FACTOR = 1.00							
AUTOSOLVE RIGHT HEEL ONLY							
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.							
NAIL VALUES							
PLATE GRIP(DRY) SHEAR SECTION							
(PSI) (PLI) (PLI) (PLI)							
MAX MIN MAX MIN MAX MIN							
MT20 650 371 1747 788 1987							



JOB NAME 428250	TRUSS NAME T52	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085232
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:10:19 2022 Page 1
ID:4IRtKRO8ssghv2KQFYp5dytbbD-KOeOpO7c1FEFk10Rt12uhms1yKIZZiqCEokC3ypD3I



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

PLATES (table is in inches)	IT TYPE	PLATES	W	LEN	Y	X
A	TMW+p	MT20	4.0	6.0	Edge	
B	TIWW+m	MT20	5.0	6.0	2.25	1.50
C	TMW+w	MT20	2.0	4.0		
D	TMW-t	MT20	4.0	6.0		
E	BMV1+p	MT20	3.0	4.0		
F	BMWW-t	MT20	4.0	10.0		
G	BS-t	MT20	3.0	8.0		
H	BMWW-t	MT20	4.0	4.0	2.00	1.75
I	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	DOWN	UP	BRG	
JT	VERT	HORZ	DOWN	HORZ
E	1068	0	1068	0
I	1068	0	1068	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
E	754	502 / 0	0 / 0
I	754	502 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, I
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING	TOTAL LOAD CASES: (4)
CHORDS	WEBS
MEMB.	MEMB.
MAX. FACTORED	MAX. FACTORED
FORCE (LBS)	FORCE (LBS)
VERT. LOAD	VERT. LOAD
FROM TO	FROM TO
A-B	-1013 / 0
B-C	-1113 / 0
C-D	-1113 / 0
D-E	-1015 / 0
E-A	-1035 / 0
I-H	0 / 0
H-G	0 / 807
G-F	0 / 807
F-E	0 / 0

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
BOT CH. LL = 0.0 PSF
TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = U360 (0.63")
CALCULATED VERT. DEFL.(LL) = U999 (0.04")
ALLOWABLE DEFL.(TL) = U360 (0.63")
CALCULATED VERT. DEFL.(TL) = U999 (0.10")
CSI: TC=0.89/1.00 (C-D:1), BC=0.29/1.00 (F-H:4), WB=0.32/1.00 (C-F:1), SS=0.32/1.00 (C-D:1)

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

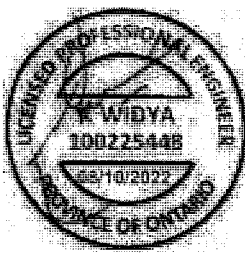
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

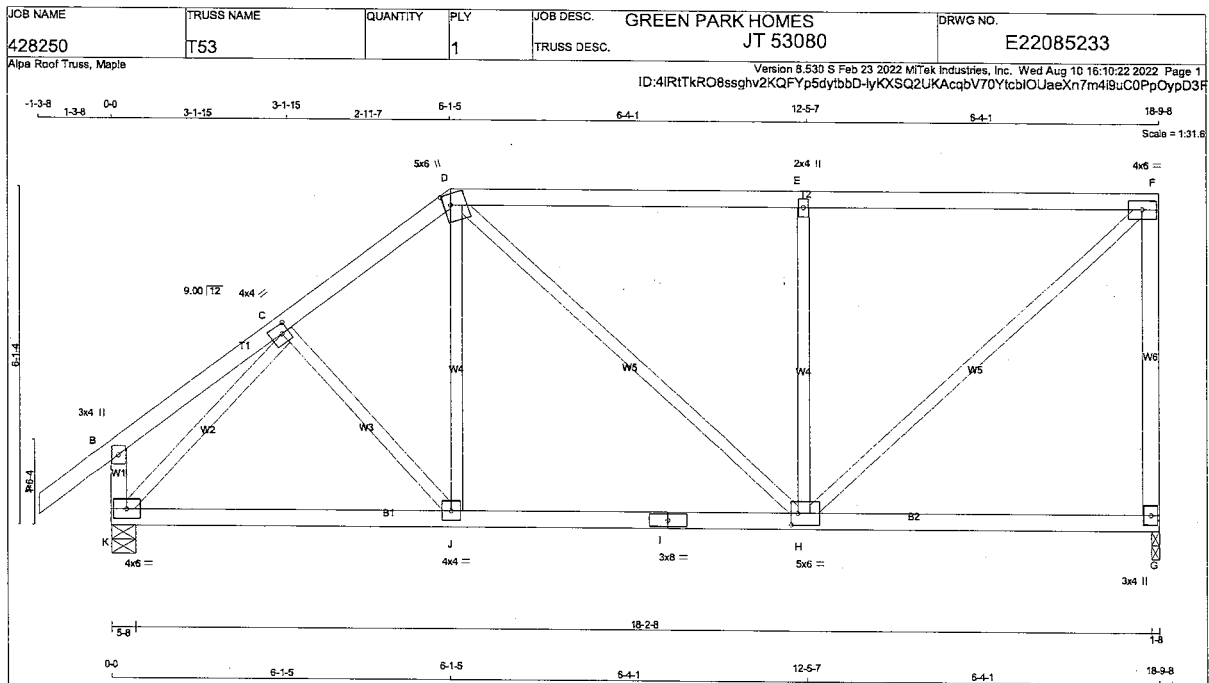
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

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

JSI GRIP= 0.84 (A) (INPUT = 0.90)
JSI METAL= 0.51 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
K - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
I - G	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	3.0	4.0		
C TMWW-t	MT20	4.0	4.0	2.00	1.50
D TTWW+m	MT20	5.0	6.0	2.25	1.50
E TMW+w	MT20	2.0	4.0		
F TMWW-t	MT20	4.0	6.0		
G BMV+p	MT20	3.0	4.0		
H BMWWW-t	MT20	5.0	6.0	2.50	1.50
I BS-t	MT20	3.0	8.0		
J BMWW-t	MT20	4.0	4.0		
K BMWW-t	MT20	4.0	6.0		

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

BEARINGS

	FACTORED	GROSS REACTION	MAXIMUM FACTORED	INPUT	REQD
	VERT	HORZ	DOWN	HORZ	UPLIFT
JT	1058	0	1068	0	1-8
G	1200	0	1200	0	5-8
K					

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
G	754	502/0	0/0
K	844	575/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED	FORCE	FACTORED	VERT. LOAD	LC1	MAX	WEBS	MEMB.	MAX. FACTORED	FORCE	MAX
FR-TO			(LBS)	FROM	TO		CS1 (LC)	UNBRAC			(LBS)	CS1 (LC)
A-B	0/39	-95.2	-95.2	0.13	(1)		10.00	C-J	-36/27	0.01	(1)	
B-C	0/19	-95.2	-95.2	0.13	(1)		10.00	J-D	0/152	0.04	(4)	
C-D	-984/0	-95.2	-95.2	0.14	(1)		6.12	D-H	0/127	0.03	(1)	
D-E	-866/0	-95.2	-95.2	0.69	(1)		5.32	H-E	-748/0	0.44	(1)	
E-F	-866/0	-95.2	-95.2	0.69	(1)		5.32	H-F	0/1171	0.26	(1)	
G-F	-1019/0	0.0	0.0	0.74	(1)		7.76	K-C	-1207/0	0.41	(1)	
K-B	-245/0	0.0	0.0	0.03	(1)		7.81					
K-J	0/795	-18.5	-18.5	0.22	(4)		10.00					
J-I	0/773	-18.5	-18.5	0.23	(4)		10.00					
I-H	0/773	-18.5	-18.5	0.23	(4)		10.00					
H-G	0/0	-18.5	-18.5	0.17	(4)		10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.7	PSF
	OL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	OL	=	7.4	PSF
TOTAL LOAD	=	40.1	PSF	

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CS1: TC=0.74/1.00 (F-G:1), BC=0.23/1.00 (H-J:4), WB=0.44/1.00 (E-H:1), SS=0.23/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

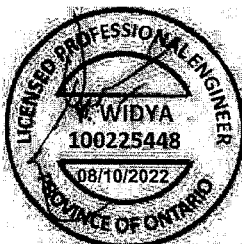
PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)
MAX	MIN	MAX
MT20	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.80)
JSI METAL= 0.40 (C) (INPUT = 1.00)

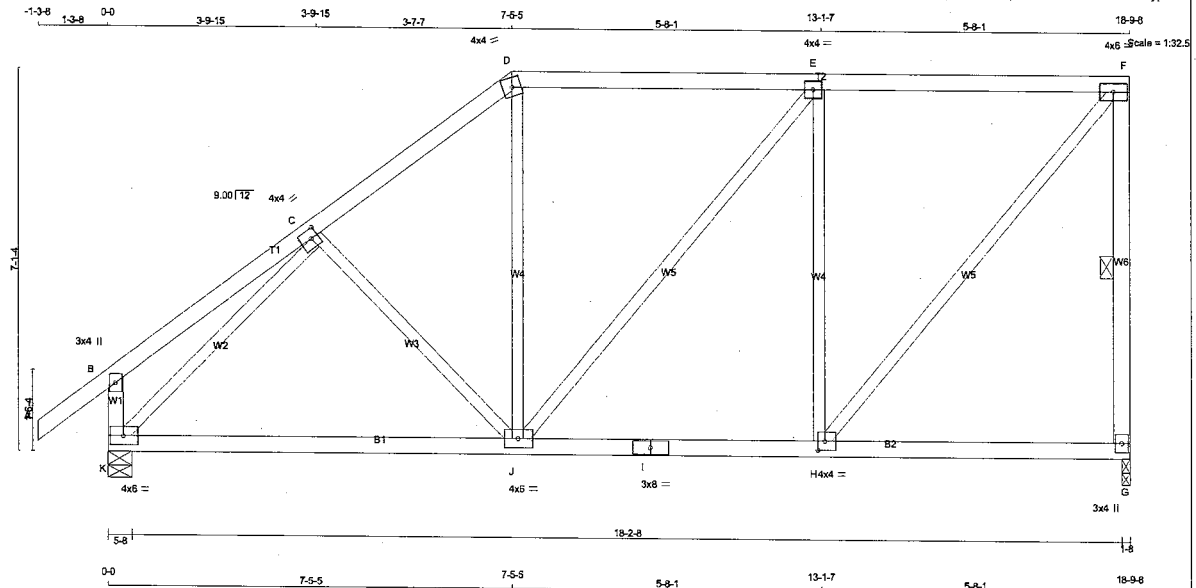
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME T54	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085234
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MITek Industries, Inc. Wed Aug 10 16:10:24 2022 Page 1
ID:4IRTKRO8sgghv2KQFYp5dytbbD-hLS+is63isoyqoHofle3OpZzDLStExJSLWVWuHypD3D



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
K - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
I - G	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0	
C	TMW-w	MT20	4.0	4.0	2.00 1.50
D	TTW-m	MT20	4.0	4.0	
E	TMW-w	MT20	4.0	4.0	
F	TMW-w	MT20	4.0	6.0	
G	BMV-w	MT20	3.0	4.0	
H	BMW-w	MT20	4.0	4.0	2.00 1.50
I	BS-1	MT20	3.0	8.0	
J	BMW-w	MT20	4.0	6.0	
K	BMW-w	MT20	4.0	6.0	

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

BUILDING DESIGNER

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
G	1068	0	1068	0
K	1200	0	1200	0

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PL)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	C-J	-142 / 2
B-C	0 / 24	-95.2	-95.2	0.21 (1)	10.00	J-D	0 / 199
C-D	-922 / 0	-95.2	-95.2	0.22 (1)	6.15	J-E	0 / 56
D-E	-720 / 0	-95.2	-95.2	0.54 (1)	6.10	H-E	-713 / 0
E-F	-685 / 0	-95.2	-95.2	0.54 (1)	6.21	H-F	0 / 1056
F-G	-1023 / 0	0.0	0.0	0.23 (1)	6.20	K-C	-1196 / 0
G-K	-267 / 0	0.0	0.0	0.03 (1)	7.81		
K-J	0 / 815	-18.5	-18.5	0.28 (4)	10.00		
J-I	0 / 685	-18.5	-18.5	0.27 (4)	10.00		
I-H	0 / 685	-18.5	-18.5	0.27 (4)	10.00		
H-G	0 / 0	-18.5	-18.5	0.13 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	=	26.7	PSF
DL	=	6.0	PSF
BOT CH. LL	=	0.0	PSF
DL	=	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. G/C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.11")

CSI: TC=0.54/1.00 (D-E-1), BC=0.28/1.00 (J-K-4), WB=0.52/1.00 (E-H-1), SSI=0.26/1.00 (E-F-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

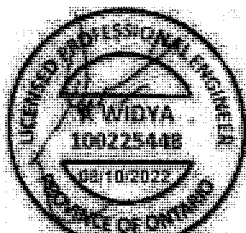
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PL)	(PL)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

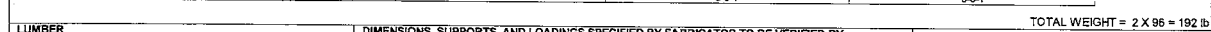
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.86 (H) (INPUT = 0.90)
JSI METAL = 0.40 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (0.63")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.03")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.63")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

CS: TC=0.41/1.00 (D-E:1), BC=0.18/1.00 (J-K:1),
WB=0.94/1.00 (E-H:1), SS=0.23/1.00 (E-F:1)

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

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JSI GRIP= 0.88 (H) (INPUT = 0.90 )
JSI METAL= 0.55 (B) (INPUT.= 1.00 )
```

100

100

1. *Journal of the American Medical Association*, 2000; 283: 2686-2692.

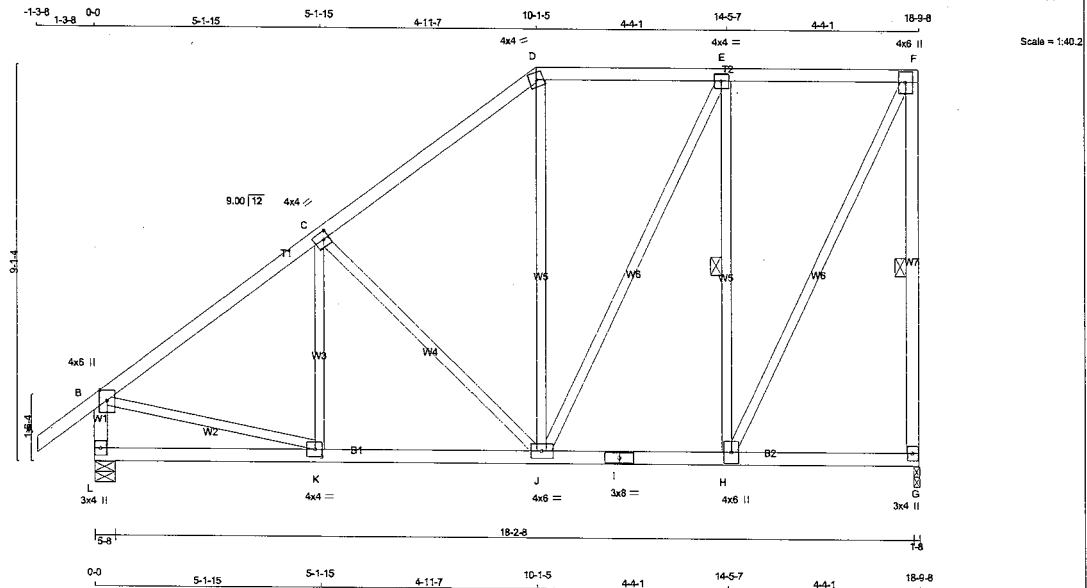
100

Circumstance	Percentage (%)
If someone is attacking you	95
If someone is threatening you	85
If someone is harassing you	75
If someone is insulting you	65
If someone is annoying you	55

JOB NAME 428250	TRUSS NAME T56	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085236
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MTek Industries, Inc. Wed Aug 10 16:10:29 2022 Page 1
ID:4IRtKRO8ssghv2KQFYp5dytbbD-1JFAwp7hKVqxZ9MSrE5tGr7MAJvFeBvNnDGZUypD38



TOTAL WEIGHT = 2 X 101 = 203 lb
(M/F)

LUMBER

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	4.0	6.0	Edge	
C TMWW-I	MT20	4.0	4.0	2.00	1.50
D TIW-m	MT20	4.0	4.0		
E TMWW-I	MT20	4.0	4.0		
F TMVW+p	MT20	4.0	6.0		
G BMV1+p	MT20	3.0	4.0		
H BMWW+I	MT20	4.0	6.0		
I BS-I	MT20	3.0	8.0		
J BMWWW-I	MT20	4.0	6.0		
K BMWW-I	MT20	4.0	4.0	2.00	1.75
L BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	
JT	VERT	HORZ	DOWN	HORZ
G	1068	0	1068	0
L	1200	0	1200	0

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
L	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.76 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH FR-TO	WEBS	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH FR-TO
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	K-C	-91 / 57	0.04 (1)			
B-C	-1037 / 0	-95.2	-95.2	0.33 (1)	5.76	C-J	-412 / 0	0.41 (1)			
C-D	-745 / 0	-95.2	-95.2	0.32 (1)	6.25	J-D	0 / 93	0.03 (4)			
D-E	-567 / 0	-95.2	-95.2	0.23 (1)	6.25	J-E	0 / 308	0.07 (1)			
E-F	-435 / 0	-95.2	-95.2	0.22 (1)	6.25	H-E	-796 / 0	0.42 (1)			
F-G	-1035 / 0	0.0	0.0	0.40 (1)	5.18	H-F	0 / 977	0.22 (1)			
L-B	-1160 / 0	0.0	0.0	0.12 (1)	7.39	B-K	0 / 880	0.20 (1)			
L-K	0 / 0	-18.5	-18.5	0.12 (4)	10.00						
K-J	0 / 857	-18.5	-18.5	0.20 (1)	10.00						
J-I	0 / 435	-18.5	-18.5	0.11 (4)	10.00						
I-H	0 / 435	-18.5	-18.5	0.11 (4)	10.00						
H-G	0 / 0	-18.5	-18.5	0.08 (4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN./C

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.63")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.03")
ALLOWABLE DEFL.(TL) = $L/360$ (0.63")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

CSI: TC=0.40/1.00 (F-G:1), BC=0.20/1.00 (J-K:1), WB=0.42/1.00 (E-H:1), SSI=0.20/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

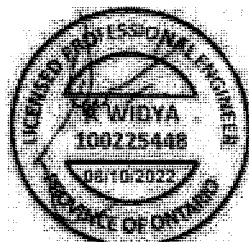
PLATE GRIP(DRY)	SHEAR	SECTION
(RS)	(PL)	(PL)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371 1747 788 1967 1873	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

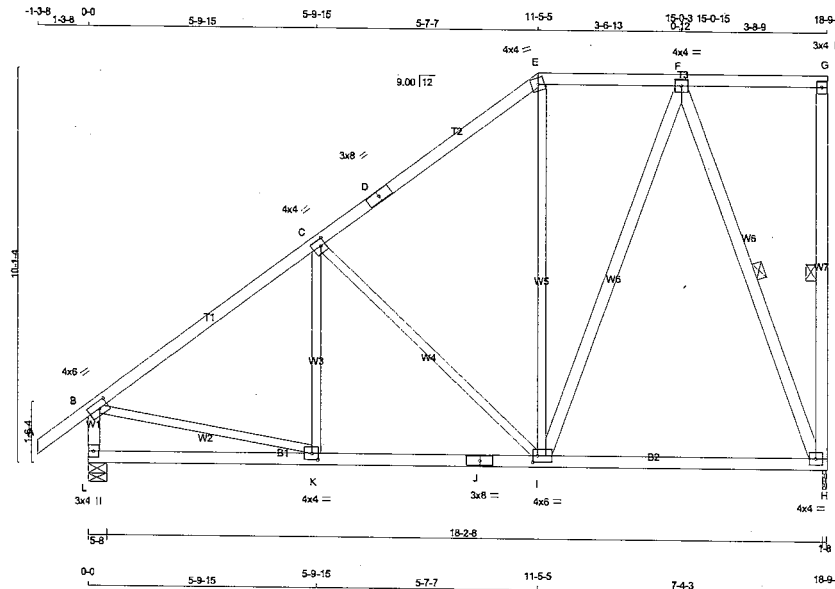
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428250	T57		1	TRUSS DESC.	JT 53080	E22085237

Alpa Roof Truss, Maple

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ID:4IRtKRO8ssghv2KQFYp5dytbbD-SuxJY9mzFIPo1ux7_nxiVuMpZBm6YjeBIRwAppD35



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

DRY, SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMW-t	MT20	4.0	6.0	2.00	2.75
C TMW-t	MT20	4.0	4.0	2.00	1.50
D TS-t	MT20	3.0	8.0		
E TTW-m	MT20	4.0	4.0		
F TMW-t	MT20	4.0	4.0		
G TMV-p	MT20	3.0	4.0		
H BMW-t	MT20	4.0	4.0		
I BMW-t	MT20	4.0	6.0	2.00	1.50
J BS-t	MT20	3.0	8.0		
K BMW-t	MT20	4.0	4.0	2.00	1.75
L BMV-p	MT20	3.0	4.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT GROSS REACTION			BRG	BRG
H VERT	1113	0	DOWN	IN-SX
L 1210	0	1210	0	5-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS
JT COMBINED			
H 790	502 / 0	0 / 0	0 / 0
L 853	576 / 0	0 / 0	0 / 0

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

BRACING

FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.50 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED PLF	VERT. LOAD	LC1	MAX CSI (LC)	MAX UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO				LENGTH FR-TO			
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	K-C	-89 / 63	0.04 (1)	
B-C	-1036 / 0	-95.2	-95.2	0.43 (1)	5.60	C-I	-495 / 0	0.66 (1)	
C-D	-873 / 0	-95.2	-95.2	0.41 (1)	6.25	I-E	0 / 67	0.02 (4)	
D-E	-873 / 0	-95.2	-95.2	0.41 (1)	6.25	E-F	0 / 474	0.09 (1)	
E-F	-505 / 0	-102.7	-102.7	0.18 (1)	2.00	F-H	-976 / 0	0.58 (1)	
F-G	0 / 0	-102.7	-102.7	0.23 (1)	10.00	B-K	0 / 878	0.20 (1)	
G-H	-145 / 0	0.0	0.0	0.07 (1)	6.25				
L-B	-1164 / 0	0.0	0.0	0.12 (1)	7.39				
L-K	0 / 0	-18.5	-18.5	0.13 (4)	10.00				
K-J	0 / 860	-18.5	-18.5	0.28 (4)	10.00				
J-I	0 / 860	-18.5	-18.5	0.28 (4)	10.00				
I-H	0 / 345	-18.5	-18.5	0.24 (4)	10.00				

TOTAL WEIGHT = 10 X 106 = 1062 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 26.7 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 40.1 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.63")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.02")
ALLOWABLE DEFL. (TL) = $L/360$ (0.63")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.09")

CSI: TC=0.43/1.00 (B-C-1), BC=0.28/1.00 (I-K-4), WB=0.66/1.00 (C-I-1), SSI=0.21/1.00 (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

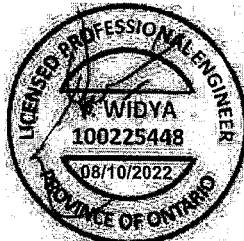
PLATE	GRIP (DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)	
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.29 (K) (INPUT = 1.00)

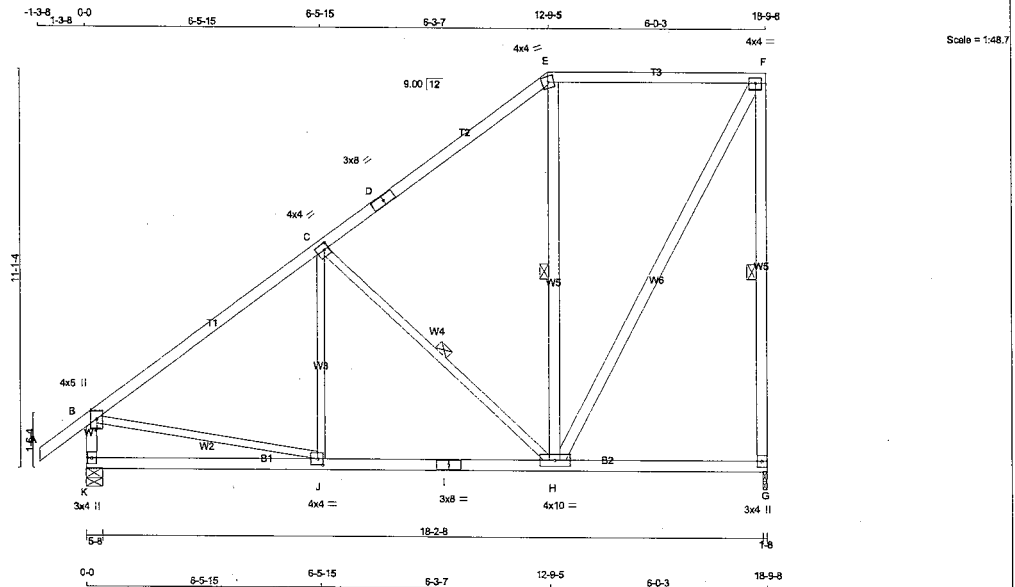
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME T58	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085238
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Alpa Roof Truss, Maple

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ID:4IRITkRO8ssghv2KQFYp5dytbbD-sTcSAIcGAF_fUdVp6LeK8WpenDxJ_4jg8m8ypD32



LUMBER

N.L.G.A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
K - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
I - G	2x4	DRY	No.2

ALL WEBS	EXCEPT	SIZE	LUMBER	DESCR.
H - E	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMWW+p	MT20	4.0	6.0	Edge	
C TMWW-i	MT20	4.0	4.0	2.00	1.50
D TS-i	MT20	3.0	8.0		
E TTW-m	MT20	4.0	4.0		
F TMWW-i	MT20	4.0	4.0		
G BMV1+p	MT20	3.0	4.0		
H BMWWW-i	MT20	4.0	10.0		
I BS-i	MT20	3.0	8.0		
J BMWW-i	MT20	4.0	4.0	2.00	1.75
K BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REORD
JT GROSS REACTION				
VERT	HORZ	DOWN	HORZ	UPLIFT
G	1065	0	1065	0
K	1200	0	1200	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED		MAX. FACTORED		
MEMB.	FORCE	FACTORED	MAX.	MAX.	MEMB.	FORCE	MAX.	MAX.	
	(LBS)	VERT. LOAD	LC1	CSI (LC)		(LBS)	LC1	CSI (LC)	
FR-TO		(PLF)			FR-TO				
A-B	0 / 39	-95.2	-95.2	0.13 (1)	J-C	-22 / 99	0.03 (4)		
B-C	-1005 / 0	-95.2	-95.2	0.55 (1)	C-H	-599 / 0	0.32 (1)		
C-D	-552 / 0	-95.2	-95.2	0.52 (1)	H-E	-206 / 13	0.13 (1)		
D-E	-552 / 0	-95.2	-95.2	0.52 (1)	H-F	0 / 842	0.14 (1)		
E-F	-401 / 0	-95.2	-95.2	0.44 (1)	B-J	0 / 854	0.19 (1)		
G-F	-1025 / 0	0.0	0.0	0.55 (1)					
K-B	-1151 / 0	0.0	0.0	0.12 (1)					
K-J	0 / 0	-18.5	-18.5	0.18 (4)	10.00				
J-I	0 / 840	-18.5	-18.5	0.25 (4)	10.00				
I-H	0 / 840	-18.5	-18.5	0.25 (4)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
LL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.65/1.00 (F-G:1), BC=0.25/1.00 (H-J:4), WB=0.32/1.00 (C-H:1), SS=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

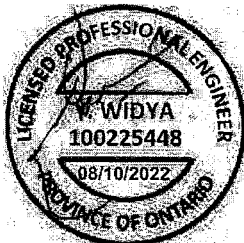
PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 768

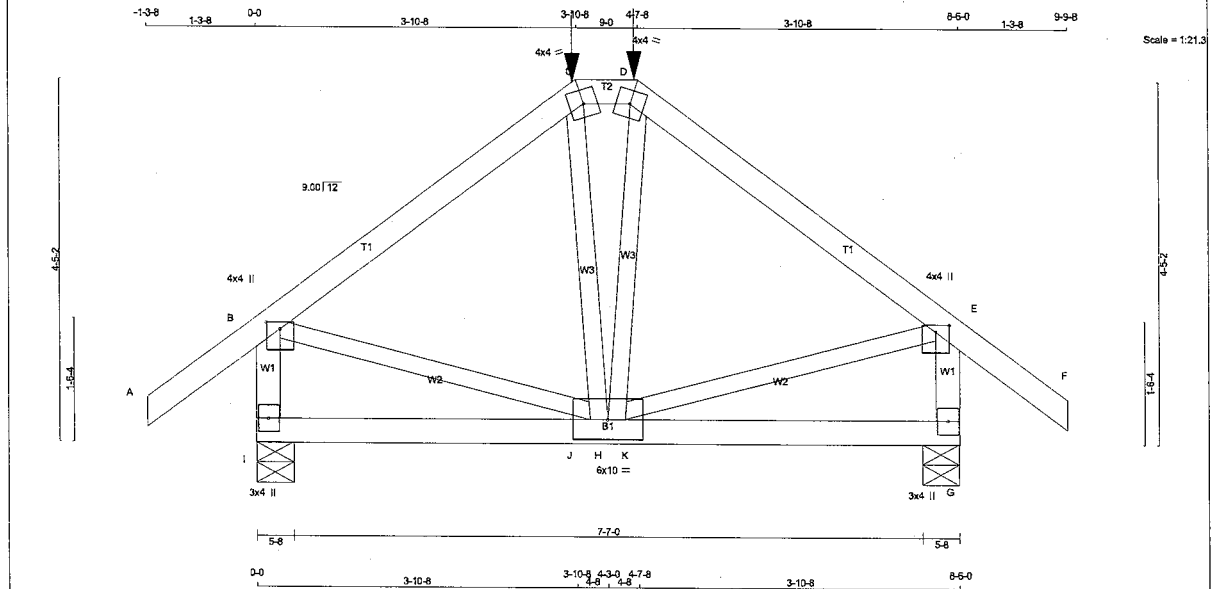
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE PLATES				
B TMW+p MT20	4.0	4.0	1.00	2.00
C TTW-m MT20	4.0	4.0		
D TTW-m MT20	4.0	4.0		
E TMW+p MT20	4.0	4.0	1.00	2.00
G BMV1+p MT20	3.0	4.0		
H BMVWWV+ MT20	6.0	10.0		
I BMV1+p MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
	FACTORED	MAXIMUM FACTORED	INPUT	REQD					
	GROSS REACTION	GROSS REACTION	BRG	BRG					
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
I	814	0	814	0	0	5-8	1-8		
G	814	0	814	0	0	5-8	1-8		

UNFACTORED REACTIONS									
1ST CASE	MAX	MIN	COMPONENT	REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM	WIND	DEAD	SOIL		
I	573	392 / 0	0 / 0	0 / 0	0 / 0	180 / 0	0 / 0		
G	573	392 / 0	0 / 0	0 / 0	0 / 0	180 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, G
BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS									
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	W E B S	MAX. FACTORED		
	(LBS)	(PLF)					(LBS)	MAX	
A-B	0 / 39	-95.2	-95.2	0.14 (1)	10.00	B-H	0 / 454	0.11 (1)	
B-C	-546 / 0	-95.2	-95.2	0.29 (1)	6.25	H-E	0 / 454	0.11 (1)	
C-D	-433 / 0	-139.8	-139.8	0.01 (1)	6.25	C-H	-53 / 40	0.02 (1)	
D-E	-546 / 0	-95.2	-95.2	0.29 (1)	6.25	H-D	-53 / 40	0.02 (1)	
E-F	0 / 39	-95.2	-95.2	0.14 (1)	10.00				
I-B	-769 / 0	0.0	0.0	0.09 (1)	7.81				
G-E	-769 / 0	0.0	0.0	0.09 (1)	7.81				
I-J	0 / 0	-27.2	-27.2	0.15 (4)	10.00				
J-H	0 / 0	-27.2	-27.2	0.15 (4)	10.00				
H-K	0 / 0	-27.2	-27.2	0.15 (4)	10.00				
K-G	0 / 0	-27.2	-27.2	0.15 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-11-1	-148	-148	-	FRONT	VERT	TOTAL	-	C1
D	4-6-15	-148	-148	-	FRONT	VERT	TOTAL	-	C1

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

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH.	LL = 26.7 PSF
DL	= 6.0 PSF
BOT CH.	LL = 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 40.1 PSF
SPACING = 24.0 IN./C/C	

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

GIRDER TYPE: CPrimeHip
 SIDE SETBACK = 3-11-1
 END SETBACK = 3-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADDTL LOADS BASED ON 55 % OF GSI.

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.29/1.00 (B-C:1), BC=0.15/1.00 (G-H:4), WB=0.11/1.00 (B-H:1), SS=0.13/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

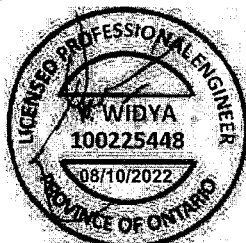
NAIL VALUES					
PLATE GRIP(DRY)	SHEAR	SECTION			
(PSI)	(PLI)	(PLI)			
MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987

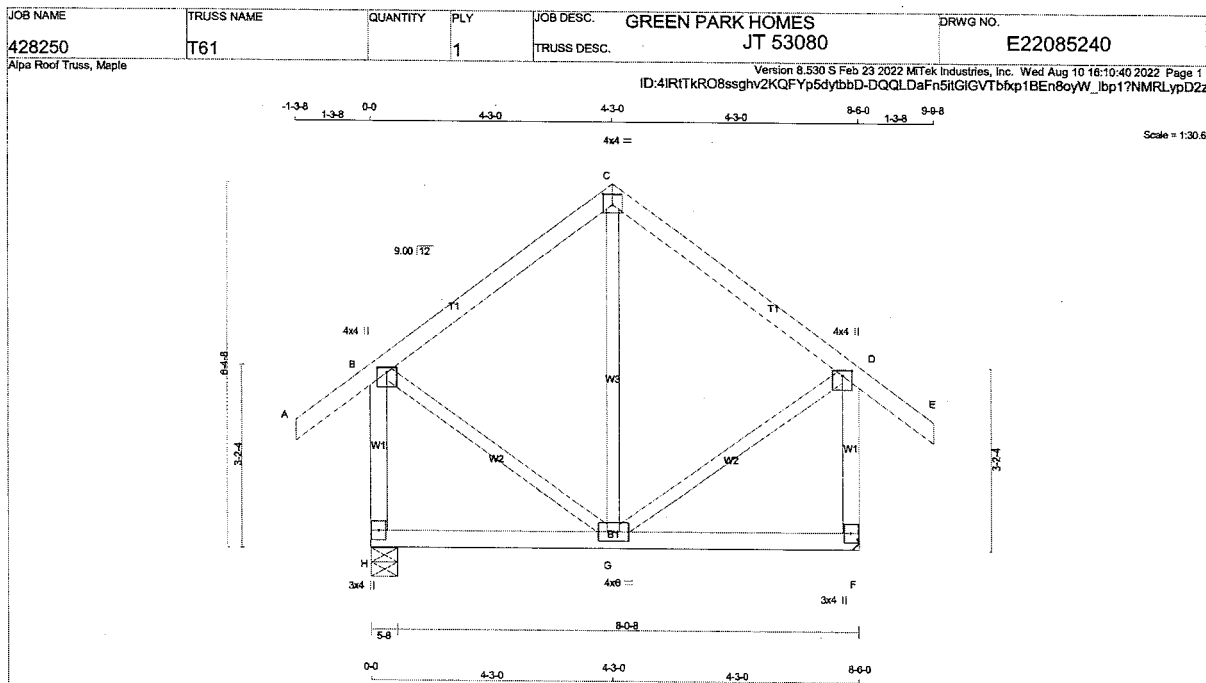
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (B) (INPUT = 0.90)
 JSI METAL= 0.19 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. C. A. RULES

CHORDS	SIZE	LUMBER
A - C	2x4	DRY
C - E	2x4	DRY
H - B	2x4	DRY
F - D	2x4	DRY
H - F	2x4	DRY
ALL WEBS EXCEPT	2x3	DRY

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	4.0	4.0	1.00	2.00
C	TTW+p	MT20	4.0	4.0	2.25	2.00
F	BMV1+p	MT20	3.0	4.0	1.00	2.00
G	BMV1+p	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	UPLIFT
H	615	0	0
F	615	0	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
H	431	301 / 0
F	431	301 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO				FR-TO			
A-B	0 / 39	-95.2	-95.2	G-C	-140 / 24	0.09 (1)	0.09 (1)
B-C	-220 / 0	-95.2	-95.2	B-G	0 / 212	0.05 (1)	0.05 (1)
C-D	-220 / 0	-95.2	-95.2	G-D	0 / 212	0.05 (1)	0.05 (1)
D-E	0 / 39	-95.2	-95.2				
H-B	-584 / 0	0.0	0.0				
F-D	-584 / 0	0.0	0.0				
H-G	0 / 0	-18.5	-18.5				
G-F	0 / 0	-18.5	-18.5				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.22/1.00 (C-D:1), BC=0.09/1.00 (F-G:4), WB=0.09/1.00 (C-G:1), SS=0.13/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 L.S BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

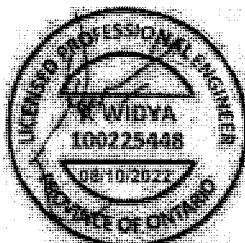
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

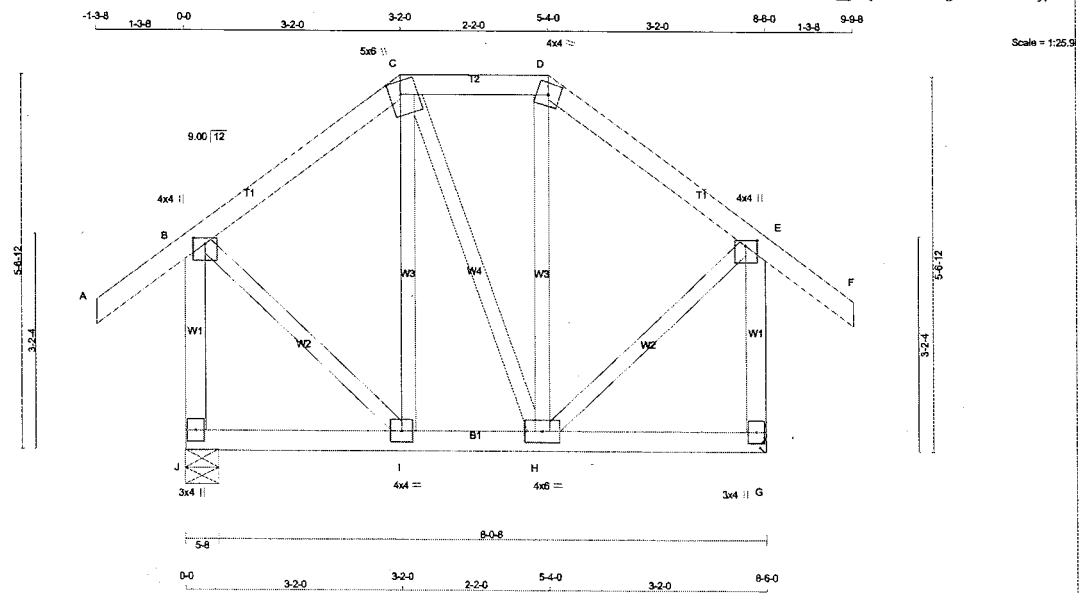
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - C	2x4	DRY
C - D	2x4	DRY
D - F	2x4	DRY
J - B	2x4	DRY
G - E	2x4	DRY
J - G	2x4	DRY
ALL WEBS	2x3	DRY
EXCEPT		No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TTWW+m	MT20	5.0	6.0	Edge	2.00
D	TTW-m	MT20	4.0	4.0		
E	TMVW+p	MT20	4.0	4.0	1.00	2.00
G	BMV1+p	MT20	3.0	4.0		
H	BMVWW-t	MT20	4.0	6.0		
I	BMVW-t	MT20	4.0	4.0		
J	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
J	615	0	615	0
G	615	0	615	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
J	431	301/0	0/0
G	431	301/0	0/0

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

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LOAD (L/C)	MAX. FACTORED CSI (L/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (L/C)		
FR-TO		FROM TO			FR-TO				
A-B	0/39	-95.2	-95.2 0.13 (1)	10.00	I-C	-110/3	0.05 (1)		
B-C	-236/0	-95.2	-95.2 0.12 (1)	6.25	C-H	-2/0	0.00 (1)		
C-D	-185/0	-95.2	-95.2 0.06 (1)	6.25	H-D	-112/3	0.05 (1)		
D-E	-235/0	-95.2	-95.2 0.12 (1)	6.25	B-I	0/250	0.06 (1)		
E-F	0/39	-95.2	-95.2 0.13 (1)	10.00	H-E	0/249	0.06 (1)		
J-B	-589/0	0.0	0.0 0.10 (1)	7.91					
G-E	-587/0	0.0	0.0 0.10 (1)	7.91					
J-I	0/0	-18.5	-18.5 0.04 (4)	10.00					
I-H	0/186	-18.5	-18.5 0.05 (4)	10.00					
H-G	0/0	-18.5	-18.5 0.04 (4)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.13/1.00 (A-B-1), BC=0.05/1.00 (H-I-4), WB=0.06/1.00 (B-1), SSI=0.09/1.00 (D-E-1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

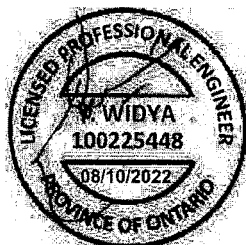
PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428322	T70		1	TRUSS DESC.	JT 53080	E22085340

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MITek Industries, Inc. Thu Aug 11 09:34:48 2022 Page 1
ID:4IRtKRO8ssghv2KFQyP5dytbdbD-vtssg6GqJJsFhwovbst76Woiqv3Vwre2vo6PHayozmS

Scale = 1:100.0

TOTAL WEIGHT = 397 lb

LUMBER	N.L.G.A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x6 DRY No.2	SPF			
C - D	2x6 DRY No.2	SPF			
D - F	2x6 DRY No.2	SPF			
F - H	2x6 DRY No.2	SPF			
H - J	2x6 DRY No.2	SPF			
J - L	2x6 DRY No.2	SPF			
L - N	2x6 DRY No.2	SPF			
N - P	2x6 DRY No.2	SPF			
P - Q	2x6 DRY No.2	SPF			
Q - S	2x6 DRY No.2	SPF			
B - AC	2x6 DRY 2100F 1.8E	SPF			
AC - Z	2x6 DRY 2100F 1.8E	SPF			
Z - W	2x6 DRY 2100F 1.8E	SPF			
W - R	2x6 DRY 2100F 1.8E	SPF			

REINFORCING MEMBERS	HW1	HW2	ALL WEBS	2x4 DRY	No.2	SPF
HW1	2x6 DRY	No.2	SPF			
HW2	2x6 DRY	No.2	SPF			

ALL WEBS 2x4 DRY SEASONED LUMBER.

DESIGN CRITERIA

SPECIFIED LOADS:

- TOP CH. LL = 35.1 PSF
- DL = 6.0 PSF
- BOT CH. LL = 10.5 PSF
- DL = 7.4 PSF
- TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN.C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 2015, AISC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 2014

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEF.(LL) = U/360 (1.88")

CALCULATED VERT. DEF.(LL) = U/999 (0.51")

ALLOWABLE DEF.(TL) = U/180 (3.33")

CALCULATED VERT. DEF.(TL) = U/976 (0.72")

CSI: TC=0.84/1.00 (O-P:1), BC=0.62/1.00 (U-V:1), WB=0.87/1.00 (Q-U:1), SS=0.38/1.00 (K-L:3)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00

WIND LOAD IMPORTANCE FACTOR = 1.00

LIVE LOAD IMPORTANCE FACTOR = 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (MLN)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1967 1873

MT18HS 586 423 2455 1382 3185 3004

PLATE PLACEMENT TOL. = 0.250 inches

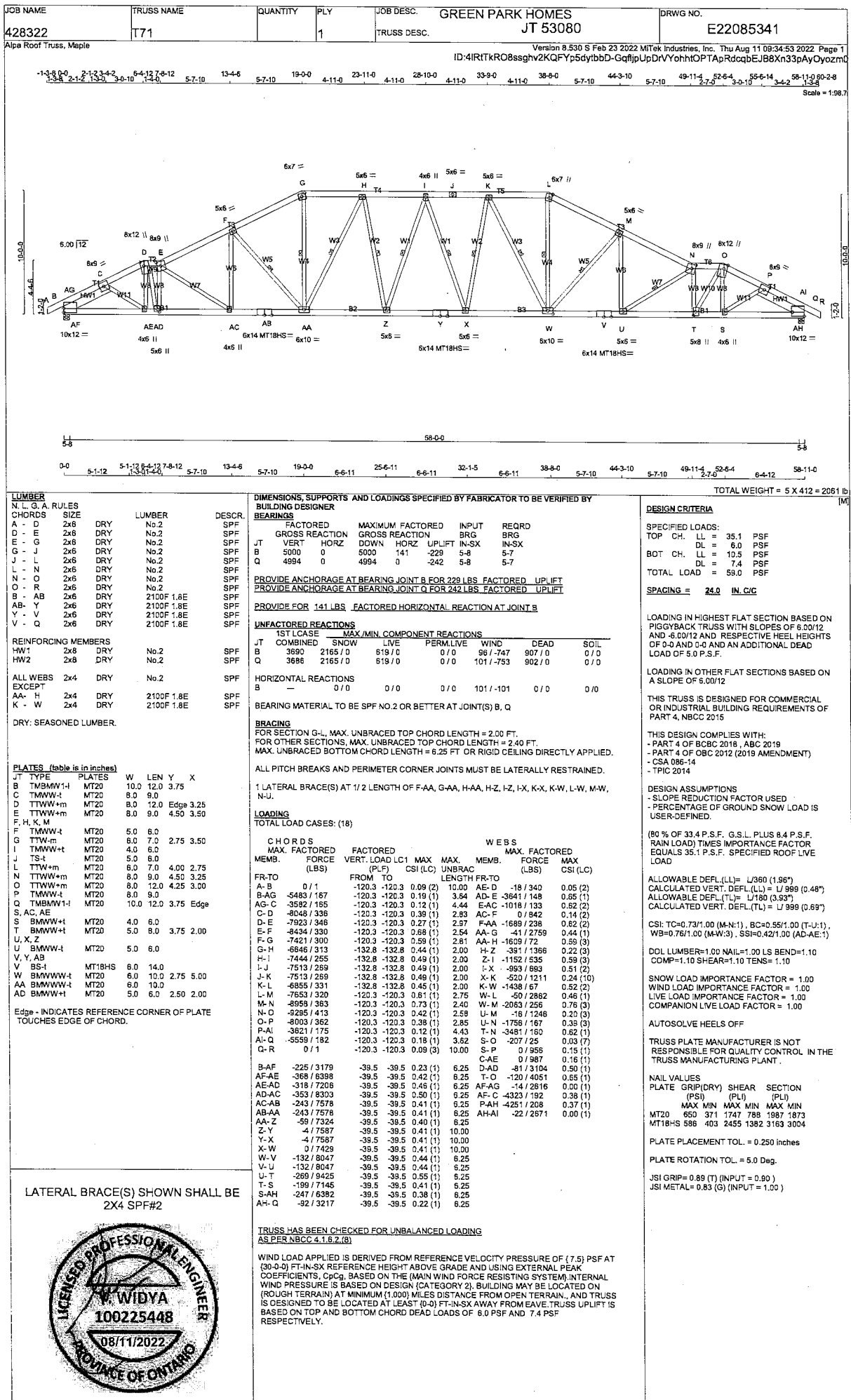
PLATE ROTATION TOL. = 5.0 Deg.

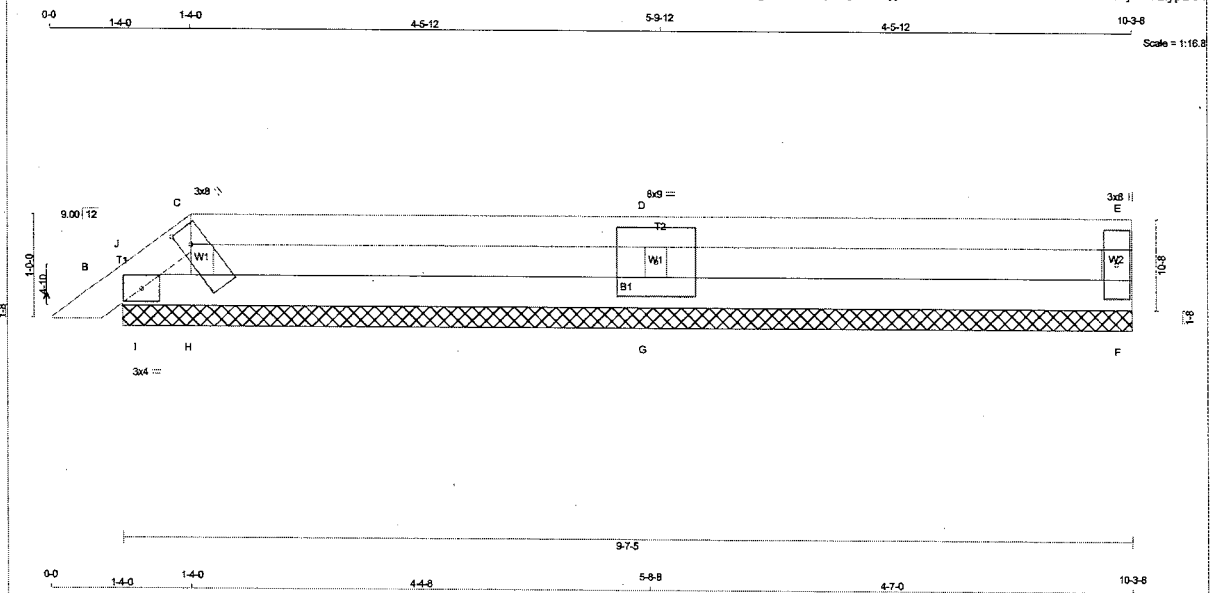
JSI GRIP= 0.90 (D) (INPUT = 0.90)

JSI METAL= 0.94 (Q) (INPUT = 1.00)

TRUSS HAS BEEN CHECKED FOR UNBALANCED BRACING AS PER NBCC 4.1.6.2(B)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF 1.75 PSF AT (30-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.





TOTAL WEIGHT = 2 X 24 = 48 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY				BUILDING DESIGNER			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQD	BRG	IN-SX
A - C	2x4	DRY	No.2	SPF	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	IN-SX	IN-SX
C - E	2x4	DRY	No.2	SPF	SPF	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
F - E	2x4	DRY	No.2	SPF	SPF	F	195	0	195	0	0
B - F	2x4	DRY	No.2	SPF	SPF	B	112	0	112	0	0
ALL WEBS	2x3	DRY	No.2	SPF	SPF	H	211	0	211	0	0
DRY, SEASONED LUMBER.						G	628	0	628	0	0

PLATES (table in inches)				UNFACTORED REACTIONS				DESIGN CRITERIA			
JT	TYPE	PLATES	W	LEN	Y	X	1ST CASE	MAX / MIN	COMPONENT REACTIONS	TOP CH.	LL
B	TMB14	MT20	3.0	4.0			F	138	91/0	DL	6.0
C	D, E, F, G, H						B	75	74/0	LL	6.0
C	TBWI1+h	MT20	3.0	8.0	2.00	1.25	H	153	80/0	DL	7.4
D	TBMW1-j	MT20	8.0	9.0			G	443	299/0	TOTAL LOAD	40.1
E	TBMW1+p	MT20	3.0	8.0						SPACING	24.0

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

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

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

LOADING				TOTAL LOAD CASES: (4)				CHORDS			
MEMB.	FORCE	VERT.	LOAD	LC1	MAX	MAX	MEMB.	FORCE	VERT.	LOAD	LC1
FR-TO	0/15	-95.2	-95.2	0.02 (1)	10.00	H-C	-132/0	0.02 (1)			
B-J	-48/5	-95.2	-95.2	0.02 (1)	6.25	G-D	-533/0	0.07 (1)			
J-C	-47/0	-95.2	-95.2	0.01 (1)	6.25	I-J	-34/0	0.00 (1)			
C-D	0/0	-95.2	-95.2	0.32 (1)	10.00						
D-E	0/0	-95.2	-95.2	0.32 (1)	10.00						
F-E	-162/0	0.0	0.0	0.02 (1)	7.81						

WEBS				MAX. FACTORED				DESIGN CRITERIA			
MEMB.	FORCE	VERT.	LOAD	LC1	MAX	MAX	MEMB.	FORCE	VERT.	LOAD	LC1
B-I	0/24	-18.5	-18.5	0.00 (1)	10.00						
I-H	0/24	-18.5	-18.5	0.05 (4)	10.00						
H-G	0/0	-18.5	-18.5	0.09 (4)	10.00						
G-F	0/0	-18.5	-18.5	0.09 (4)	10.00						

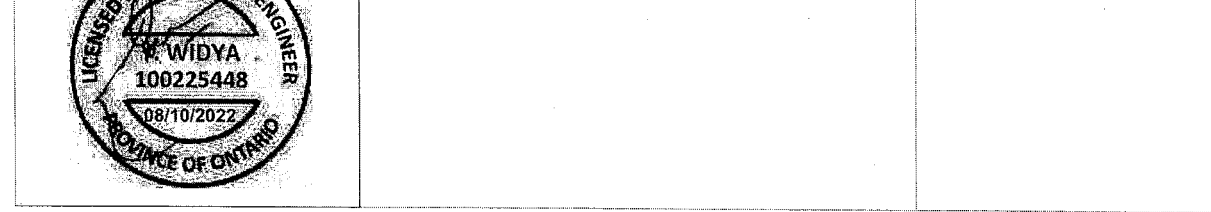
COMPANION LIVE LOAD FACTOR = 1.00

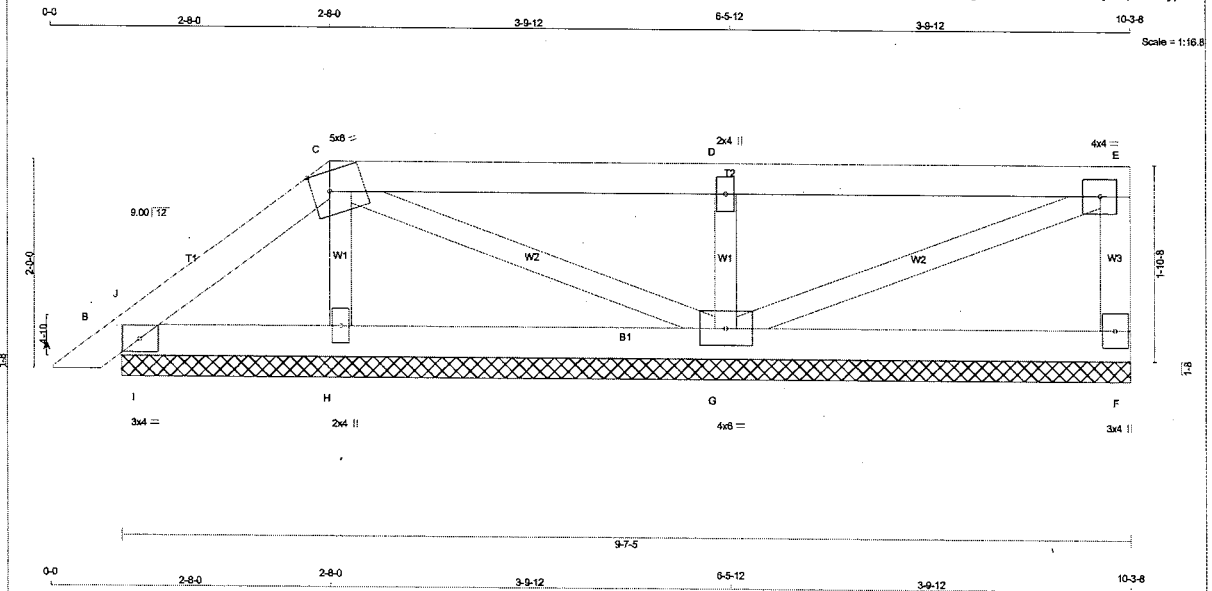
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP = 0.25 (C) (INPUT = 0.90)
JSI METAL = 0.03 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 3 X 33 = 99 lb

N. L. G. A. RULES				BUILDING DESIGNER								DESIGN CRITERIA		
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS										
A - C	2x4	DRY	No.2	SPF	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		SPECIFIED LOADS:	
C - E	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		TOP CH. LL = 28.7 PSF	
E - F	2x4	DRY	No.2	SPF	VERT	HORIZ	DOWN	HORIZ	UPLIFT	IN-SK	IN-SK		DL = 6.0 PSF	
F - F	2x4	DRY	No.2	SPF	JT								LL = 0.0 PSF	
					B	166	0	166	0	0	9-7.5	1-8	BOT CH. DL = 7.4 PSF	
					B	191	0	191	0	0	9-7.5	1-8	DL = 7.4 PSF	
					H	244	0	244	0	0	9-7.5	1-8	TOTAL LOAD = 40.1 PSF	
					G	546	0	546	0	0	9-7.5	1-8		
ALL WEBS	2x3	DRY	No.2	SPF										
DRY: SEASONED LUMBER.														

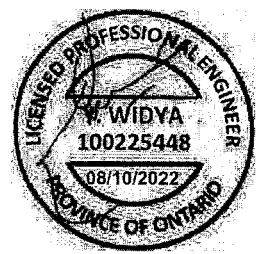
PLATES (table is in inches)				UNFACTORED REACTIONS			
JT	TYPE	PLATES	W LEN Y X	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	
F	118	78/0	0/0	0/0	0/0	40/0	0/0
B	133	100/0	0/0	0/0	0/0	33/0	0/0
H	174	106/0	0/0	0/0	0/0	68/0	0/0
G	384	261/0	0/0	0/0	0/0	124/0	0/0

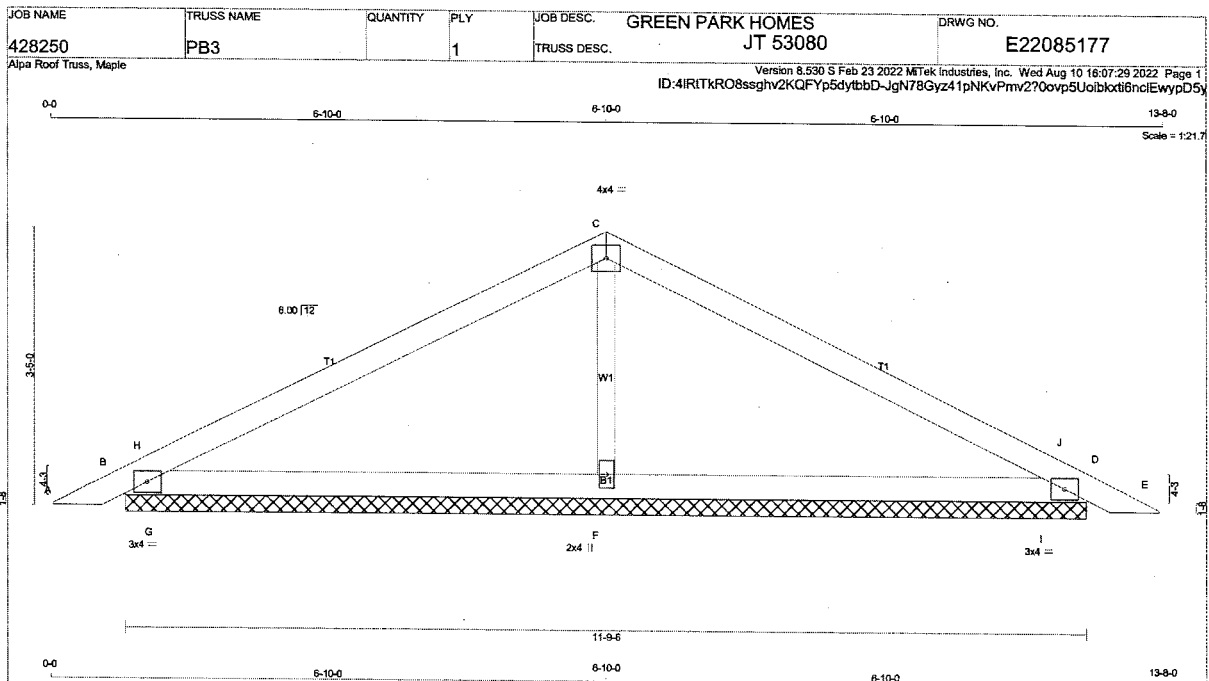
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, B, H, G
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING				CHORDS				WEBS			
TOTAL LOAD CASES: (4)				MAX. FACTORED	FACTORED	MEMB.	FORCE	MAX. FACTORED	FACTORED	MEMB.	FORCE
FR-TO	MEMB.	FORCE (LBS)	VERT. LOAD (PL)	VERT. LOAD (PL)	MAX. FACTORED	MAX. FACTORED	FORCE (LBS)	MAX. FACTORED	FACTORED	MAX. FACTORED	FORCE (LBS)
A-B	0/15	-95.2	-95.2	0.02 (1)	10.00	H-C	-168/0	0.02 (1)			
B-J	-36/0	-95.2	-95.2	0.01 (1)	6.25	C-G	-33/0	0.01 (1)			
J-C	-53/0	-95.2	-95.2	0.04 (1)	6.25	G-D	-453/0	0.07 (1)			
C-D	0/2	-95.2	-95.2	0.23 (1)	10.00	G-E	-2/0	0.00 (1)			
D-E	0/2	-95.2	-95.2	0.23 (1)	10.00	H-J	-119/0	0.00 (1)			
F-E	-138/0	0.0	0.0	0.01 (1)	7.81						
B-I	0/40	-18.5	-18.5	0.05 (1)	10.00						
I-H	0/40	-18.5	-18.5	0.05 (1)	10.00						
H-G	0/29	-18.5	-18.5	0.07 (4)	10.00						
G-F	0/0	-18.5	-18.5	0.07 (4)	10.00						

CS: TC=0.23/1.00 (C-D-1), BC=0.07/1.00 (G-H-4), WB=0.07/1.00 (D-G-1), SS=0.18/1.00 (D-E-1)
 DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
 COMP=1.10 SHEAR=1.10 TENS=1.10
 COMPANION LIVE LOAD FACTOR = 1.00
 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
 NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 650 371 1747 788 1987 1873
 PLATE PLACEMENT TOL. = 0.250 inches
 PLATE ROTATION TOL. = 5.0 Deg.
 JSI GRIP= 0.23 (D) (INPUT = 0.90)
 JSI METAL= 0.10 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

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

DRY, SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-i	MT20	3.0	4.0		
C	TTW-2	MT20	4.0	4.0		
D	TMB1-i	MT20	3.0	4.0		
F	BMW1-w	MT20	2.0	4.0		

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

BUILDING DESIGNER							
BEARINGS							
	FACTORED		MAXIMUM FACTORED		INPUT	REQRD	
	GROSS REACTION		GROSS REACTION		BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	477	0	477	0	0	11-9-6	1-8
D	477	0	477	0	0	11-9-6	1-8
F	547	0	547	0	0	11-9-6	1-8

UNFACTORED REACTIONS		MAX/MIN. COMPONENT REACTIONS					
JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	334	239 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0
D	334	239 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0
F	389	242 / 0	0 / 0	0 / 0	0 / 0	147 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS		MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED TORSION (LBS-FT)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED TORSION (LBS-FT)
		VERT. LOAD (LBS)	HORIZ. LOAD (LBS)						
FR-TO									
A-B	0 / 17	-95.2	-95.2	0.05 (1)	10.00		F-C	-279 / 0	0.05 (1)
B-H	-53 / 0	-95.2	-95.2	0.19 (1)	6.25		G-H	-634 / 0	0.00 (1)
H-C	-225 / 0	-95.2	-95.2	0.40 (1)	6.25		I-J	-634 / 0	0.00 (1)
C-J	-225 / 0	-95.2	-95.2	0.40 (1)	6.25				
J-D	-53 / 0	-95.2	-95.2	0.19 (1)	6.25				
D-E	0 / 17	-95.2	-95.2	0.05 (1)	10.00				
B-G	0 / 191	-18.5	-18.5	0.37 (1)	10.00				
G-F	0 / 191	-18.5	-18.5	0.37 (1)	10.00				
F-I	0 / 191	-18.5	-18.5	0.37 (1)	10.00				
I-D	0 / 191	-18.5	-18.5	0.37 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.40/1.00 (C-J-1), BC=0.37/1.00 (F-I-1), WB=0.05/1.00 (C-F-1), SSI=0.48/1.00 (B-G-1)

DOL LUMBER=1.00 NAIL=1.00 L.S.BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

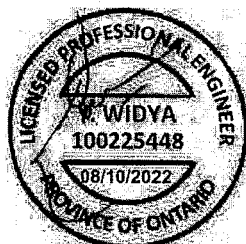
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 850 371 1747 788 1987 1873

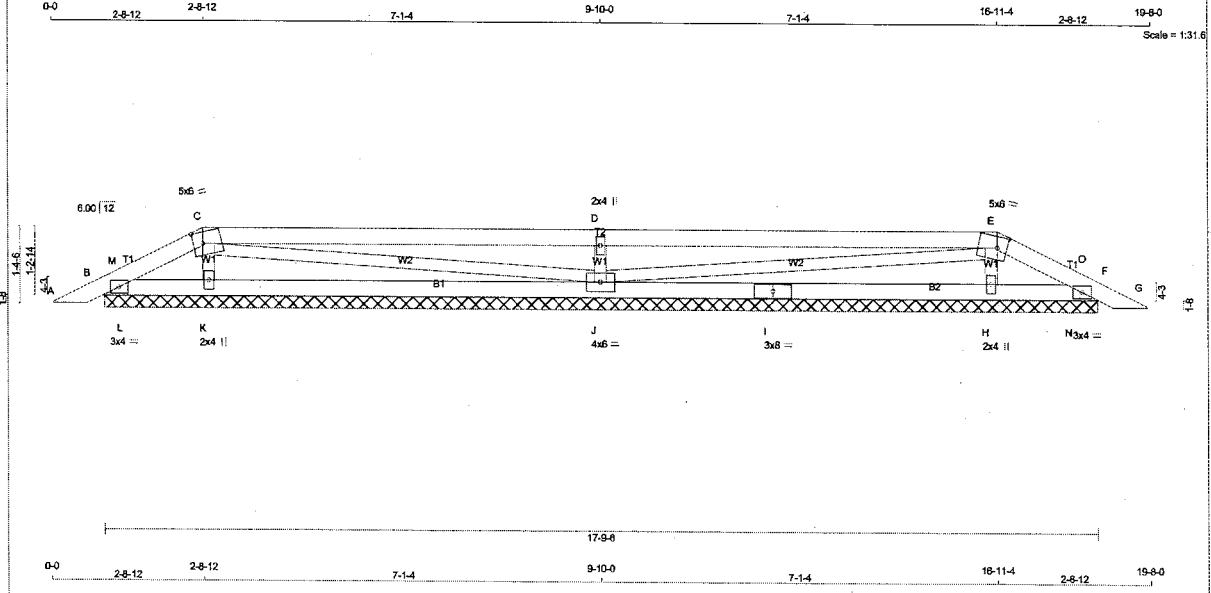
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (D) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:31.6 TOTAL WEIGHT = 55 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY			
N. L. G. A. RULES				BUILDING DESIGNER			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS			
A - C	2x4	DRY	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQD
C - E	2x4	DRY	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG
E - G	2x4	DRY	SPF	VERT	HORIZ	UPLIFT	IN-SX
B - I	2x4	DRY	SPF	DOWN	HORIZ	UPLIFT	IN-SX
I - F	2x4	DRY	SPF	DOWN	HORIZ	UPLIFT	IN-SX
ALL WEBS 2x3 DRY SEASONED LUMBER.				JT	B	K	J
					171	0	0
					430	0	0
					981	0	0
					430	0	0
					171	0	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS				DESIGN CRITERIA			
1ST LCASE				SPECIFIED LOADS:			
COMBINED				TOP CH. LL = 26.7 PSF			
SNOW				DL = 6.0 PSF			
LIVE				BOT CH. LL = 0.0 PSF			
PERM LIVE				DL = 7.4 PSF			
WIND				TOTAL LOAD = 40.1 PSF			
DEAD				SPACING = 24.0 IN. C/C			
SOIL				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
JT				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
B				THIS DESIGN COMPLIES WITH:			
K				- PART 9 OF BCBC 2018, ABC 2019			
J				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
H				- CSA 086-14			
F				- TPIC 2014			

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.				MEMB.			
MAX. FACTORED				MAX. FACTORED			
FORCE (LBS)				FORCE (LBS)			
VERT. LOAD LC1				MAX. FACTORED			
(PLF)				FORCE (LBS)			
MAX. UNBRACED				MAX. FACTORED			
LENGTH FR-TO				FORCE (LBS)			
FR-TO				MAX. FACTORED			
A-B				FORCE (LBS)			
B-M				MAX. FACTORED			
C-D				FORCE (LBS)			
D-E				MAX. FACTORED			
E-F				FORCE (LBS)			
F-G				MAX. FACTORED			
B-L				FORCE (LBS)			
L-K				MAX. FACTORED			
K-J				FORCE (LBS)			
J-I				MAX. FACTORED			
I-H				FORCE (LBS)			
H-N				MAX. FACTORED			
N-F				FORCE (LBS)			

COMPANION LIVE LOAD FACTOR = 1.00

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

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

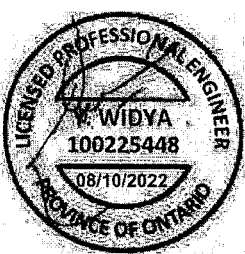
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

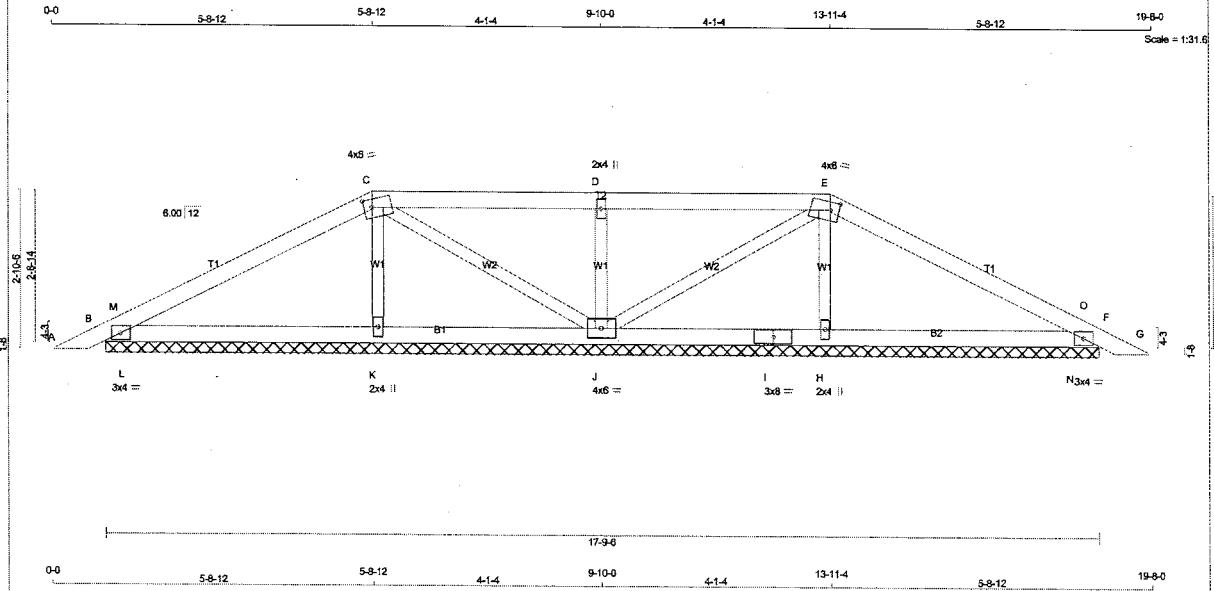
PLATE PLACEMENT TOL. = 0.250 inches

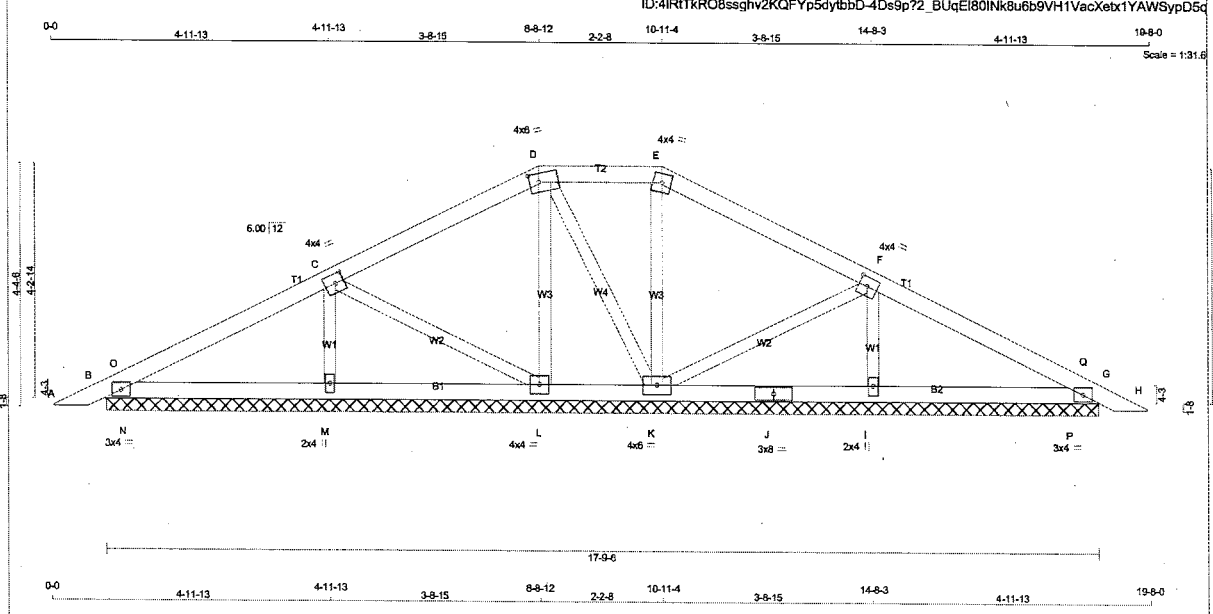
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90)
JSI METAL= 0.18 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2







Scale = 1/8" = 1'-0" TOTAL WEIGHT = 64 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY				BUILDING DESIGNER			
N. L. G. A. RULES				FACTORED				BEARINGS			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	SPF	SPF	SPF	SPF	SPF	SPF
A - D	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
E - H	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
I - J	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
K - L	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
M - N	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
O - P	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
Q - R	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
S - T	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
U - V	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
W - X	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
Y - Z	2x4	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
ALL WEBS	2x3	DRY	No.2	SPF	SPF	SPF	SPF	SPF	SPF	SPF	SPF
DRY: SEASONED LUMBER.											

PLATES (table is in inches)				UNFACTORED REACTIONS				DESIGN CRITERIA			
JT	TYPE	PLATES	W	LEN	Y	X	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND
B	TMB1+1	MT20	3.0	4.0			S	210	151/0	0/0	0/0
C	TMBW1+1	MT20	4.0	4.0	2.00	1.75	M	342	225/0	0/0	0/0
D	TTWW-m	MT20	4.0	6.0	1.75	2.00	L	163	100/0	0/0	0/0
E	TTW-m	MT20	4.0	4.0			K	293	207/0	0/0	0/0
F	TMBW1+1	MT20	4.0	4.0	2.00	1.75	I	326	212/0	0/0	0/0
G	TMB1+1	MT20	3.0	4.0			G	204	146/0	0/0	0/0
H	BMW1+1	MT20	3.0	4.0							
I	BMW1+1	MT20	3.0	4.0							
J	BS-1	MT20	3.0	8.0							
K	BMWW1+1	MT20	4.0	6.0							
L	BMWW1+1	MT20	4.0	4.0							
M	BMW1+1	MT20	2.0	4.0							

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M, L, K, I, G
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

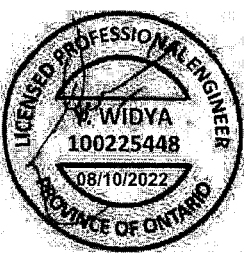
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.
 LOADING
 TOTAL LOAD CASES: (4)

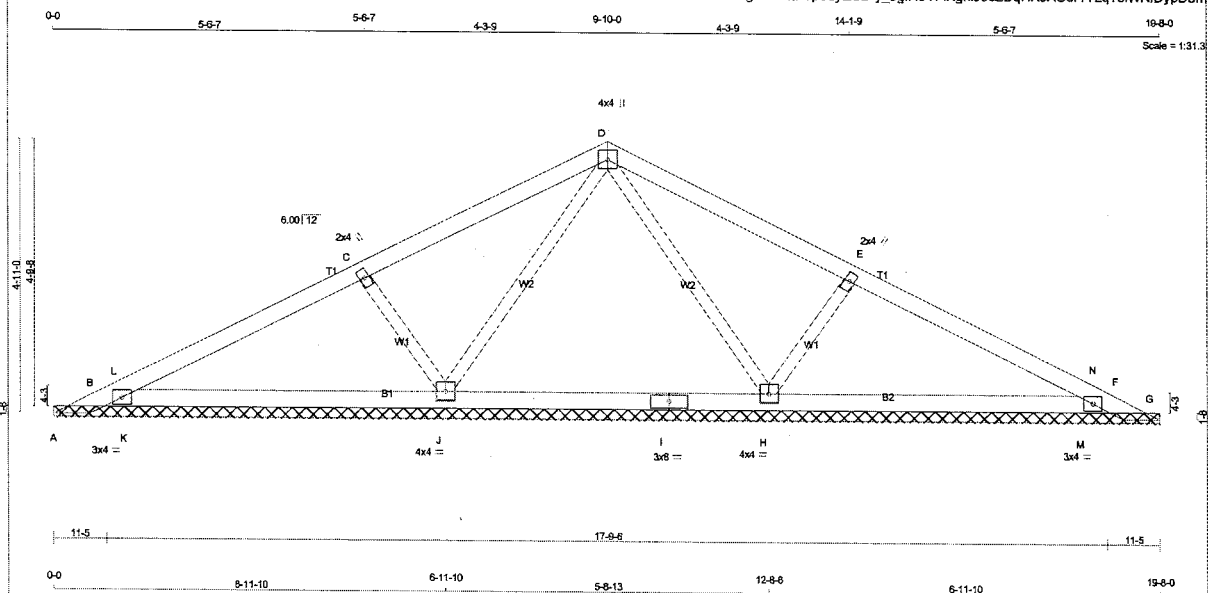
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CS1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0/17	-95.2	-95.2 0.05 (1)	10.00	M-C	-371/0	0.06 (1)
B-O	-91/0	-95.2	-95.2 0.02 (4)	6.25	C-L	-74/0	0.02 (1)
C-D	-75/0	-95.2	-95.2 0.22 (1)	6.25	L-D	-151/0	0.04 (1)
D-E	-41/0	-95.2	-95.2 0.22 (1)	6.25	D-K	-99/0	0.03 (1)
E-F	0/26	-95.2	-95.2 0.08 (1)	10.00	K-E	-250/0	0.07 (1)
F-G	-2/3	-95.2	-95.2 0.22 (1)	10.00	K-F	-98/0	0.03 (1)
G-H	-55/0	-95.2	-95.2 0.22 (1)	6.25	I-F	-349/0	0.05 (1)
H-I	-71/0	-95.2	-95.2 0.02 (4)	6.25	N-O	-156/6	0.00 (1)
I-J	0/17	-95.2	-95.2 0.05 (1)	10.00	P-Q	-156/6	0.00 (1)
J-K	0/84	-18.5	-18.5 0.10 (1)	10.00			
K-L	0/84	-18.5	-18.5 0.10 (1)	10.00			
L-M	0/84	-18.5	-18.5 0.08 (1)	10.00			
M-N	0/16	-18.5	-18.5 0.03 (4)	10.00			
N-O	0/67	-18.5	-18.5 0.08 (4)	10.00			
O-P	0/67	-18.5	-18.5 0.08 (4)	10.00			
P-Q	0/67	-18.5	-18.5 0.10 (1)	10.00			
Q-R	0/67	-18.5	-18.5 0.10 (1)	10.00			

COMPANION LIVE LOAD FACTOR = 1.00
 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 650 371 1747 788 1987 1873
 PLATE PLACEMENT TOL. = 0.250 inches
 PLATE ROTATION TOL. = 5.0 Deg.
 JSI GRIP= 0.83 (D) (INPUT = 0.90)
 JSI METAL= 0.09 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:31.3 TOTAL WEIGHT = 18 X 58 = 1036 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD	SPECIFIED LOADS:		
CHORDS									TOP CH. LL = 26.7 PSF		
A - D	2x4	DRY	No.2						DL = 6.0 PSF		
D - G	2x4	DRY	No.2						BOT CH. LL = 0.0 PSF		
B - I	2x4	DRY	No.2						DL = 7.4 PSF		
I - F	2x4	DRY	No.2						TOTAL LOAD = 40.1 PSF		
ALL WEBS	2x3	DRY	No.2						SPACING = 24.0 IN. C/C		
DRY SEASONED LUMBER.											

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

(65% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CS: TC=0.29/1.00 (C-D:1), BC=0.13/1.00 (J-K:4), WB=0.12/1.00 (D-J:1), SS=0.18/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

JSI GRIP= 0.46 (J) (INPUT = 0.90)
JSI METAL= 0.09 (D) (INPUT = 1.00)

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

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

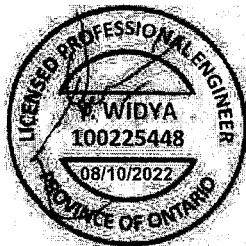
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

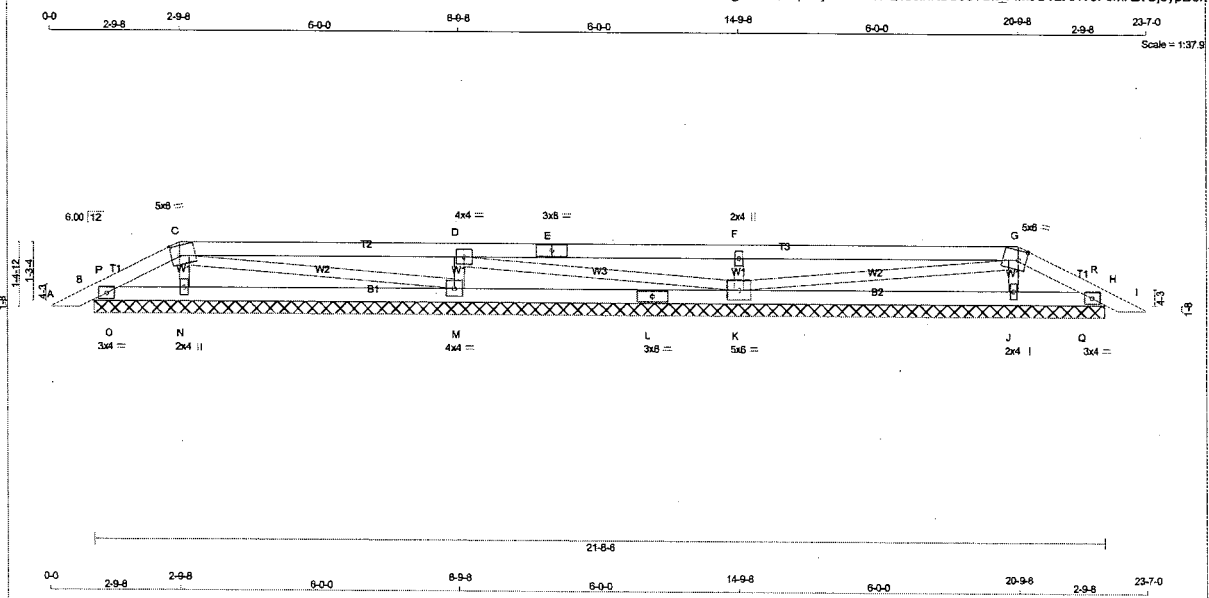
LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORIZ. LOAD (LBS)
FR-TO				FR-TO			
A-B	0/66	-113.7	-113.7 0.19 (1)	D-H	-246/0	0.12 (1)	
B-L	-286/0	-95.2	-95.2 0.19 (1)	H-E	-441/0	0.08 (1)	
L-C	-148/0	-95.2	-95.2 0.28 (1)	J-D	-246/0	0.12 (1)	
C-D	0/83	-95.2	-95.2 0.29 (1)	C-J	-441/0	0.08 (1)	
D-E	0/83	-95.2	-95.2 0.29 (1)	K-L	0/139	0.00 (1)	
E-N	-148/0	-95.2	-95.2 0.28 (1)	M-N	0/139	0.00 (1)	
N-F	-286/0	-95.2	-95.2 0.19 (1)				
F-G	0/66	-113.7	-113.7 0.19 (1)				

B-K	0/148	-18.5	-18.5 0.08 (4)	10.00
K-J	0/148	-18.5	-18.5 0.13 (4)	10.00
J-I	0/40	-18.5	-18.5 0.13 (4)	10.00
I-H	0/40	-18.5	-18.5 0.13 (4)	10.00
H-M	0/148	-18.5	-18.5 0.13 (4)	10.00
M-F	0/148	-18.5	-18.5 0.08 (4)	10.00

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 2 X 69 = 137 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY			
N. L. G. A. RULES				BUILDING DESIGNER			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS			
A - C	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT
C - E	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG
E - G	2x4	DRY	No.2	SPF	VERT	DOWN	UPLIFT
G - I	2x4	DRY	No.2	SPF	VERT	DOWN	UPLIFT
I - L	2x4	DRY	No.2	SPF	VERT	DOWN	UPLIFT
L - H	2x4	DRY	No.2	SPF	VERT	DOWN	UPLIFT
ALL WEBS	2x3	DRY	No.2	SPF	VERT	DOWN	UPLIFT
DRY, SEASONED LUMBER.				SPF	VERT	DOWN	UPLIFT

PLATES (table is in inches)				UNFACTORED REACTIONS			
JT TYPE	PLATES	W	LEN	1ST CASE	MAX / MIN	PERM LIVE	WIND
B	TMB1-I	MT20	3.0	127	106 / 0	0 / 0	0 / 0
C	TTWW-m	MT20	5.0	278	166 / 0	0 / 0	0 / 0
D	TTWW-t	MT20	4.0	M	521	352 / 0	0 / 0
E	TS-I	MT20	3.0	J	278	167 / 0	0 / 0
F	TMW-H	MT20	2.0	H	125	105 / 0	0 / 0
G	TTWW-m	MT20	5.0				
H	TMB1-I	MT20	3.0				
J	BMW1-w	MT20	2.0				
K	BMWWW1-t	MT20	5.0				
L	BS-I	MT20	3.0				
M	BMWW1-t	MT20	4.0				
N	BMW1-w	MT20	2.0				

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FACTORED	FACTORED	FACTORED	MEMB.	FACTORED	FACTORED	FACTORED
FORCE	VERT.	LC1	LC2	FORCE	VERT.	LC1	LC2
(LBS)	(PLF)	(LC)	(LC)	(LBS)	(PLF)	(LC)	(LC)
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
A-B	0 / 17	-95.2	-95.2	0.05 (1)	10.00	N-C	-273 / 0
B-P	-38 / 4	-95.2	-95.2	0.02 (4)	6.25	C-M	-6 / 0
P-C	-46 / 0	-95.2	-95.2	0.03 (1)	6.25	M-D	-627 / 0
C-D	-5 / 0	-95.2	-95.2	0.47 (1)	10.00	D-K	-6 / 0
D-E	0 / 3	-95.2	-95.2	0.47 (1)	10.00	K-F	-628 / 0
E-F	0 / 3	-95.2	-95.2	0.47 (1)	10.00	K-G	-10 / 0
F-G	0 / 3	-95.2	-95.2	0.47 (1)	10.00	J-G	-275 / 0
G-R	-42 / 0	-95.2	-95.2	0.03 (1)	6.25	C-P	-105 / 0
R-H	-34 / 4	-95.2	-95.2	0.02 (4)	6.25	Q-R	-105 / 0
H-I	0 / 17	-95.2	-95.2	0.05 (1)	10.00		
B-O	0 / 39	-18.5	-18.5	0.05 (1)	10.00		
O-N	0 / 39	-18.5	-18.5	0.10 (4)	10.00		
N-M	0 / 10	-18.5	-18.5	0.13 (4)	10.00		
M-L	0 / 5	-18.5	-18.5	0.13 (4)	10.00		
L-K	0 / 5	-18.5	-18.5	0.13 (4)	10.00		
K-J	0 / 7	-18.5	-18.5	0.13 (4)	10.00		
J-Q	0 / 36	-18.5	-18.5	0.10 (4)	10.00		
Q-H	0 / 36	-18.5	-18.5	0.05 (1)	10.00		

COMPANION LIVE LOAD FACTOR = 1.00

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

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

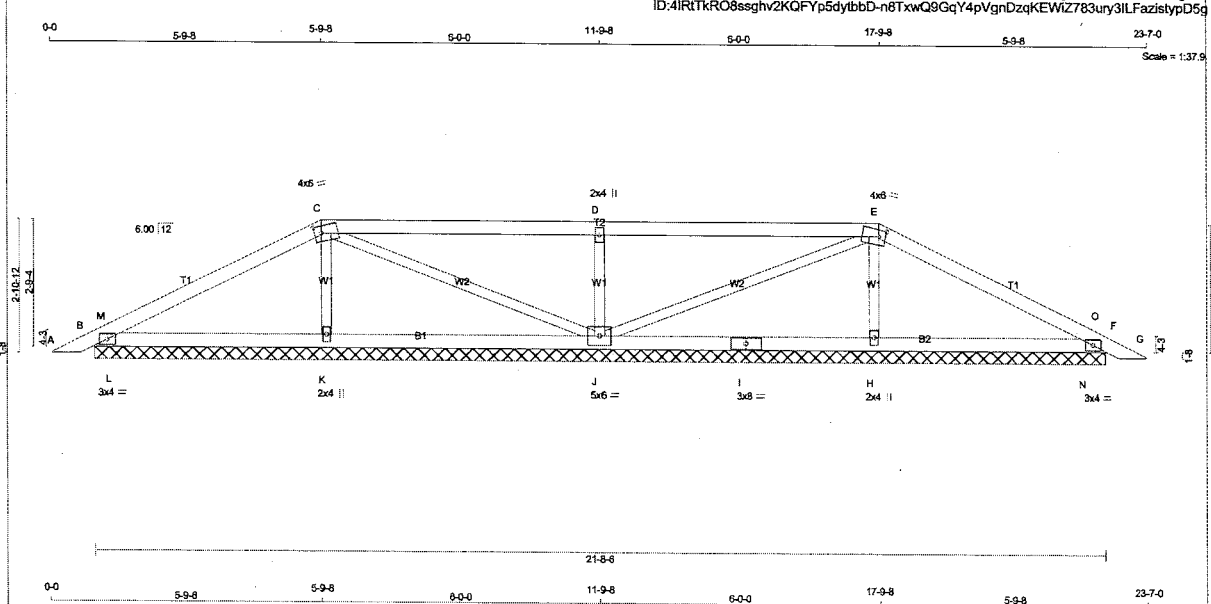
MAX MIN MAX MIN MAX MIN
MT20 950 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (C) (INPUT = 0.90)
JSI METAL = 0.14 (K) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



TOTAL WEIGHT = 2 X 68 = 137 lb

LUMBER

N.L.G.A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	SPF
C - E	2x4	DRY	SPF
E - G	2x4	DRY	SPF
B - I	2x4	DRY	SPF
I - F	2x4	DRY	SPF

ALL WEBS 2x3 DRY

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	4.0	6.0	1.75	1.75
D	TWW-w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	1.75
F	TMB1-I	MT20	3.0	4.0		
H	BMW1-w	MT20	2.0	4.0		
I	BS-I	MT20	3.0	8.0		
J	BMW1-w	MT20	5.0	6.0		
K	BMW1-w	MT20	2.0	4.0		

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	UP/LIFT
B	389	0	0
K	501	0	0
J	849	0	0
H	501	0	0
F	389	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
			PERM. LIVE
B	272	197	0
K	356	222	0
J	596	413	0
H	356	222	0
F	272	197	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

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	MEMB.	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	CS1 (LC)	UNBRACED LENGTH FR-TO
FR-TO	0/17	-95.2	-95.2	0.05 (1)
A-B	-31/0	-95.2	-95.2	0.05 (1)
B-M	-119/0	-95.2	-95.2	0.12 (1)
M-C	-27/0	-95.2	-95.2	0.05 (1)
C-D	-119/0	-95.2	-95.2	0.00 (1)
D-E	-31/0	-95.2	-95.2	0.00 (1)
E-O	0/17	-95.2	-95.2	0.00 (1)
O-F	0/100	-18.5	-18.5	0.00 (1)
F-G	0/100	-18.5	-18.5	0.00 (1)
G-H	0/100	-18.5	-18.5	0.00 (1)
H-I	0/86	-18.5	-18.5	0.00 (1)
I-H	0/86	-18.5	-18.5	0.00 (1)
H-N	0/100	-18.5	-18.5	0.00 (1)
N-F	0/100	-18.5	-18.5	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. G/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2016, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.58/1.00 (C-D:1), BC=0.23/1.00 (F-N:1), WB=0.12/1.00 (D-J:1), SS=0.31/1.00 (F-N:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

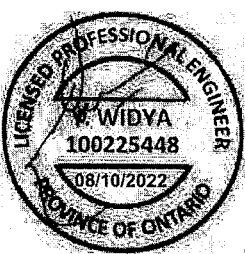
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (C) (INPUT = 0.90)

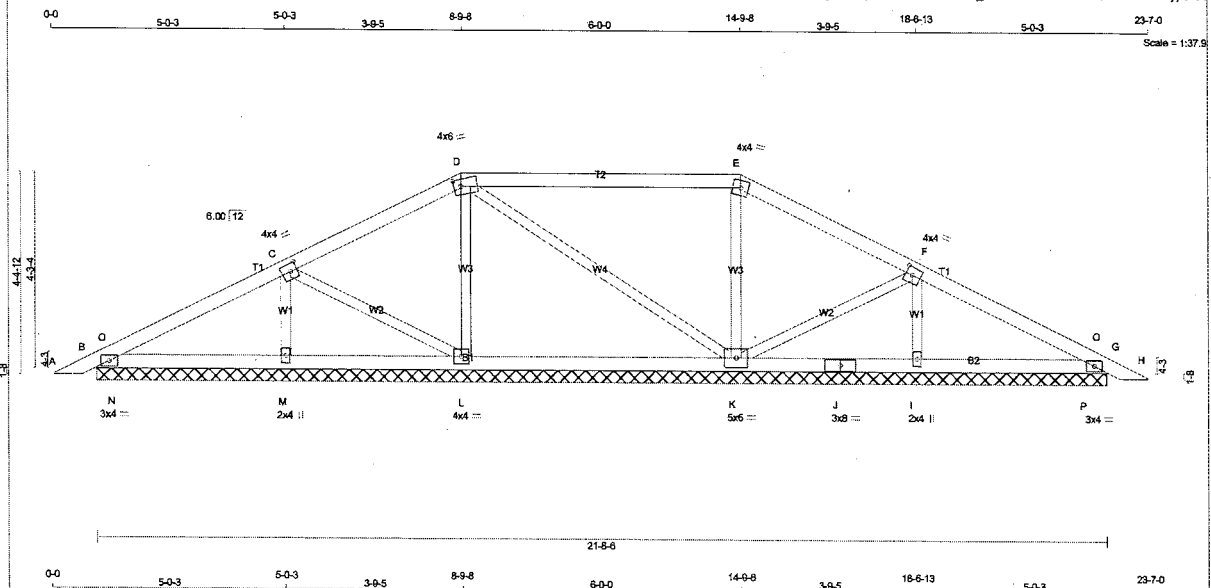
JSI METAL= 0.15 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:07:49 2022 Page 1
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LUMBER

N.L.G.A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	SPF
D - E	2x4	DRY	SPF
E - H	2x4	DRY	SPF
B - J	2x4	DRY	SPF
J - G	2x4	DRY	SPF

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT GROSS REACTION	REQD GROSS REACTION
JT	VERT	HORZ	DOWN	HORZ
B	313	0	313	0
M	497	0	497	0
L	467	0	467	0
K	593	0	593	0
I	467	0	467	0
G	301	0	301	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	219	157/0	0/0	0/0	0/0	62/0	0/0
M	350	239/0	0/0	0/0	0/0	111/0	0/0
L	332	209/0	0/0	0/0	0/0	123/0	0/0
K	412	274/0	0/0	0/0	0/0	137/0	0/0
I	329	222/0	0/0	0/0	0/0	107/0	0/0
G	211	150/0	0/0	0/0	0/0	61/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED FORCE (LBS)	W E B S	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
A-B	0/17	-95.2	-95.2	0.05 (1)	10.00	M-C	-397/0	0.06 (1)	0.02 (1)
B-O	-115/0	-95.2	-95.2	0.03 (4)	8.25	C-L	-50/0	0.02 (1)	0.10 (1)
O-C	-96/0	-95.2	-95.2	0.23 (1)	6.25	L-D	-355/0	0.06 (1)	0.11 (1)
C-D	-96/0	-95.2	-95.2	0.23 (1)	6.25	D-K	-66/0	0.06 (1)	0.11 (1)
D-E	0/5	-95.2	-95.2	0.58 (1)	10.00	K-E	-418/0	0.06 (1)	0.03 (1)
E-F	-27/0	-95.2	-95.2	0.23 (1)	6.25	F-I	-367/0	0.06 (1)	0.00 (1)
F-Q	-69/0	-95.2	-95.2	0.23 (1)	6.25	I-F	-367/0	0.06 (1)	0.00 (1)
Q-G	-88/0	-95.2	-95.2	0.03 (4)	8.25	N-O	-150/13	0.00 (1)	0.00 (1)
G-H	0/17	-95.2	-95.2	0.05 (1)	10.00	P-Q	-151/13	0.00 (1)	0.00 (1)
B-N	0/103	-18.5	-18.5	0.10 (1)	10.00				
N-M	0/103	-18.5	-18.5	0.11 (1)	10.00				
M-L	0/103	-18.5	-18.5	0.11 (4)	10.00				
L-K	0/50	-18.5	-18.5	0.10 (4)	10.00				
K-J	0/80	-18.5	-18.5	0.10 (4)	10.00				
J-I	0/80	-18.5	-18.5	0.10 (4)	10.00				
I-P	0/80	-18.5	-18.5	0.10 (1)	10.00				
P-G	0/80	-18.5	-18.5	0.10 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.58/1.00 (D-E:1), BC=0.11/1.00 (L-M:4), WB=0.11/1.00 (E-K:1), SH=0.22/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

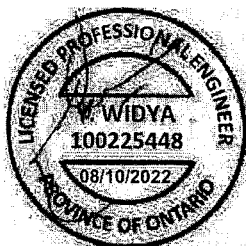
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1967 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (D) (INPUT = 0.90)
JSI METAL= 0.17 (D) (INPUT = 1.00)

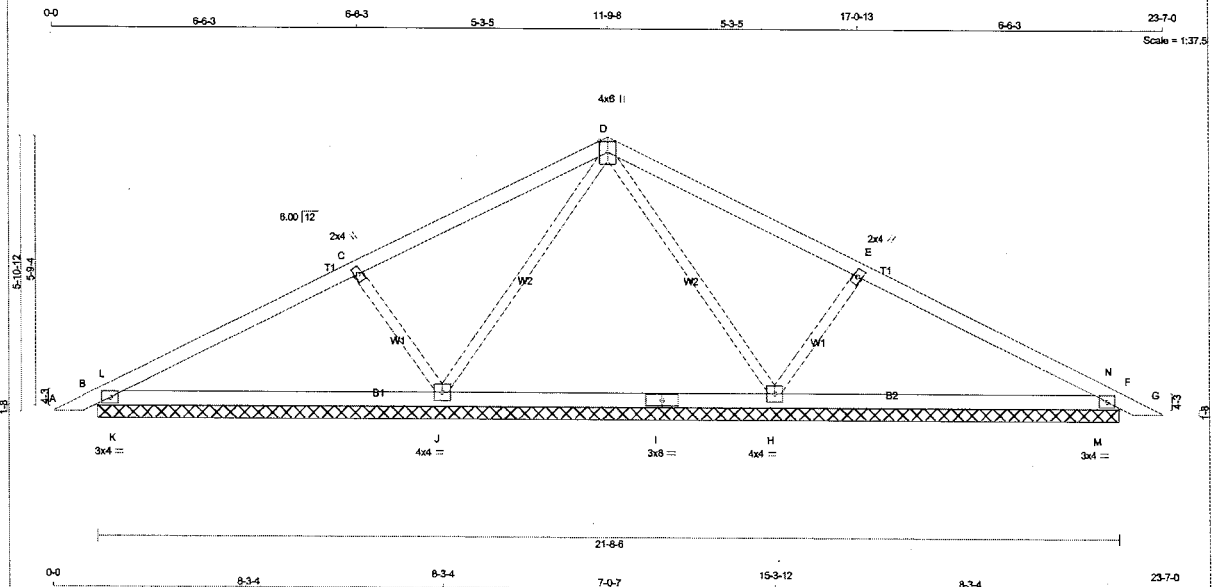
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME PB11	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085185
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Alpha Roof Truss, Maple

Version 8.530 S Feb 23 2022 MTEK Industries, Inc. Wed Aug 10 16:07:52 2022 Page 1
ID:4IRtKRO8ssghv2KQFyp5dybbD-86Gqz8DPf5j6bRtBINwQDmG74bDdH04CshTY5ypD5t



Scale = 1:37.5

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				TOTAL WEIGHT = 2 X 70 = 140 lb			
N.L.G.A. RULES	SIZE	LUMBER	DESCR.	BEARINGS				DESIGN CRITERIA			
A - D	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:			
D - G	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 26.7 PSF			
B - I	2x4	DRY	No.2	VERT	DOWN	HORZ	UPLIFT	DL = 6.0 PSF			
I - F	2x4	DRY	No.2	B	454	0	0	BOT CH. LL = 0.0 PSF			
				H	860	0	0	DL = 7.4 PSF			
				J	860	0	0	TOTAL LOAD = 40.1 PSF			
				F	454	0	0				
ALL WEBS	2x3	DRY	No.2	VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH				SPACING = 24.0 IN. C/C			
DRY: SEASONED LUMBER.				UNFACTORED REACTIONS				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE	PLATES			
B	TMB1-t	MT20	3.0	4.0
C	TMW-w	MT20	2.0	4.0
D	TTWW-w	MT20	4.0	6.0
E	TMW-w	MT20	2.0	4.0
F	TMB1-t	MT20	3.0	4.0
H	BMWW1-t	MT20	4.0	4.0
I	BS-t	MT20	3.0	8.0
J	BMWW1-t	MT20	4.0	4.0

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

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	FORCE	FACTORED	MAX.	MEMB.	FORCE	FACTORED	MAX.
FR-TO	(LBS)	VERT. LOAD	LC1	FR-TO	(LBS)	VERT. LOAD	LC1
A-B	0 / 17	-95.2	-95.2 0.05 (1)	D-H	-276 / 0	0.22 (1)	0.22 (1)
B-L	-268 / 0	-95.2	-95.2 0.10 (4)	H-E	-566 / 0	0.12 (1)	0.12 (1)
L-C	-226 / 0	-95.2	-95.2 0.46 (1)	J-D	-276 / 0	0.22 (1)	0.22 (1)
C-D	-2 / 62	-95.2	-95.2 0.46 (1)	C-J	-566 / 0	0.12 (1)	0.12 (1)
D-E	-2 / 62	-95.2	-95.2 0.46 (1)	K-L	-130 / 102	0.00 (1)	0.00 (1)
E-N	-226 / 0	-95.2	-95.2 0.46 (1)	M-N	-130 / 102	0.00 (1)	0.00 (1)
N-F	-268 / 0	-95.2	-95.2 0.10 (4)				
F-G	0 / 17	-95.2	-95.2 0.05 (1)				
B-K	0 / 230	-18.5	-18.5 0.13 (1)				
K-J	0 / 230	-18.5	-18.5 0.22 (4)				
J-I	0 / 89	-18.5	-18.5 0.21 (4)				
I-H	0 / 89	-18.5	-18.5 0.21 (4)				
H-M	0 / 230	-18.5	-18.5 0.22 (4)				
M-F	0 / 230	-18.5	-18.5 0.13 (1)				

COMPANION LIVE LOAD FACTOR = 1.00

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

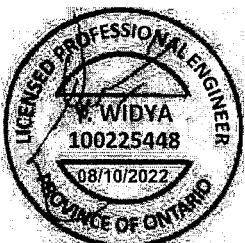
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 768 1987 1873

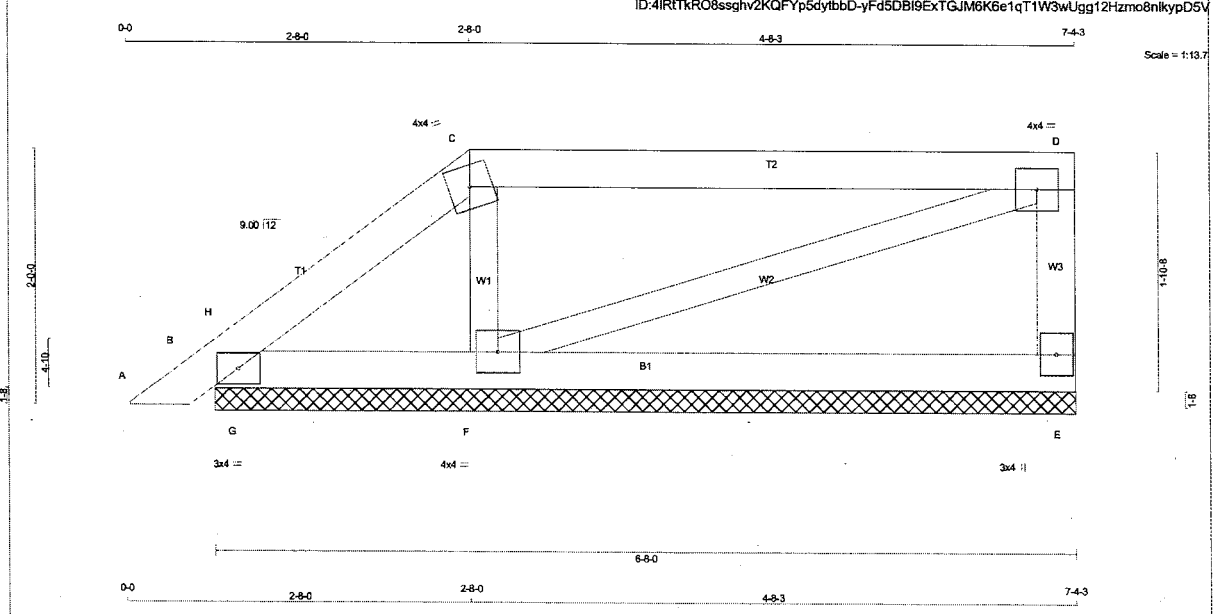
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.46 (H) (INPUT = 0.90)
JSI METAL = 0.12 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:13.7 TOTAL WEIGHT = 2 X 23 = 46 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY			
N. L. G. A. RULES				BUILDING DESIGNER			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS			
A - C	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQD
C - D	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG
E - D	2x4	DRY	No.2	JT VERT	HORZ	DOWN	HORZ
B - E	2x4	DRY	No.2	E 262	0	262	0
ALL WEBS	2x3	DRY	No.2	B 177	0	177	0
DRY: SEASONED LUMBER.				F 374	0	374	0

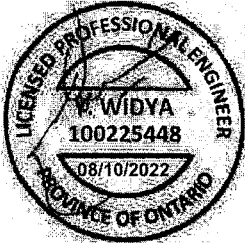
PLATES (table in inches)				UNFACTORED REACTIONS			
JT	TYPE	PLATES	W	LEN	Y	X	
B	TMB1-I	MT20	3.0	4.0			
C	TTW-m	MT20	4.0	4.0			
D	TMW-I	MT20	4.0	4.0			
E	BMV1+P	MT20	3.0	4.0			
F	BMWW1-I	MT20	4.0	4.0			

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, F. TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	FORCE	FACTORED	MAX	MEMB.	FORCE	FACTORED	MAX
FR-TO	(LBS)	VERT. LOAD	LC1	FROM	TO	LENGTH	FR-TO
A-B	0/15	-95.2	-95.2 0.02 (1)	10.00	F-C	-271/0	0.04 (1)
B-H	-14/10	-95.2	-95.2 0.02 (1)	6.25	F-D	0/18	0.00 (1)
H-C	-48/0	-95.2	-95.2 0.04 (1)	6.25	G-H	-145/0	0.00 (1)
C-D	-17/0	-95.2	-95.2 0.35 (1)	6.25			
E-D	-229/0	0.0	0.0 0.02 (1)	7.81			
B-G	0/35	-18.5	-18.5 0.05 (1)	10.00			
G-F	0/35	-18.5	-18.5 0.09 (4)	10.00			
F-E	0/0	-18.5	-18.5 0.09 (4)	10.00			

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 5.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. CC
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015
THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014
(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD
CSI: TC=0.35/1.00 (C-D:1), BC=0.09/1.00 (F-G:4), WB=0.04/1.00 (C-F:1), SSI=0.17/1.00 (C-D:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10
COMPANION LIVE LOAD FACTOR = 1.00
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSD) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.18 (C) (INPUT = 0.90)
JSI METAL= 0.04 (F) (INPUT = 1.00)

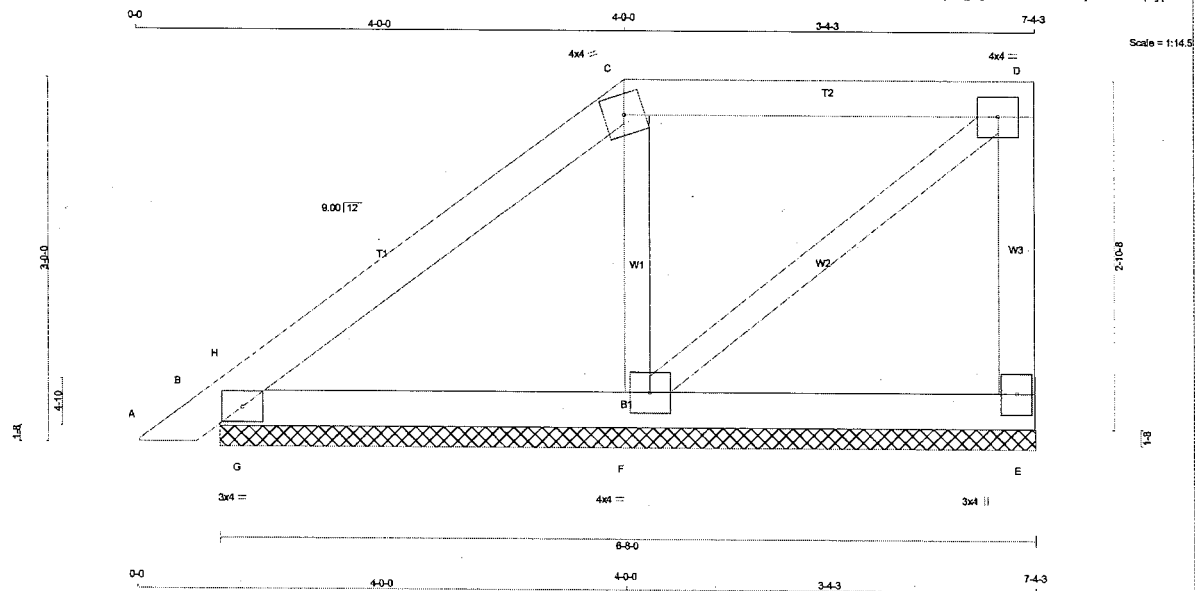
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428250	PB17		1	TRUSS DESC.	JT 53080	E22085188

Alpa Roof Truss, Maple

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ID:4IRtTkRO8ssghv2KQFyp5dytbbD-velreKQmYjzYgGjD33lYScS7LlNvYhGE6duqdyD5f



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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
B TMB1-t	MT20	3.0	4.0	
C TTW-m	MT20	4.0	4.0	
D TMWW-t	MT20	4.0	4.0	
E BMV1+p	MT20	3.0	4.0	
F BMWW1-t	MT20	4.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REGRD	
	VERT	HORZ	DOWN	HORZ	BRG	IN-SX
E	204	0	204	0	6-8/0	1-8
B	268	0	268	0	6-8/0	1-8
F	340	0	340	0	6-8/0	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	143	101/0	0/0	0/0	0/0	43/0	0/0
B	188	136/0	0/0	0/0	0/0	52/0	0/0
F	242	151/0	0/0	0/0	0/0	91/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOAD LC (LBS)	MAX. CSI (LC)	MAX. UNBRAC.	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0/15	-95.2	-95.2	0.02 (1)	10.00	F-C	-257/0	0.04 (1)	
B-H	-16/28	-95.2	-95.2	0.05 (1)	6.25	F-D	0/47	0.01 (1)	
H-C	-57/0	-95.2	-95.2	0.13 (1)	6.25	G-H	-295/0	0.00 (1)	
C-D	-37/0	-95.2	-95.2	0.18 (1)	6.25				
E-D	-189/0	0.0	0.0	0.03 (1)	7.81				
B-G	0/47	-18.5	-18.5	0.11 (1)	10.00				
G-F	0/47	-18.5	-18.5	0.11 (1)	10.00				
F-E	0/0	-18.5	-18.5	0.06 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.18/1.00 (C-D:1), BC=0.11/1.00 (F-G:1), WB=0.04/1.00 (C-F:1), SSI=0.23/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

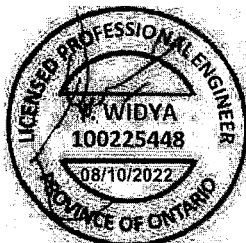
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 786 1997 1873

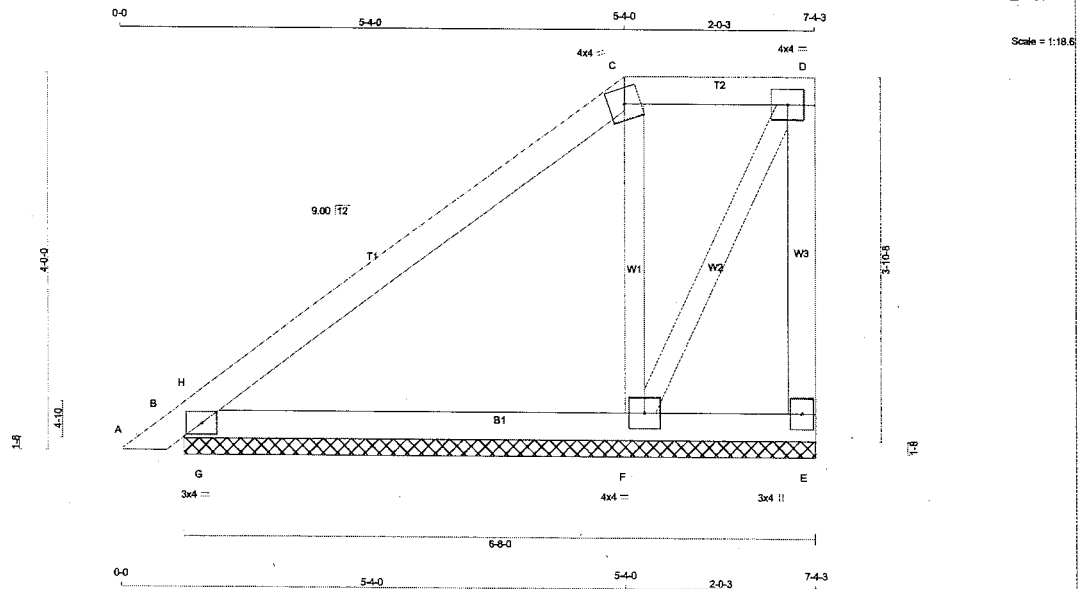
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.50)
JSI METAL= 0.06 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
B TMB1-I	MT20	3.0	4.0	
C TTW-m	MT20	4.0	4.0	
D TMVW-I	MT20	4.0	4.0	
E BMV1-p	MT20	3.0	4.0	
F BMVW1-I	MT20	4.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	UPLIFT	IN-SX
E	132	0	0	6-8-0
B	335	0	0	6-8-0
F	346	0	0	6-8-0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM LIVE
E	92	70/0	0/0	0/0
B	235	165/0	0/0	0/0
F	246	152/0	0/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	UNBRACED LENGTH	FR-TO	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)
A-B	0/15	-95.2	-95.2	0.02 (1)	10.00	F-C	-251/0	0.06 (1)		
B-H	-15/170	-95.2	-95.2	0.15 (1)	6.25	F-D	0/78	0.02 (1)		
H-C	-67/0	-95.2	-95.2	0.25 (1)	6.25	G-H	-566/0	0.00 (1)		
C-D	-37/0	-95.2	-95.2	0.07 (1)	6.25					
E-D	-164/0	0.0	0.0	0.04 (1)	7.81					
B-G	0/44	-18.5	-18.5	0.21 (1)	10.00					
G-F	0/44	-18.5	-18.5	0.21 (1)	10.00					
F-E	0/0	-18.5	-18.5	0.13 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.25/1.00 (C-H-1), BC=0.21/1.00 (B-G-1), WB=0.06/1.00 (C-F-1), SSI=0.44/1.00 (B-G-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

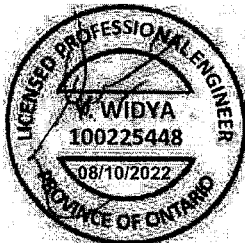
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 786 1987 1873

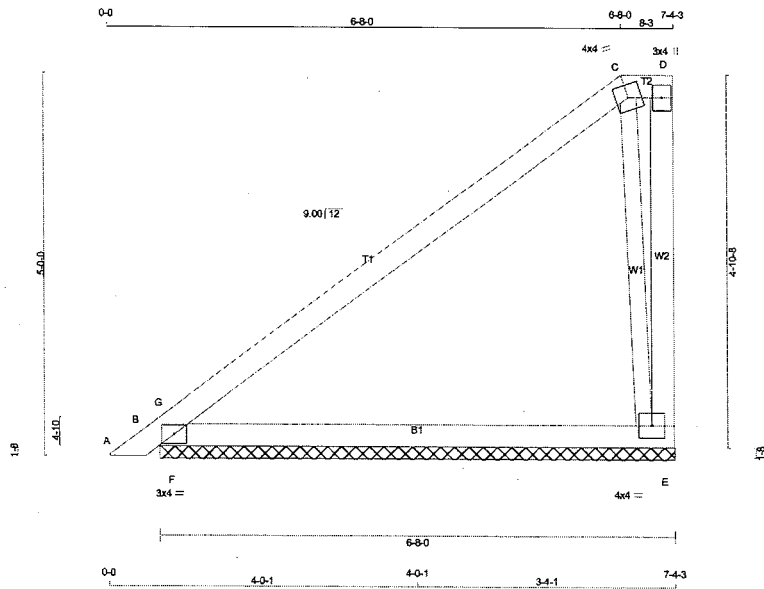
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.10 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1/22.5

TOTAL WEIGHT = 2 X 26 = 53 lb

LUMBER

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMB-1	MT20	3.0	4.0	
C	TTW-m	MT20	4.0	4.0	
D	TMV-p	MT20	3.0	4.0	
E	BMVW-1	MT20	4.0	4.0	

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

BEARINGS							
	FACTORED		MAXIMUM FACTORED		INPUT	REQRD	
	GROSS REACTION		GROSS REACTION				
JT	VERT	HORZ	DOWN	HORZ	BRG	BRG	
E <td>379</td> <td>0</td> <td>379</td> <td>0</td> <td>6-8-0</td> <td>1-8</td>	379	0	379	0	6-8-0	1-8	
B	434	0	434	0	6-8-0	1-8	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	268	178 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0
B	305	209 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		W E B S	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	LC1 MAX (PLF)	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	0 / 15					
A-B	-78 / 242	-95.2	-95.2	0.02 (1)	10.00	C-E -260 / 0
B-G		-95.2	-95.2	0.19 (1)	6.25	F-G -720 / 54
G-C	-56 / 0	-95.2	-95.2	0.47 (1)	6.25	
C-D	0 / 0	-95.2	-95.2	0.01 (1)	10.00	
E-D	-30 / 0	0.0	0.0	0.01 (1)	7.81	
B-F	0 / 36	-18.5	-18.5	0.28 (1)	10.00	
F-E	0 / 36	-18.5	-18.5	0.31 (1)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 26.7 PSF
 DL = 6.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.4 PSF
 TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.47/1.00 (C-G:1), BC=0.31/1.00 (E-F:1), WB=0.09/1.00 (C-E:1), SS=0.59/1.00 (B-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

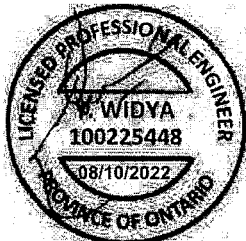
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MT20 650 371 1747 768 1987 1673

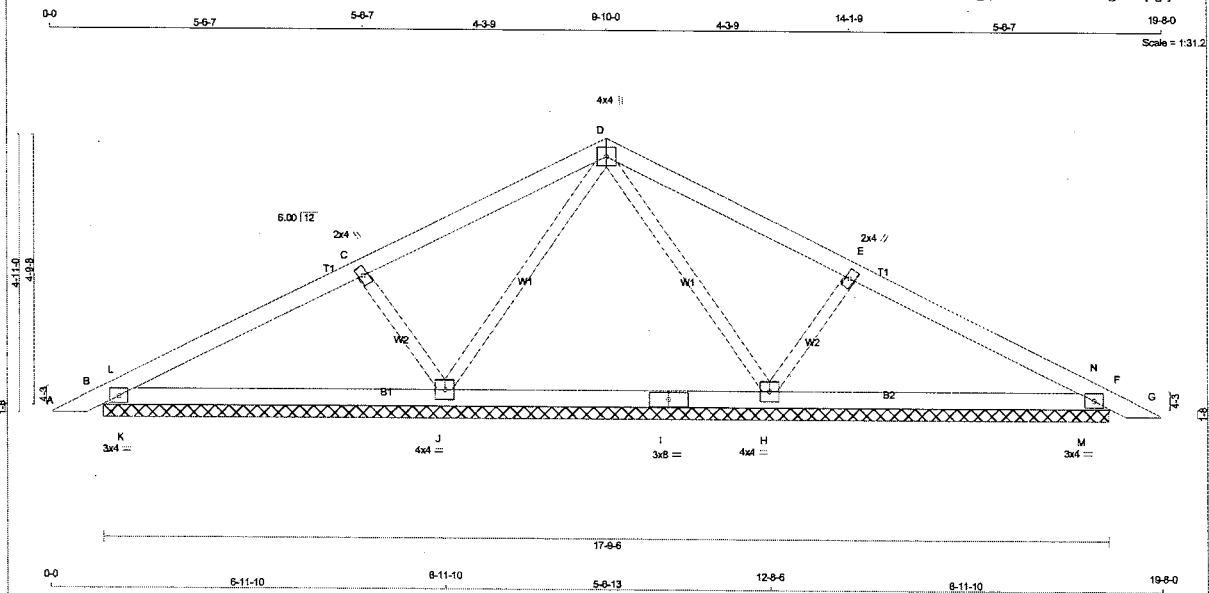
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
 JSI METAL= 0.13 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+u	MT20	2.0	4.0		
D	TTWV+u	MT20	2.0	4.0		
E	TMW+u	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-I	MT20	4.0	4.0		
I	BS-I	MT20	3.0	8.0		
J	BMWW1-I	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
B	383	0	383	0	0	0	17-9-6 (9-11-128)	17-9-6 (9-11-128)
H	708	0	708	0	0	0	17-9-6 (9-11-128)	17-9-6 (9-11-128)
J	708	0	708	0	0	0	17-9-6 (9-11-128)	17-9-6 (9-11-128)
F	383	0	383	0	0	0	17-9-6 (9-11-128)	17-9-6 (9-11-128)

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE		MAX / MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
B	269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
H	500	333 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0
J	500	333 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0
F	269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO	0 / 17	-95.2	-95.2 0.05 (1)	FR-TO	-229 / 0	0.11 (1)	
A-B	-233 / 0	-95.2	-95.2 0.07 (4)	D-H	-463 / 0	0.08 (1)	
B-L	-174 / 0	-95.2	-95.2 0.31 (1)	J-D	-229 / 0	0.11 (1)	
L-C	0 / 59	-95.2	-95.2 0.31 (1)	C-J	-463 / 0	0.08 (1)	
C-D	0 / 59	-95.2	-95.2 0.31 (1)	K-L	-91 / 71	0.00 (1)	
D-E	-174 / 0	-95.2	-95.2 0.31 (1)	M-N	-91 / 71	0.00 (1)	
E-N	-233 / 0	-95.2	-95.2 0.07 (4)				
N-F	0 / 17	-95.2	-95.2 0.05 (1)				
F-G							
B-K	0 / 179	-18.5	-18.5 0.10 (1)				
K-J	0 / 179	-18.5	-18.5 0.15 (4)				
J-I	0 / 50	-18.5	-18.5 0.14 (4)				
I-H	0 / 50	-18.5	-18.5 0.14 (4)				
H-M	0 / 179	-18.5	-18.5 0.15 (4)				
M-F	0 / 179	-18.5	-18.5 0.10 (1)				

TOTAL WEIGHT = 6 X 58 = 345 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	6.0	PSF
BOT CH.	LL	PSF
DL	7.4	PSF
TOTAL LOAD	40.1	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.31/1.00 (C-D:1), BC=0.15/1.00 (H-M:4), WB=0.11/1.00 (D-H:1), SS=0.18/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

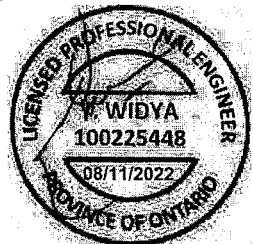
PLATE	GRIP(DRY)	SHEAR	SECTION (PL)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (J) (INPUT = 0.90)
JSI METAL= 0.10 (E) (INPUT = 1.00)

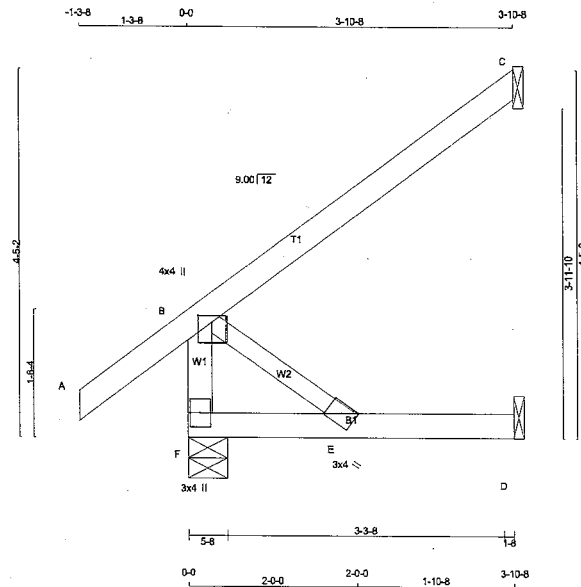
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME J8	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085163
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MITek Industries, Inc. Wed Aug 10 16:05:57 2022 Page 1
ID:4IRtKtRO8ssghv2KQFYp5dytbbD-FWR1QKZvcBnV_yc1KQWV9Vg3vrYESn_lps36nypD6S



Scale = 1:21.0

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

PLATES (table is in inches)	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMV+w	MT20	3.0	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	REQRD		
	GROSS REACTION		GROSS REACTION		BRG	BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
F	352	0	352	0	0	5-8	1-8	
C	184	0	184	0	0	1-8	1-8	
D	35	0	40	0	0	1-8	1-8	

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	246	177 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0	0 / 0
C	127	104 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0	0 / 0
D	29	0 / 0	0 / 0	0 / 0	0 / 0	29 / 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: (7)

CHORDS	MAX. FACTORED	FACTORED	MEMB.	FORCE	MAX	WEBS	MAX. FACTORED	MEMB.	FORCE	MAX
FR-TO	MEMB.	FORCE	VERT. LOAD	LC1	MAX	UNBRAC	MEMB.	FORCE	MAX	
F-B	-318 / 0	0.0	0.0	0.03 (1)	7.81	10.00	B-E	0 / 0	0.00 (1)	
A-B	0 / 39	-95.2	-95.2	0.15 (6)	10.00					
B-C	0 / 0	-95.2	-95.2	0.24 (1)	10.00					
F-E	0 / 0	-18.5	-18.5	0.08 (4)	10.00					
E-D	0 / 0	-18.5	-18.5	0.08 (4)	10.00					

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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 BCSC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

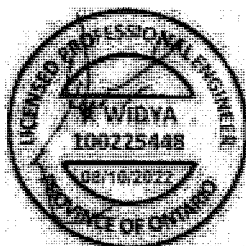
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TDL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.80)

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

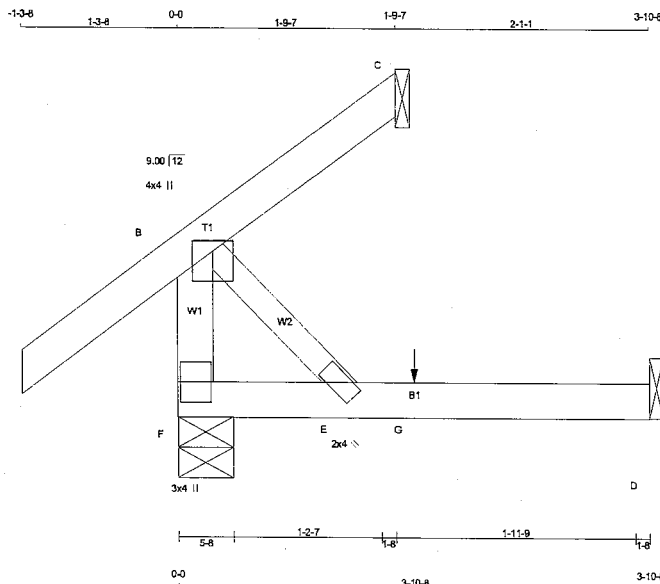
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME J9	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085164
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MiTek Industries, Inc. Wed Aug 10 16:05:59 2022 Page 1
ID:4IRITkRO8ssghv2KQFyp5dytbbD-BvZor0a88p1dk679IT_aaa14IXDlMHHC6LABfypD6C



Scale = 1:14.5

LUMBER

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00 2.00
E	BMV+w	MT20	2.0	4.0	
F	BMV1+p	MT20	3.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	OWN	HORZ
F	303	0	303	0
C	34	0	77	0
D	36	0	40	0

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	212	150/0	0/0	0/0	0/0	62/0	0/0
C	24	48/-28	0/0	0/0	0/0	4/0	0/0
D	29	0/0	0/0	0/0	0/0	29/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, 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: (11)

CHORDS	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRACED LENGTH (FT)	FR-TO	WEBS	MEMB.	FORCE (LBS)	MAX. FACTORED (LC)
F-B	-267/0	0.0	0.0	0.03 (1)	7.81	B-E	0/0	0.00 (1)		
A-B	0/39	-95.2	-95.2	0.15 (5)	10.00					
B-C	-30/0	-95.2	-95.2	0.14 (5)	6.25					
F-E	0/0	-18.5	-18.5	0.07 (4)	10.00					
E-G	0/0	-18.5	-18.5	0.08 (4)	10.00					
G-D	0/0	-18.5	-18.5	0.08 (4)	10.00					

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11.4	1	1	-	FRONT	VERT	TOTAL	-	C1

CONNECTION REQUIREMENTS

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.15/1.00 (A-B-5), BC=0.08/1.00 (D-E-4), WB=0.00/1.00 (B-E-1), SSI=0.09/1.00 (A-B-5)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

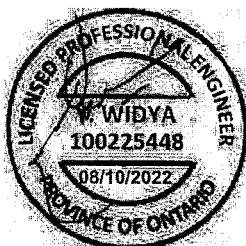
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)	(PL)
MT20	650	371	1747
	788	1987	1873

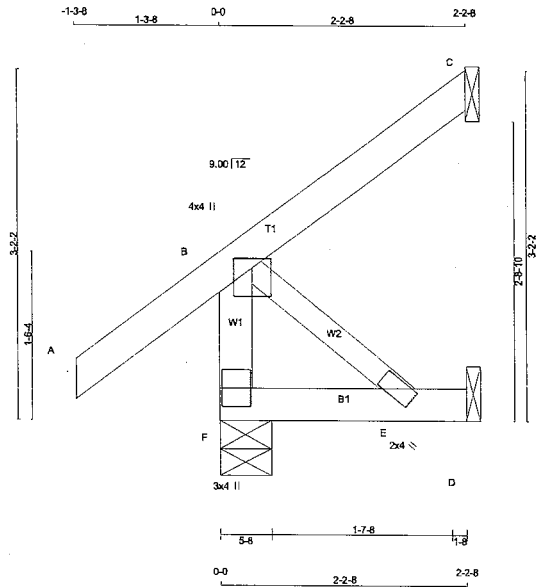
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale: 3/4"=1'

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

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
F	257	0	257	0
C	105	0	105	0
D	20	0	20	0

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	179	133/0	0/0	0/0	0/0	46/0	0/0
C	72	59/0	0/0	0/0	0/0	13/0	0/0
D	16	0/0	0/0	0/0	0/0	16/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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	MEMB.	FORCE	MAX	W E B S	MAX. FACTORED	MEMB.	FORCE	MAX
FR-TO	1ST CASE	FROM TO	LENGTH	FR-TO	LENGTH	FR-TO	LENGTH	FR-TO	LENGTH	FR-TO
F-B	-236/0	0.0	0.0	0.02 (1)	7.81	B-E	0/0	0.00 (1)		
A-B	0/39	-95.2	-95.2	0.13 (6)	10.00					
B-C	0/0	-95.2	-95.2	0.08 (1)	10.00					
F-E	0/0	-18.5	-18.5	0.03 (4)	10.00					
E-D	0/0	-18.5	-18.5	0.02 (4)	10.00					

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.13/1.00 (A-B-S), BC=0.03/1.00 (E-F-A), WB=0.00/1.00 (B-E-1), SS=0.08/1.00 (A-B-S)

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.

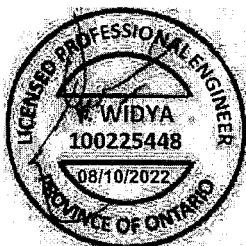
NAIL VALUES	PLATE GRIP(DRY)	SHEAR	SECTION
(PS)	(PL)	(PL)	(PL)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

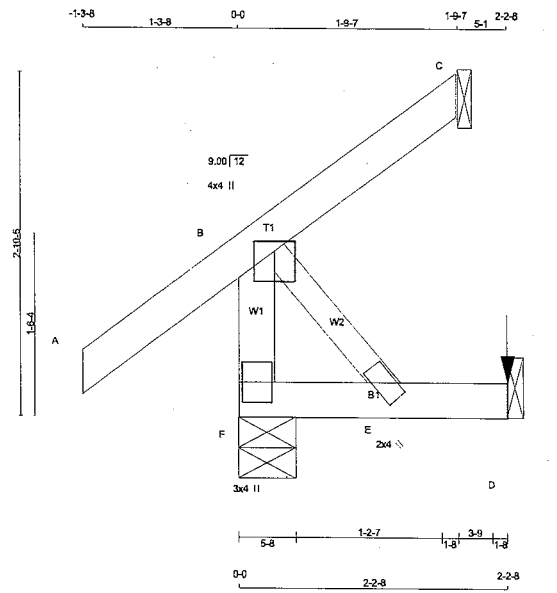
JSI GRIP= 0.18 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME J11	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085166
Alpha Roof Truss, Maple					

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Scale = 1:14.5

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

DESCR.
SPF
SPF
SPF

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
JT	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UP/LIFT	IN-SX	IN-SX	BRG
F	287	0	287	0	0	5-8	1-8	1-8	
C	34	0	34	0	-41	1-8	1-8	1-8	
D	28	0	28	0	0	1-8	1-8	1-8	

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

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

UNFACTORED REACTIONS		1ST CASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
F	200	150/0	0/0	0/0	0/0
C	24	19/-28	0/0	0/0	0/0
D	21	0/0	0/0	0/0	21/0

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

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS		MEMB.		W E B S	
FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB. LENGTH FR-TO UNBRAC	MAX. FACTORED FORCE (LBS)
F-B	-257/0	0.0	0.0	0.03 (1)	7.81
A-B	0/39	-95.2	-95.2	0.14 (5)	10.00
B-C	-30/0	-95.2	-95.2	0.13 (5)	6.25
F-E	0/0	-18.5	-18.5	0.03 (4)	10.00
E-D	0/0	-18.5	-18.5	0.03 (4)	10.00

FACTORED CONCENTRATED LOADS (LBS)		FACE		DIR.		TYPE		HEEL		CONN.	
JT	LOC.	LC1	MAX.	MAX+	BACK	VERT	TOTAL	---	---	C1	
D	2-2-8	-6	-6								

CONNECTION REQUIREMENTS

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2015, 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/599$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.00")

CSI: TC=0.14/1.00 (A-B-5), BC=0.03/1.00 (E-F-4), WB=0.09/1.00 (B-E-1), SS=0.09/1.00 (A-B-5)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

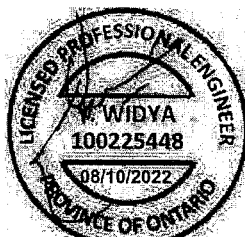
NAIL VALUES		PLATE GRIP(DRY) SHEAR		SECTION	
(PSI)	(PL)	(PSI)	(PL)	(PSI)	(PL)
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

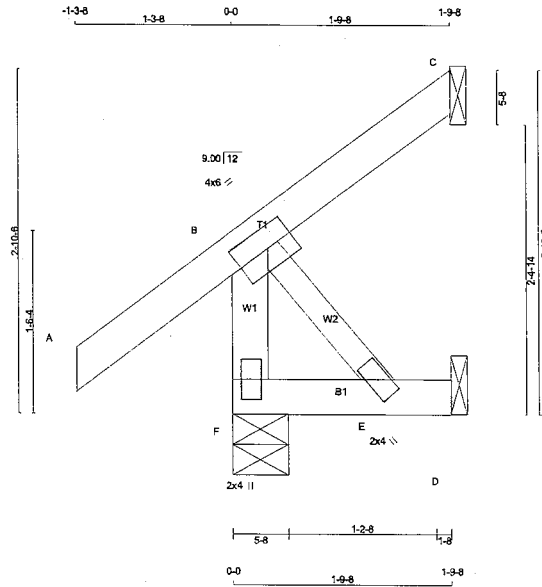
JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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TOTAL WEIGHT = 3 X 9 = 27 lb

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

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	4.0	6.0	2.00 2.75
E	BMVW-1	MT20	2.0	4.0	
F	BMV1-p	MT20	2.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
	VERT	HORZ	DOWN	HORZ
JT	284	0	284	0
F	35	0	35	0
C	17	0	17	0
D	17	0	17	0

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

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

UNFACTORED REACTIONS	1ST CASE	MAX. MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE
F	197	150/0	0/0	0/0
C	24	20/-28	0/0	0/0
D	13	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 = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING	CHORDS	WEBS
TOTAL LOAD CASES: (5)	MAX. FACTORED	MAX. FACTORED
	FORCE (LBS)	FORCE (LBS)
	FR-TO	FR-TO
F-B	-267/0	0/0
A-B	0/39	-95.2 -95.2 0.13 (1) 10.00
B-C	-30/0	-95.2 -95.2 0.12 (1) 6.25
F-E	0/0	-18.5 -18.5 0.02 (4) 10.00
E-D	0/0	-18.5 -18.5 0.02 (4) 10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
OL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS
- OVER-HANG NOT TO BE ALTERED OR CUT OFF.
(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.13/1.00 (A-B:1), BC=0.02/1.00 (E-F:4), WB=0.00/1.00 (B-E:1), SS=0.08/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

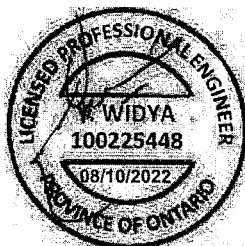
NAIL VALUES	PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	MAX MIN	
MT20	650	371	1747	788 1987 1873

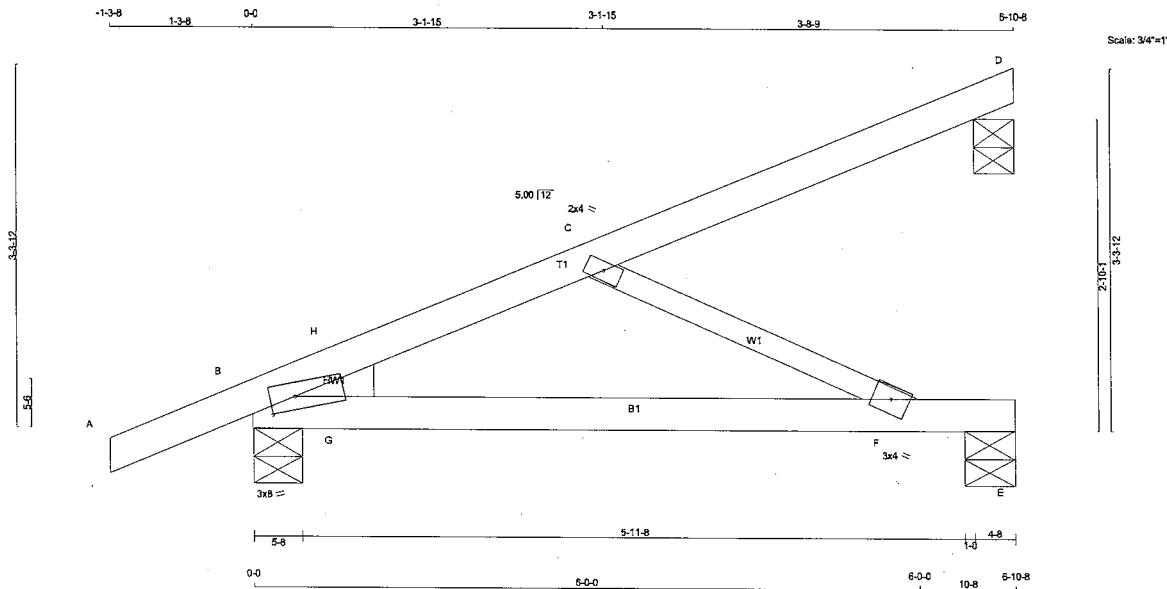
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (B) (INPUT = 0.80)
JSI METAL= 0.06 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	8.0	1.50	2.75
C	TMW+w	MT20	2.0	4.0		
F	BMW+w	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		RECORD	HEEL WEDGE
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX		
D	155	0	155	0	-78	4-8		
B	519	0	519	163	-183	5-8	1-8	2x4 L
E	236	0	236	0	-146	5-8	1-8	

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

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 183 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 150 LBS. FACTORED UPLIFT

PROVIDE FOR 163 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	COMBINED	MAX/MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM. LIVE	WIND	DEAD
D	107	87 / 0	0 / 0	0 / 0	3 / -68	20 / 0
B	364	256 / 0	0 / 0	0 / 0	0 / -200	108 / 0
E	169	97 / 0	0 / 0	0 / 0	0 / -151	72 / 0

HORIZONTAL REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
B	—	0 / 0	0 / 0	0 / 0	116 / -0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (12)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)
FR-TO				
A-B	0 / 19	-95.2	-95.2	0.12 (1)
B-H	-591 / 182	-95.2	-95.2	0.16 (7)
H-C	-429 / 118	-95.2	-95.2	0.20 (1)
C-D	-38 / 0	-95.2	-95.2	0.16 (1)
B-G	-236 / 432	-18.5	-18.5	0.17 (1)
G-F	-236 / 432	-18.5	-18.5	0.42 (1)
F-E	0 / 0	-18.5	-18.5	0.35 (1)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0) FT IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe} BASED ON THE MAIN WIND FORCE RESISTING SYSTEM. INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 3). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA D88-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = U/775 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/481 (0.17")

CSI: TC=0.20/1.00 (C-H-1), BC=0.42/1.00 (F-G-1), WB=0.11/1.00 (C-F-1), SS=0.18/1.00 (E-F-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

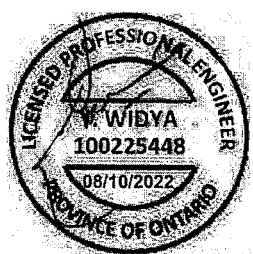
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PL)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788

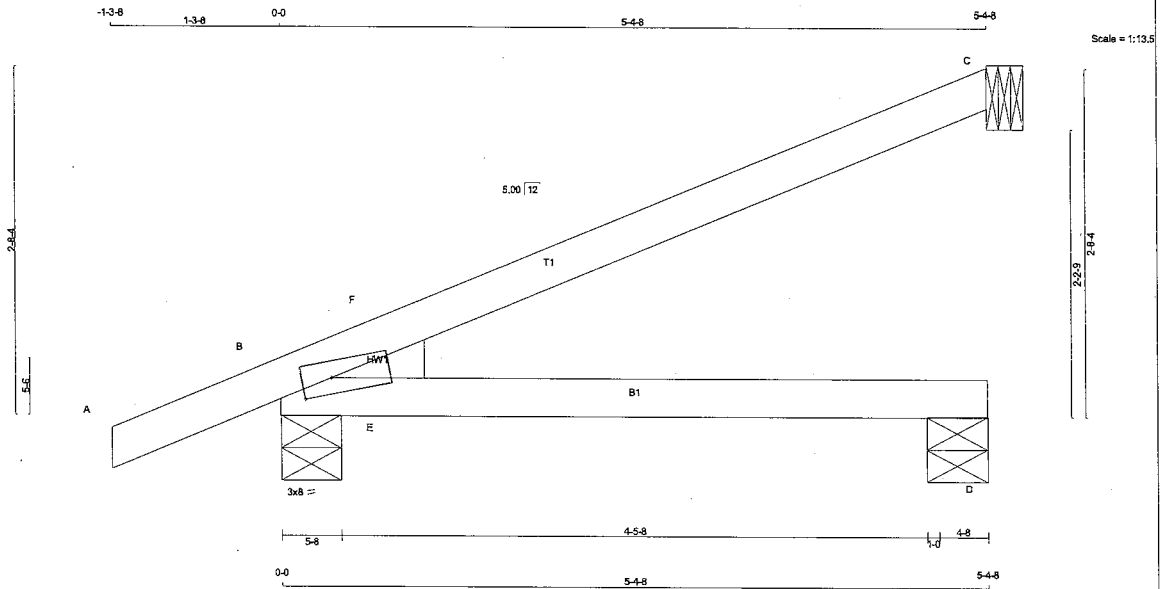
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.37 (C) (INPUT = 0.90)
JSI METAL=0.24 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)
 JT TYPE PLATES W LEN Y X
 B TMBH1-m MT20 3.0 8.0 1.50 2.75

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

JT	VERT	HORZ	DOWN	UP	BRG	IN-SX	HEEL
C	220	0	220	0	-115	4-8	1-8
B	434	0	434	132	-148	5-8	1-8
D	86	0	86	0	-60	5-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

PROVIDE FOR 132 LBS FACTORED HORIZONTAL REACTION AT JOINT B

JT	1ST CASE	SNOW	LIVE	PERM	LIVE	WIND	DEAD	SOIL
C	152	119 / 0	0 / 0	0 / 0	0 / 0	0 / -103	33 / 0	0 / 0
B	304	216 / 0	0 / 0	0 / 0	0 / 0	0 / -162	86 / 0	0 / 0
D	64	25 / 0	0 / 0	0 / 0	0 / 0	0 / -68	39 / 0	0 / 0

HORIZONTAL REACTIONS	B	D
0 / 0	0 / 0	94 / 0
0 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (12)

MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (LBS)	LC1 (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
A-B	0 / 19	-95.2	-95.2	0.12 (1)	10.00	E-F	-254 / 112
B-F	-109 / 4	-95.2	-95.2	0.08 (12)	6.25		
F-C	-54 / 3	-95.2	-95.2	0.34 (1)	6.25		
B-E	0 / 0	-18.5	-18.5	0.27 (1)	10.00		
E-D	0 / 0	-18.5	-18.5	0.27 (1)	10.00		

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, $C_p C_g$ BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 3). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 26.7 PSF
 DL = 6.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.4 PSF
 TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN./C/C

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEF. (LL) = $L/360$ (0.10")
 CALCULATED VERT. DEF. (LL) = $L/999$ (0.06")
 ALLOWABLE DEF. (TL) = $L/360$ (0.10")
 CALCULATED VERT. DEF. (TL) = $L/587$ (0.11")

CSI: TC=0.34/1.00 (C-F:1), BC=0.27/1.00 (B-E:1), WB=0.00/1.00 (E-F:1), SSI=0.20/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

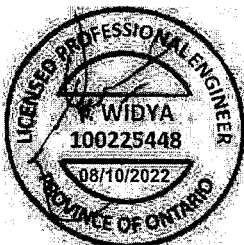
NAIL VALUES
 PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)
 JSI METAL= 0.04 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 10 X 22 = 224 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (0.25")
 CALCULATED VERT. DEFL.(LL)= $L/999$ (0.04")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.25")
 CALCULATED VERT. DEFL.(TL)= $L/999$ (0.08")

CS: TC=0.14/1.00 (C-I:1), BC=0.53/1.00 (F-G:1)
WB=0.15/1.00 (C-F:1), SS=0.23/1.00 (E-F:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

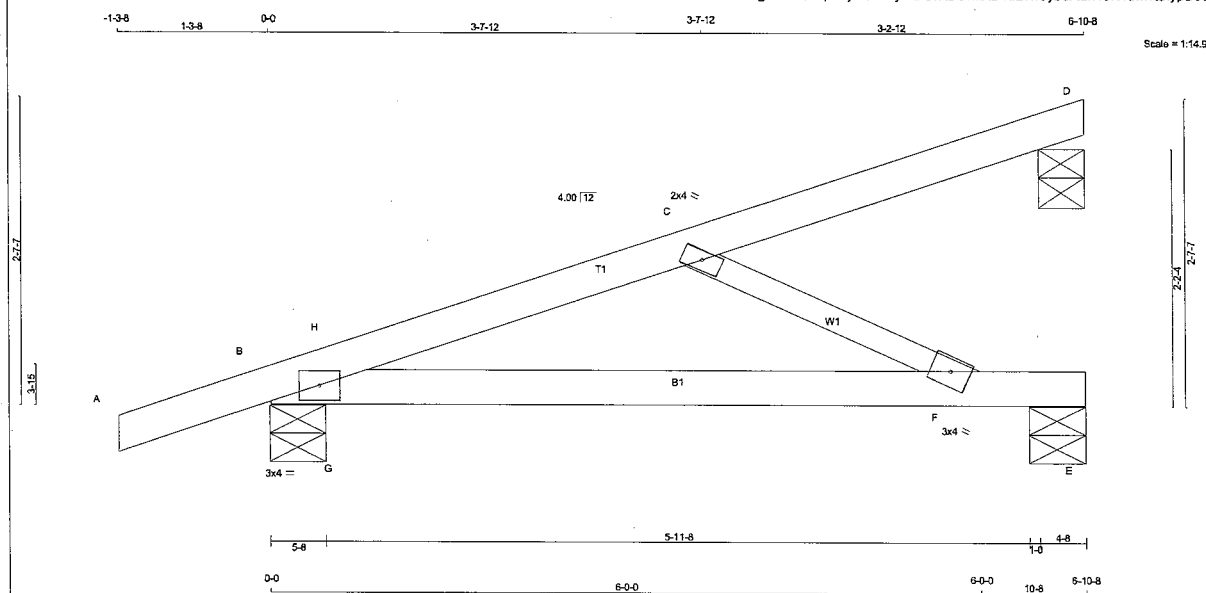
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.52 (F) (INPUT = 0.90)
JSI METAL= 0,29 (F) (INPUT = 1.00)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. ALL WEBS 2x3 DRY SEASONED LUMBER. TOTAL WEIGHT = 24 X 20 = 478 lb

CHORDS SIZE LUMBER DESCR. ALL WEBS 2x3 DRY SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMB14	MT20	3.0	4.0		
C	TMW+V	MT20	2.0	4.0		
F	BMW+V	MT20	3.0	4.0		

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

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

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

HORIZONTAL REACTIONS

BRACING

LOADING

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0) FT IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe}, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 3). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS

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:

ALLOWABLE DEFL. (LL) = L/360 (0.23")

CS1: TC=0.25/1.00 (C-H:1), BC=0.44/1.00 (F-G:1), WB=0.09/1.00 (C-F:1), SS=0.21/1.00 (B-H:1)

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

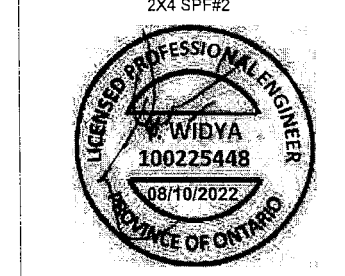
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.39 (C) (INPUT = 0.90)

JSI METAL= 0.25 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428250	TRUSS NAME J19	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085174																																
Alpe Roof Truss, Maple																																					
Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Wed Aug 10 16:07:22 2022 Page 1 ID:4IRtKRO8ssghv2KQFYp5dytbD-0KSUgtsajbm?mqMQ74NNOR1uf_KKbmzgVBPUVqypD63																																					
Scale = 1:13.8																																					
TOTAL WEIGHT = 5 X 15 = 75 lb																																					
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER A - C 2x4 DRY No.2 B - D 2x4 DRY No.2 DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQ'D JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX C 238 0 238 0 0 1-8 1-8 B 453 0 453 0 0 5-8 1-8 D 87 0 87 0 0 5-8 1-8		DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 26.7 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 40.1 PSF SPACING = 24.0 IN./C/C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF NBC 2015, ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 088-14 - TPIC 2014 (55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEF.(LL)= L/360 (0.19") CALCULATED VERT. DEF.(LL)= L/999 (0.06") ALLOWABLE DEF.(TL)= L/360 (0.19") CALCULATED VERT. DEF.(TL)= L/523 (0.13") CSI: TC=0.40/1.00 (C-F:1), BC=0.28/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SSI=0.33/1.00 (B-E:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.33 (B) (INPUT = 0.90) JSI METAL= 0.08 (B) (INPUT = 1.00)																																	
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMB14 MT20 3.0 4.0		UNFACTORED REACTIONS 1ST LCASE MAX/MIN COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL C 164 129 / 0 0 / 0 0 / 0 35 / 0 0 / 0 B 317 225 / 0 0 / 0 0 / 0 9 / 0 93 / 0 0 / 0 D 65 23 / 0 0 / 0 0 / 0 0 / 0 42 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) <table><tr><th colspan="2">CHORDS</th><th colspan="2">WEBS</th></tr><tr><th>MEMB.</th><th>FORCE (LBS)</th><th>VERT. LOAD LC1 MAX (PLF)</th><th>MAX. FORCE (LBS)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td>LENGTH FR-TO</td></tr><tr><td>A-B</td><td>0 / 23</td><td>-95.2 -95.2 0.12 (1)</td><td>10.00</td></tr><tr><td>B-F</td><td>-24 / 51</td><td>-95.2 -95.2 0.09 (1)</td><td>6.25</td></tr><tr><td>F-C</td><td>-4 / 2</td><td>-95.2 -95.2 0.40 (1)</td><td>10.00</td></tr><tr><td>B-E</td><td>0 / 0</td><td>-18.5 -18.5 0.27 (1)</td><td>10.00</td></tr><tr><td>E-D</td><td>0 / 0</td><td>-18.5 -18.5 0.28 (1)</td><td>10.00</td></tr></table>				CHORDS		WEBS		MEMB.	FORCE (LBS)	VERT. LOAD LC1 MAX (PLF)	MAX. FORCE (LBS)	FR-TO		FROM TO	LENGTH FR-TO	A-B	0 / 23	-95.2 -95.2 0.12 (1)	10.00	B-F	-24 / 51	-95.2 -95.2 0.09 (1)	6.25	F-C	-4 / 2	-95.2 -95.2 0.40 (1)	10.00	B-E	0 / 0	-18.5 -18.5 0.27 (1)	10.00	E-D	0 / 0	-18.5 -18.5 0.28 (1)	10.00
CHORDS		WEBS																																			
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B-E	0 / 0	-18.5 -18.5 0.27 (1)	10.00																																		
E-D	0 / 0	-18.5 -18.5 0.28 (1)	10.00																																		
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2																																					

EWP DESIGN INC.

(905) 832-2250

FAX (905) 832-0286

RESPONSIBILITIES AND SPECIFICATIONS

RESPONSIBILITIES

1. EWP DESIGN 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 each drawing meet or exceed the actual dead load imposed by the structure, the live load imposed by the intended use and the snow load imposed by local building code or authorities with jurisdictions.
3. All dimensions are to be verified by the owner, contractor, architect or other authorities with jurisdictions before truss fabrication.
4. EWP DESIGN INC. bears no responsibility for the erection of trusses. Persons erecting trusses are cautioned to seek professional advice regarding the temporary and permanent bracing for the system. Bracing shown on EWP DESIGN INC. drawing is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacturer's responsibility to ensure that trusses are manufactured in conformance with specifications of EWP DESIGN INC. as outlined below.

SPECIFICATIONS

1. Trusses designed by EWP DESIGN INC. conform to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type, as indicated on the EWP DESIGN INC. drawings, and conform to the design procedures established by the Truss Plate Institute of Canada. Unit stresses used for truss designs are as per the edition of CSA-O86 shown on EWP DESIGN INC. drawings.
2. Lumber is to be the size, species and grade as specified on EWP DESIGN INC. drawings.
3. Moisture content of lumber shall not exceed 19% in service unless specified otherwise.
4. Metal connector plates shall be applied to both faces of truss at each joint and shall be positioned as specified.
5. Top chords of trusses are assumed to be continuously braced laterally by roof sheathing or by purlins at intervals not exceeding 12.5 times the thickness of top chord member.
6. Bottom chords shall be laterally braced at intervals not exceeding 3M (10') o.c., where rigid ceiling is not applied directly to the underside of chords.

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

February 1, 2019

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
MAXIMUM NUMBER OF NAILS					
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

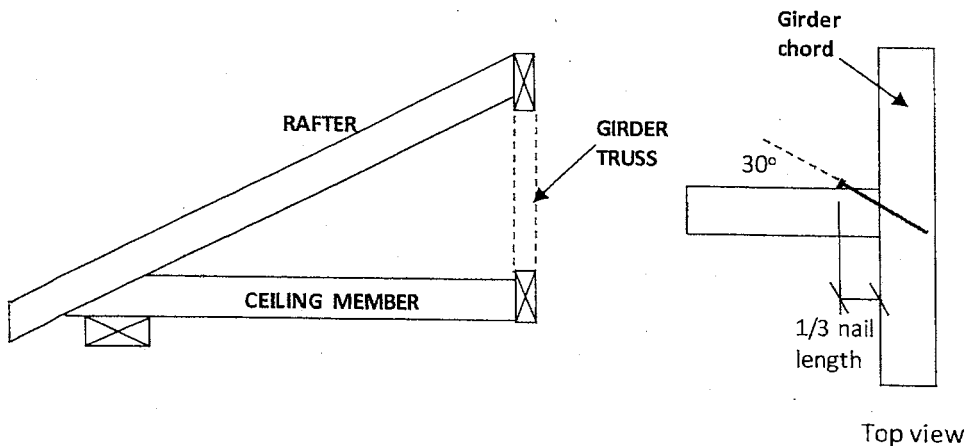
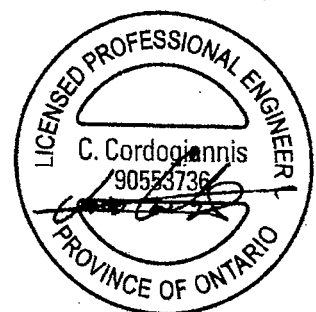


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

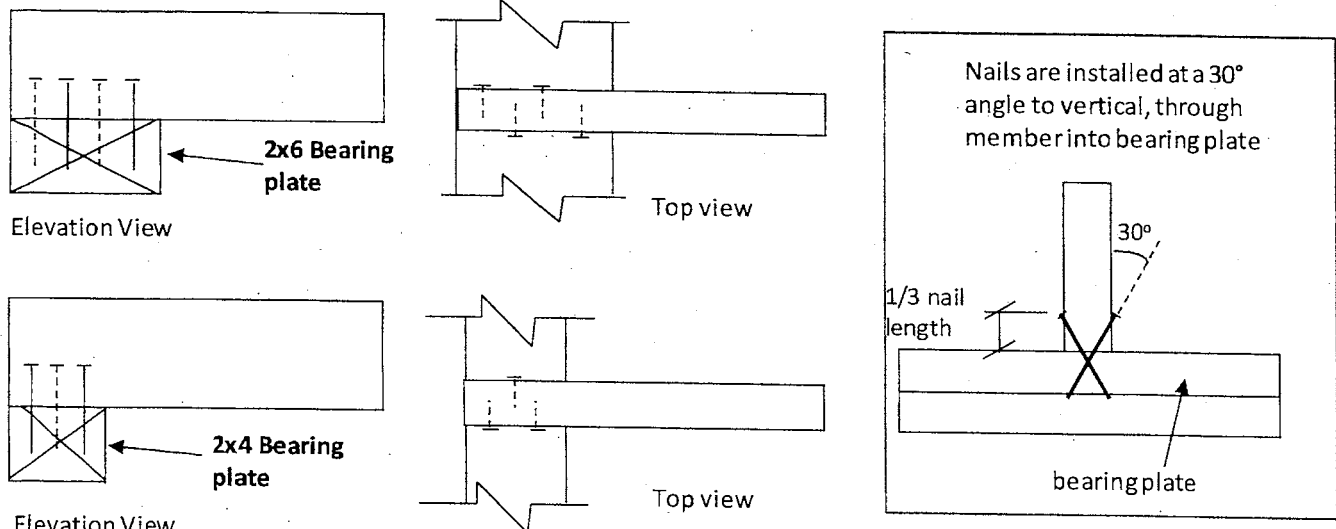
PEO
Certificate No. 10889485



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.

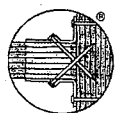
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

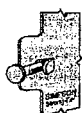
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1½" nails into the header and 10d commons into the joist, and reduce the resistance to 0.84 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

Options:

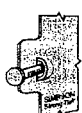
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



Double-Shear
Nailing
Top View

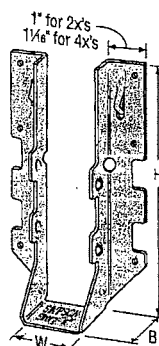
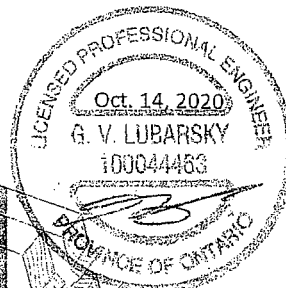
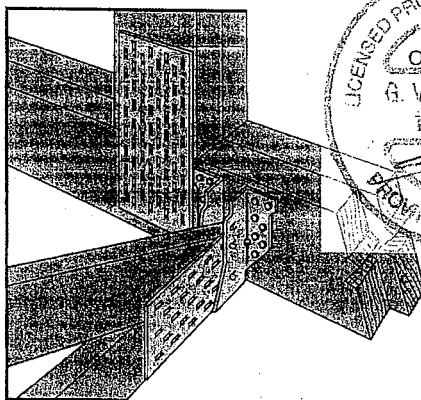
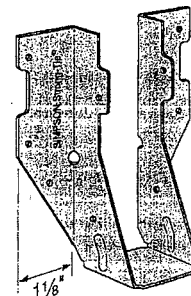
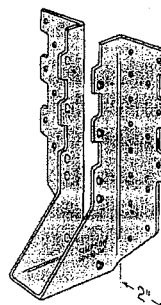
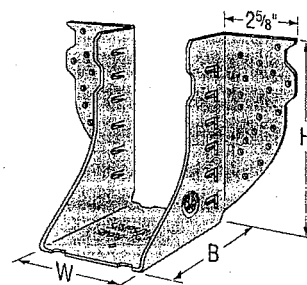
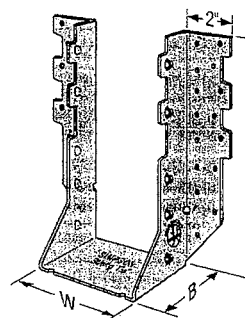
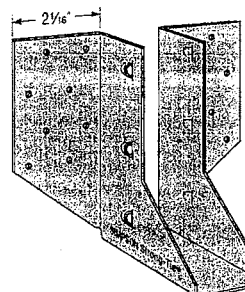


Double-Shear
Nailing
Side View;
Do not
bend tab



Dome Double-Shear
Nailing
Side View
(available on
some models)

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:

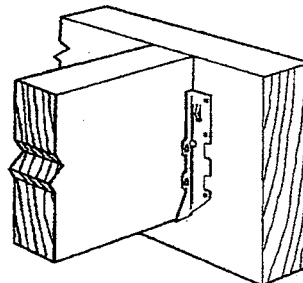
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

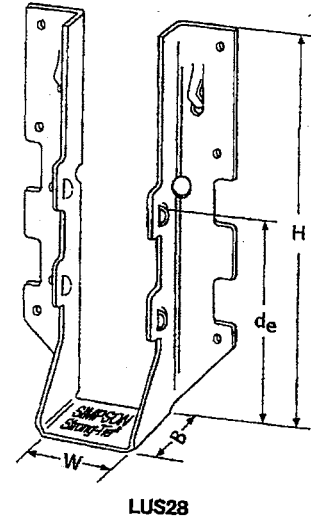
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

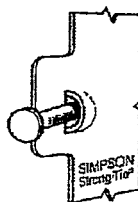


Typical LUS Installation

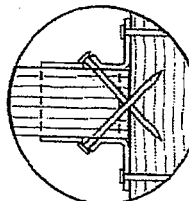


Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LUS24	18	1 1/8	3 1/8	1 1/4	1 1/8	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 1/8	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 1/8	4 3/8	1 3/4	3 3/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 3/8	4 3/8	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 1/8	6 3/8	1 3/4	3 3/8	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 3/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/8	1 3/4	3 3/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 3/8	8 3/8	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

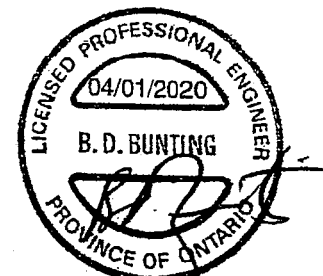
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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.

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

(800) 999-5099
strongtie.com

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: See table

Finish: G90 galvanized

Design:

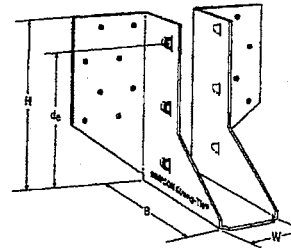
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

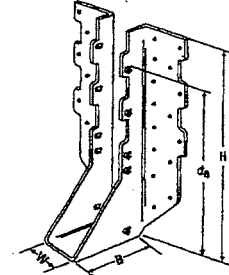
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

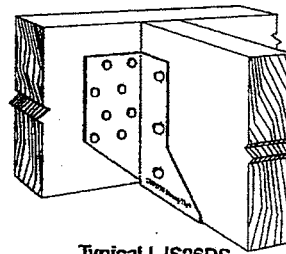
- See current catalogue for options



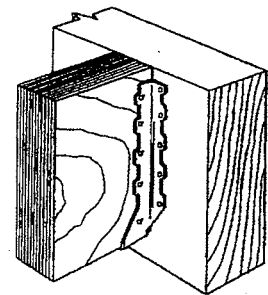
LJS26DS



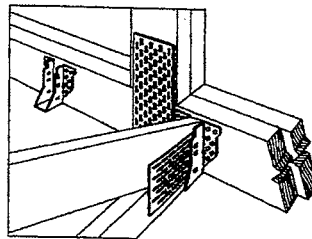
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



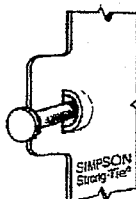
Typical HUS
Installation



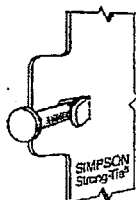
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _s ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift (K _u =1.15)	Normal (K _u =1.00)	Uplift (K _u =1.15)	Normal (K _u =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d		2055	4265	1460	4115
HUS26	16	1 1/8	5 1/2	3	3 15/16	(14) 16d	(6) 16d		2705	4940	2065	3875
HUS28	16	1 1/8	7 1/2	3	6 7/16	(22) 16d	(8) 16d		3605	5365	2675	4345
HUS210	16	1 1/8	9 1/2	3	7 3/16	(30) 16d	(10) 16d		4505	5795	4010	4740
HUS1.81/10	16	1 1/8	9	3	8	(30) 16d	(10) 16d		4505	6450	4010	5200

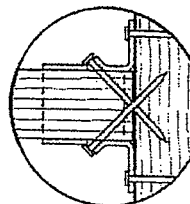
1. d_s is the distance from the seat of the hanger to the highest joist nail.



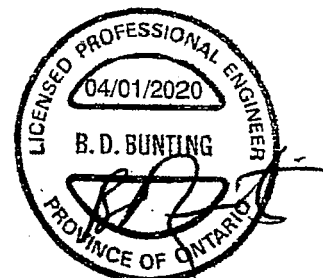
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



**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-SPECHUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

HGUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: 12 gauge

Finish: G90 galvanized

Design:

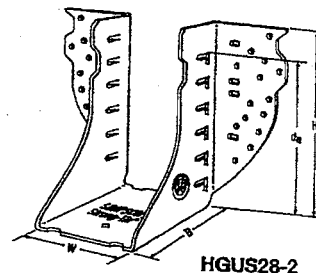
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

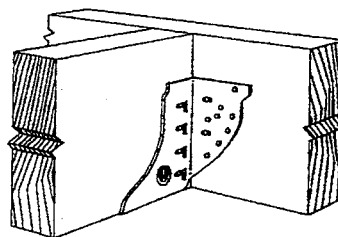
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

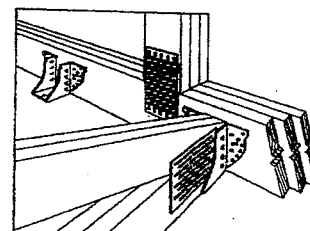
- See current catalogue for options



HGUS28-2



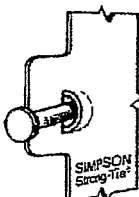
Typical HGUS Installation



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

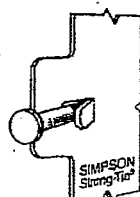
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
HGUS26	12	1 1/8	5 1/8	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/8	7 1/8	5	6 1/8	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1 1/8	9 1/8	5	7 1/8	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 1/8	10 1/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 1/8	12 1/8	4	11 1/8	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d₀ is the distance from the seat of the hanger to the highest joist nail.

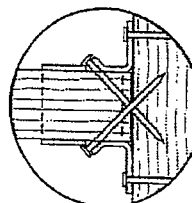


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



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



Double Shear Nailing Top View.

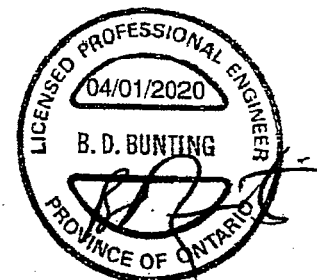


LIMIT STATES DESIGN

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-SPECHGUS20 3/20 exp. 6/22



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strongtie.com

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:

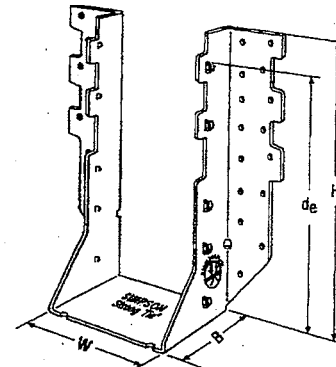
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

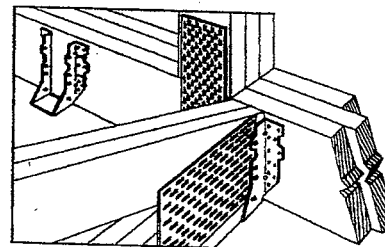
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



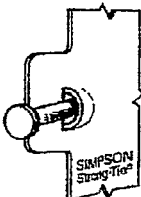
HHUS410



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

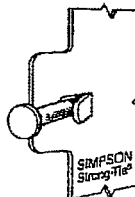
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _p =1.15)	(K _p =1.00)	(K _p =1.15)	(K _p =1.00)
HHUS26-2	14	3 1/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 1/16	7 1/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 1/16	9 3/32	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4 1/16	9	3	7 15/16	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3 3/8	5 19/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 3/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3 3/8	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7 1/4	9	3 1/16	7 29/32	(30) 16d	(10) 16d	4670	10155	3370	7210

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

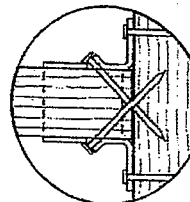


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

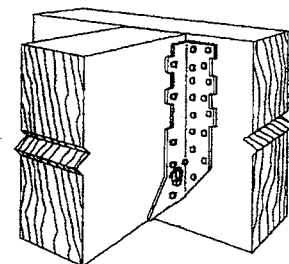
U.S. Patent
5,603,580



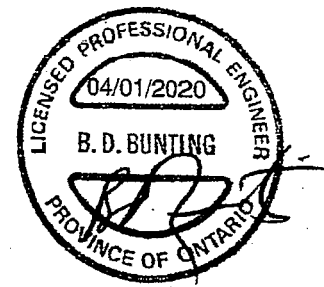
Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



Typical HHUS Installation



**LIMIT
STATES
DESIGN**

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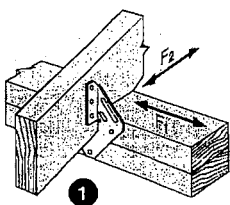
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T-SPECHHUS20 3/20 exp. 6/22

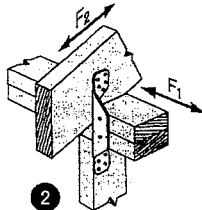
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strongtie.com

H/TSP

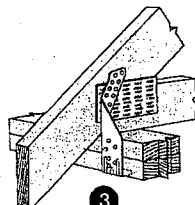
Seismic and Hurricane Ties (cont.)



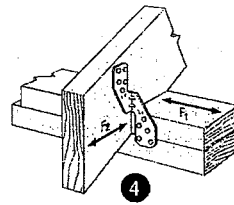
1 H1 Installation



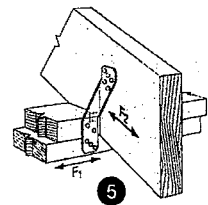
2 H2A Installation



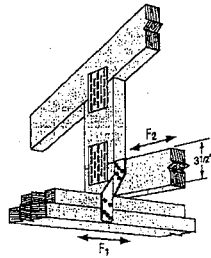
3 TSP Installation



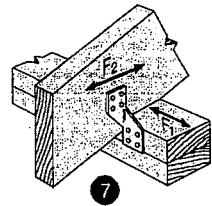
4 H2.5A Installation
(Nails into both top plates)



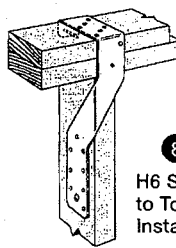
5 H2.5T Installation
(Nails into both top plates)



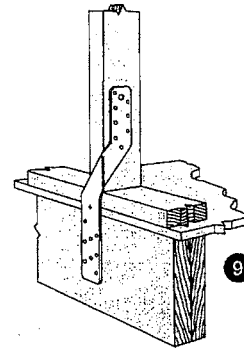
6 H2.5T Installation



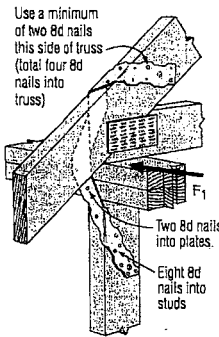
7 H3 Installation
(Nails into upper top plate)



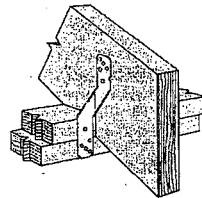
8 H6 Stud to Top Plate Installation



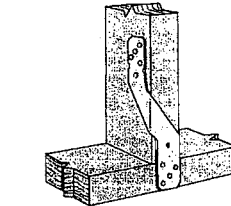
9 H6 Stud to Band Joist Installation



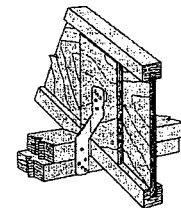
10 H7Z Installation



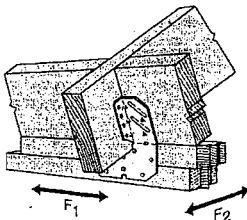
11 H8 Attaching Rafter to Double Top Plates



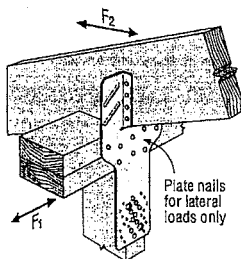
12 H8 attaching Stud to Sill
(4) 8d into plate, (5) 8d into stud



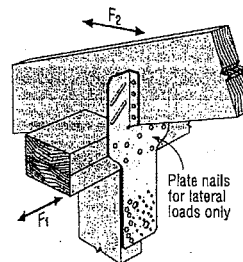
13 H8 attaching I-Joist to Double Top Plates



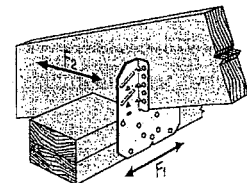
14 H10A Field-Bent Installation



15 H10S Installation

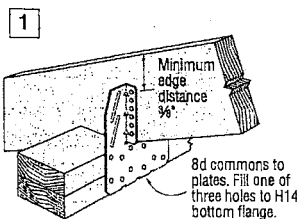


16 H10S Installation with Stud Offset

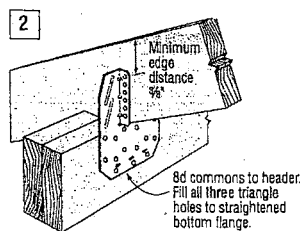


17 H10A Installation

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.

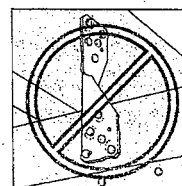


18 H14 Installation to Double Top Plates



19 H14 Installation to Double 2x Header

Avoid a Misinstallation



Do not make new holes or overdrive nails.

H/TSP

Seismic and Hurricane Ties

Simpson Strong-Tie® hurricane ties provide a positive connection between truss/rafter and the wall of the structure to resist wind and seismic forces. New additions to the line provide even more options.

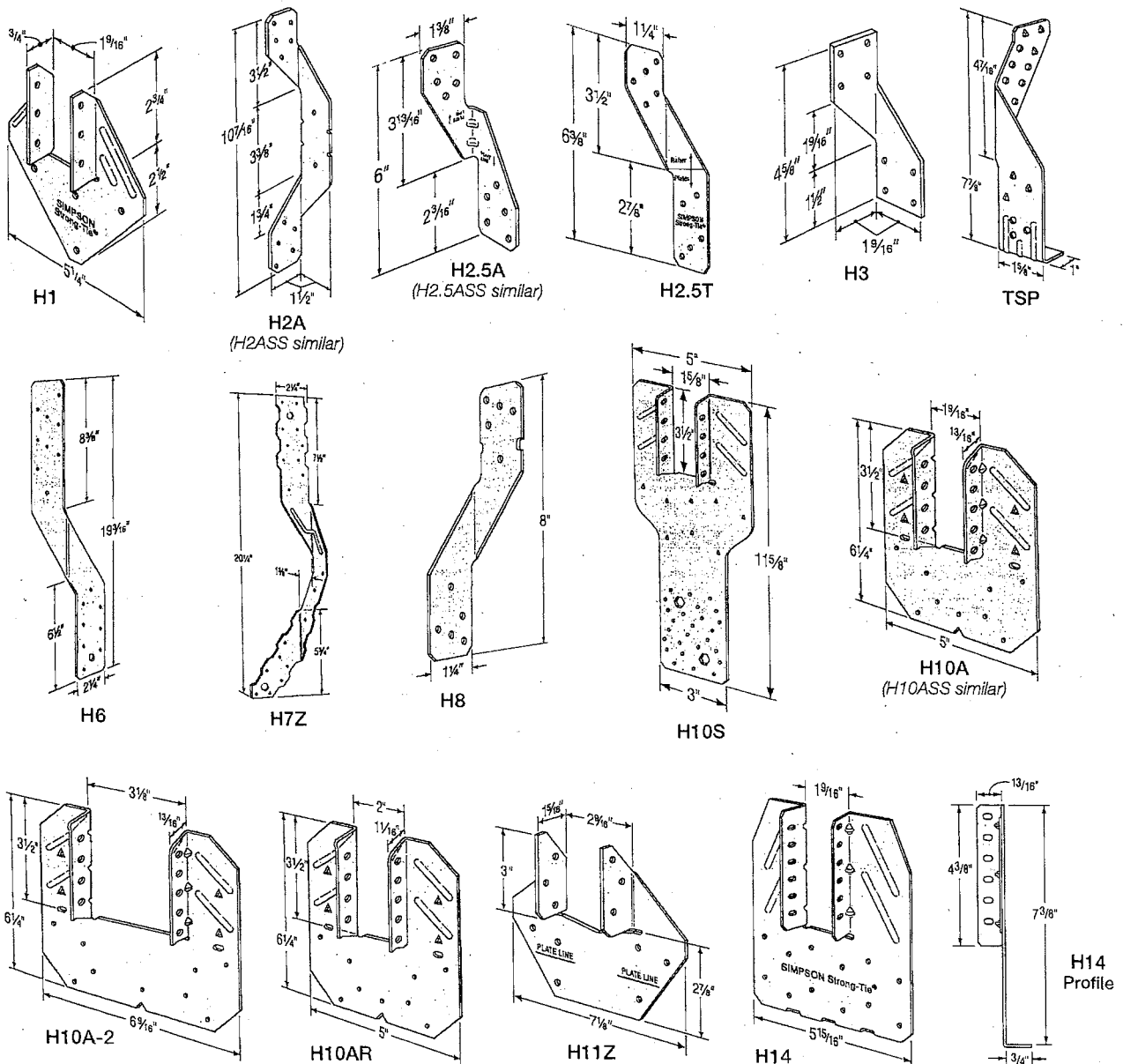
- H10AR — The heavy-duty design of the H10A available with a 2" wide throat to accommodate rough lumber
- H10A-2 — The H10A design with a 3" throat for double 2x members
- H2ASS, H2.5ASS and H10ASS — Popular ties now available in stainless steel

Material: See table

Finish: Galvanized. H7Z and H11Z — ZMAX® coating. Some models available in stainless steel or ZMAX; see Corrosion Information, pp.20-24 or visit strongtie.com.

Installation:

- Use all specified fasteners; see General Notes.
- H1 can be installed with flanges facing inward (reverse of H1 installation drawing; number 1).
- H2.5T, H3 and H6 ties are shipped in equal quantities of right and left versions (right versions shown).
- Hurricane ties do not replace solid blocking.
- When installing ties on plated trusses (on the side opposite the truss plate) do not fasten through the truss plate from behind. This can force the truss plate off of the truss and compromise truss performance.
- H10A optional nailing to connect shear blocking, use 8d nails. Slots allow maximum field bending up to a pitch of 6:12, use H10A sloped loads for field bent installation.



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

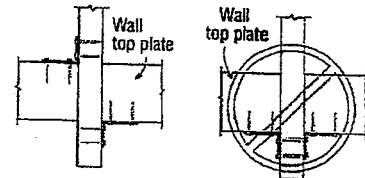
- Factored resistances have been increased 15%. No further increase is permitted.

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

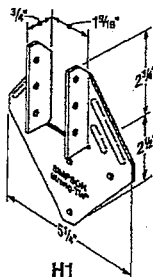
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

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

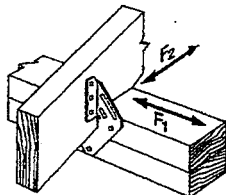


Install diagonally across from each other for minimum 2x truss.

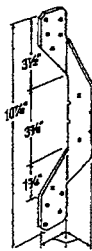
Nailing into both sides of a single ply 2x truss may cause the wood to split.



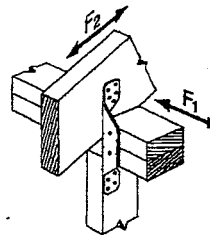
H1



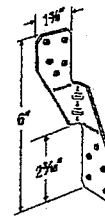
H1 Installation



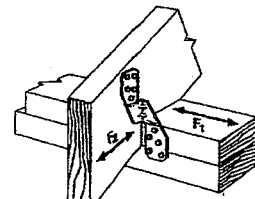
H2A



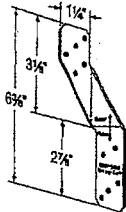
H2A Installation



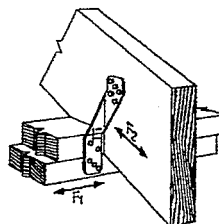
H2.5A



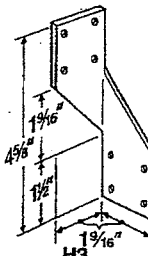
H2.5A Installation



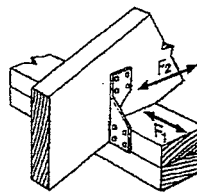
H2.5T



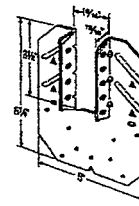
H2.5T Installation
(Nails into both top plates)



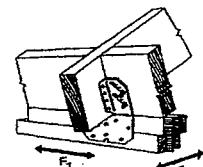
H3



H3 Installation



H10A



H10A Installation

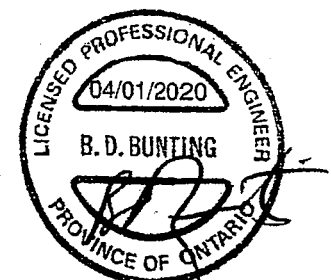
Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
					D-Fir-L			S-P-F		
		To Rafter	To Plates	To Studs	Uplift	Normal		Uplift	Normal	
						F ₁	F ₂		F ₁	F ₂
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H2.5T	18	(5) 8d	(5) 8d	—	835	175	240	740	160	210
H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290

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

2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.

3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.

4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.



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-SPECH20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

TC - Truss Connectors

SIMPSON
Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1 1/4". The TC also attaches 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

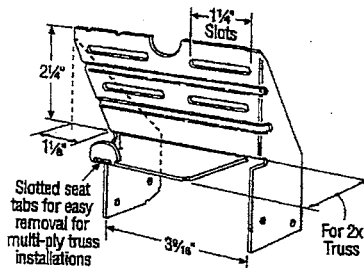
Design: Factored resistances are in accordance with CSA 086-14

Installation:

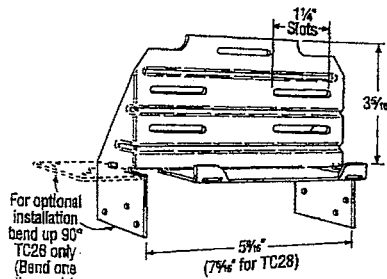
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

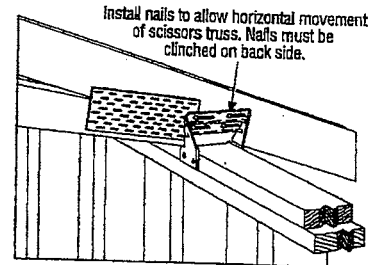
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



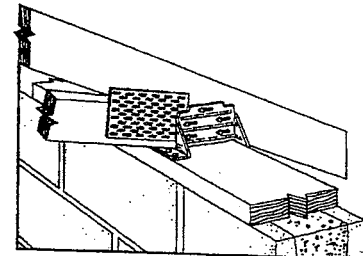
TC24
U.S. Patent 4,932,173



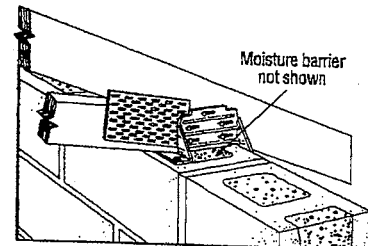
TC26
(TC28 Similar)



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

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

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _o =1.15)	Uplift (K _o =1.15)
TC26	(5) 10d	(6) 10d x 1 1/2"	810	660
	(5) 10d	(6) 10d	930	660

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) - 3/8" x 2 1/4" Titen screws has a factored uplift resistance of 275 lb.



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-SPECTC20 3/20 exp. 6/22

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strongtie.com

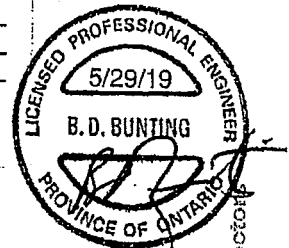
HTU**SIMPSON**
Strong-Tie**Face-Mount Truss Hanger (cont.)**

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.Fir-L		S-P-F	
					Uplift	Normal	Uplift	Normal
					($K_D = 1.15$)	($K_D = 1.00$)	($K_D = 1.15$)	($K_D = 1.00$)
					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
					7.74	14.86	5.49	10.54
HTU26 (Max.)	5 1/4	(2) 2x4	(10) 16d	(20) 10d x 1 1/2"	2470	4015	1755	2850
					10.99	17.86	7.81	12.68
HTU28 (Max.)	3 7/8	(2) 2x6	(20) 16d	(26) 10d x 1 1/2"	4150	6395	2945	4540
					18.46	28.46	13.10	20.19
HTU210 (Max.)	7 1/4	(2) 2x6	(20) 16d	(32) 10d x 1 1/2"	4150	6395	2945	4540
					18.46	28.45	13.10	20.19

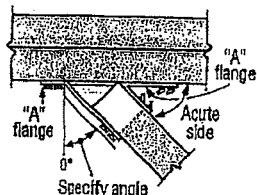
See table footnotes on p. 260.

**Hanger Options**

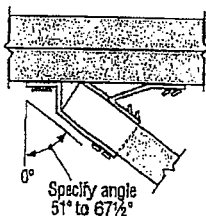
See Hanger Options Information on pp. 125-127.

Skewed Seat

- Skawable 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.	Skaw Angle (Degrees)	Fasteners		Factored Resistance			
		Header	Joist	D.Fir-L		S-P-F	
				Uplift	Normal	Uplift	Normal
				($K_D = 1.15$)	($K_D = 1.00$)	($K_D = 1.15$)	($K_D = 1.00$)
				lb.	lb.	lb.	lb.
				kN	kN	kN	kN
HTU26	< 51	(20) 16d	(14) 10d x 1 1/2"	1835	4110	1300	2905
				8.16	18.28	5.78	12.92
	51-67 1/2	(20) 16d	(12) 10d x 1 1/2"	1350	3620	965	2550
				6.01	16.10	4.25	11.39
HTU28	< 51	(26) 16d	(20) 10d x 1 1/2"	2810	4270	1985	3030
				12.60	18.99	8.83	13.48
	51-67 1/2	(26) 16d	(17) 10d x 1 1/2"	2075	3930	1465	2780
				9.23	17.48	6.52	12.37
HTU210	< 51	(32) 16d	(26) 10d x 1 1/2"	3785	4430	2675	3135
				16.84	19.71	11.90	13.95
	51-67 1/2	(32) 16d	(22) 10d x 1 1/2"	2795	4240	1980	3000
				12.43	18.86	8.81	13.35
HTU26-2	< 51	(20) 16d	(14) 10d	2140	3715	1515	2625
				9.52	16.53	6.74	11.68
	51-67 1/2	(20) 16d	(12) 10d	1610	3920	1140	2785
				7.16	17.44	5.07	12.39
HTU28-2	< 51	(26) 16d	(20) 10d	3960	5425	2815	3855
				17.62	24.13	12.52	17.15
	51-67 1/2	(26) 16d	(17) 10d	2385	5425	1895	3855
				10.61	24.13	7.54	17.15
HTU210-2	< 51	(32) 16d	(26) 10d	5025	6890	3570	4890
				22.35	30.65	15.88	21.75
	51-67 1/2	(32) 16d	(22) 10d	3145	6680	2225	4745
				13.99	29.72	9.90	21.10

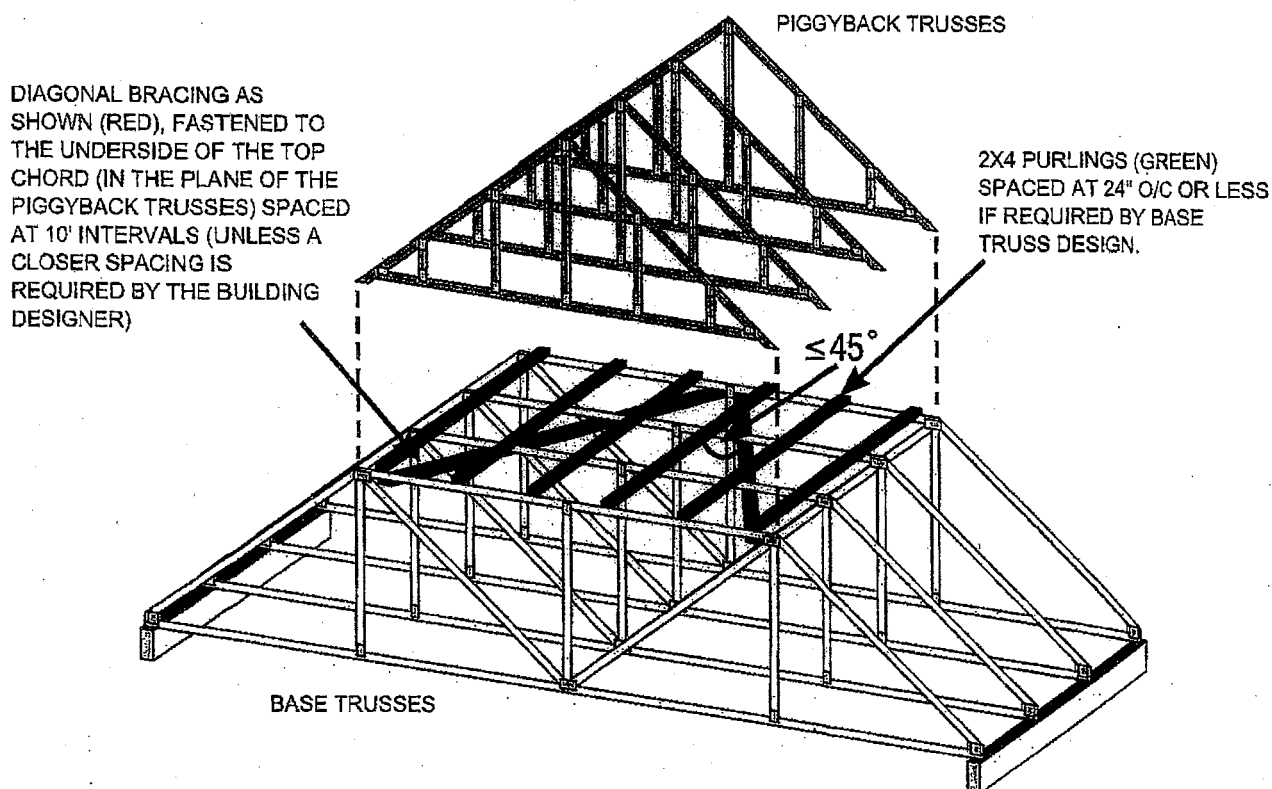
1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Reduced heel heights are not permitted for skewed HTU's.
3. Nails: 16d = 0.162" dia. x 3 1/2" long, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long, 10d = 0.148" dia. x 3" long. See pp.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

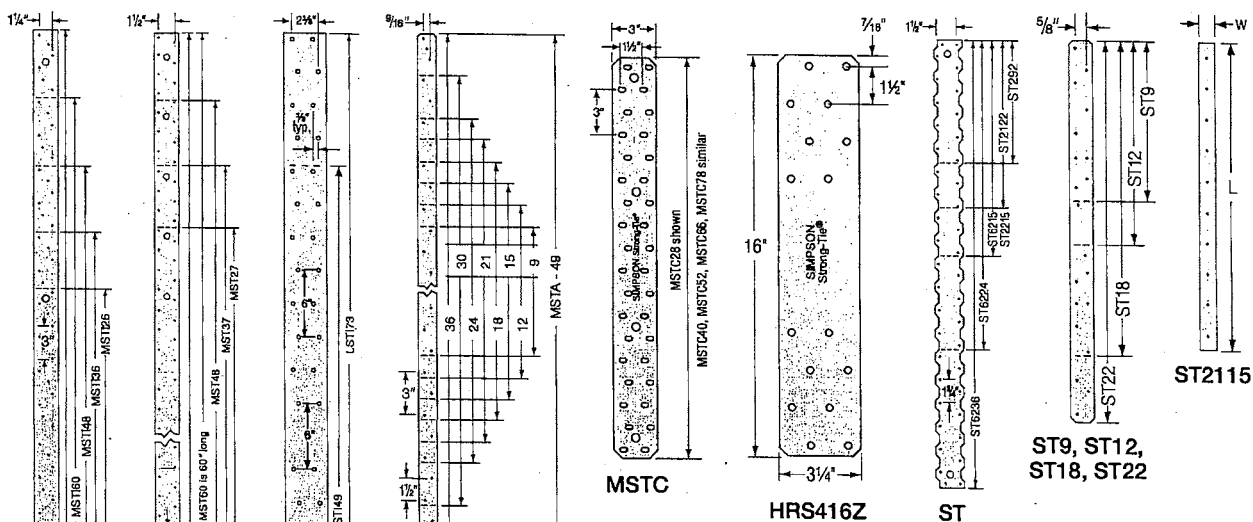
MST — High-capacity strap that can be installed with either nails or bolts. Suitable for double 2x member connections or greater.

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.

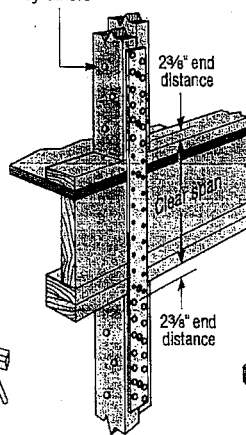
Installation: Use all specified fasteners; see General Notes

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

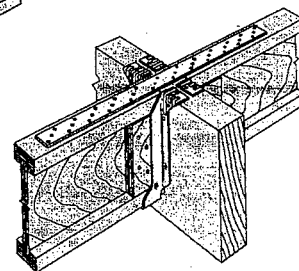


LSTA and MSTA
(Pilot holes not shown)

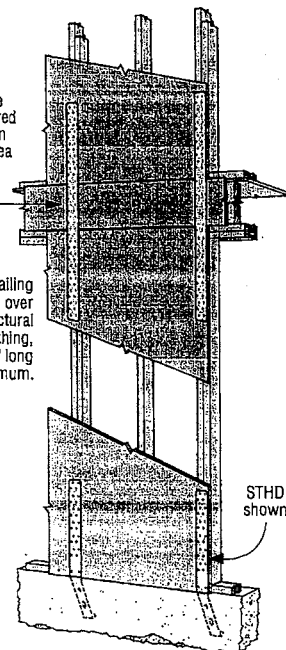
Stitch nailing
of double studs
by others



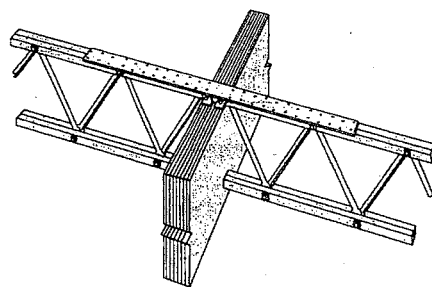
Floor-to-Floor Tie
Installation
Showing a
Clear Span



Typical MSTI Installation
(MIT hanger shown)
LSTI similar



Typical Detail with
Strap Installed over
Wood Structural Panel
Sheathing



Typical LSTI Installation

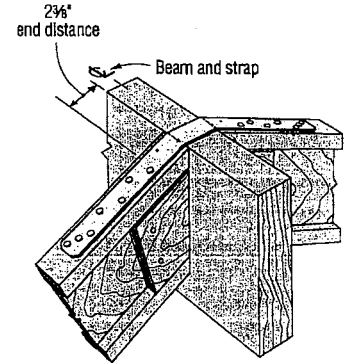
HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

Strap Ties (cont.)

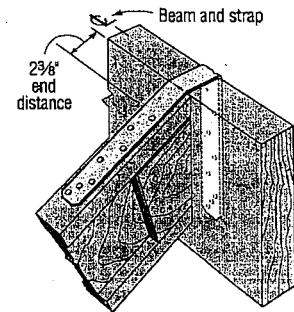
These products are available with additional corrosion protection. For more information, see p. 20.

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		S-P-F	
					(K _D = 1.00)	(K _D = 1.15)	(K _D = 1.00)	(K _D = 1.15)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
LSTA9	20	1¼	9	(6) 10d	600	690	555	635
LSTA12		1¼	12	(8) 10d	800	920	735	845
LSTA15		1¼	15	(10) 10d	1000	1150	920	1060
LSTA18		1¼	18	(12) 10d	1200	1380	1105	1270
LSTA21		1¼	21	(14) 10d	1400	1610	1290	1485
LSTA24		1¼	24	(16) 10d	1600	1840	1475	1695
ST292		2⅝	9⅝	(8) 8d	585	675	535	615
ST2122		2⅝	12⅜	(12) 8d	940	1085	865	995
ST2115		¾	16⅝	(8) 8d	670	770	615	710
ST2215		2⅝	16⅝	(16) 8d	1335	1540	1235	1420
LSTA30	18	1¼	30	(20) 10d	2235	2465	2075	2385
LSTA36		1¼	36	(24) 10d	2465	2465	2465	2465
LSTI49		3¾	49	(32) 10d x 1½"	3115	3580	2852	3280
LSTI73		3¾	73	(48) 10d x 1½"	4670	5370	4280	4920
MSTA9		1¼	9	(6) 10d	670	770	625	715
MSTA12		1¼	12	(8) 10d	895	1030	830	955
MSTA15		1¼	15	(10) 10d	1120	1285	1040	1195
MSTA18		1¼	18	(12) 10d	1340	1545	1245	1430
MSTA21		1¼	21	(14) 10d	1565	1800	1455	1670
MSTA24		1¼	24	(16) 10d	1790	2060	1660	1910
MSTA30	16	1¼	30	(20) 10d	2470	2840	2260	2595
MSTA36		1¼	36	(24) 10d	2965	3070	2710	3070
MSTA49		1¼	49	(28) 8d	2725	2725	2545	2725
ST6215		2⅝	16⅝	(16) 8d	1405	1615	1300	1500
ST6224		2⅝	23⅝	(24) 8d	2305	2650	2155	2475
ST9		1¼	9	(6) 8d	525	605	490	560
ST12		1¼	11⅝	(8) 8d	700	805	650	750
ST18		1¼	17¾	(12) 8d	1050	1210	975	1125
ST22		1¼	21⅝	(18) 8d	1580	1790	1465	1685
					7.03	7.96	6.52	7.50



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



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

- 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 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.

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

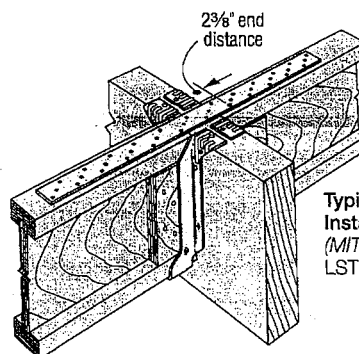
Strap Ties (cont.)

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

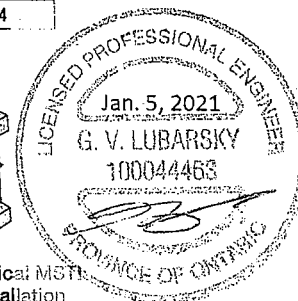
SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.)		Fasteners (Total)	Factored Tensile Resistance			
					D.Fir-L		S-P-F	
		W	L		(K _D = 1.00)	(K _D = 1.15)	(K _D = 1.00)	(K _D = 1.15)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
MSTC28	16	3	28¼	(32) 10d	3955	4545	3615	4155
MSTC40		3	40¼	(48) 10d	17.59	20.22	16.08	18.48
					5930	6820	5420	6235
MSTC52		3	52¼	(54) 10d	26.38	30.34	24.11	27.74
	6670				6940	6100	6940	
MSTC66	14	3	65¾	(66) 10d	29.67	30.87	27.14	30.87
					8515	8565	7455	8565
MSTC78		3	77¾	(66) 10d	37.88	38.10	33.16	38.10
					8515	8565	7455	8565
ST6236	2½	33 13⁄16	(36) 8d	37.88	38.10	33.16	38.10	
				3735	4295	3270	3760	
MSTI26	12	2½	26	(22) 10d x 1 ½"	16.61	19.11	14.55	16.73
					2825	3250	2475	2850
		2½	36	(32) 10d x 1 ½"	12.57	14.46	11.01	12.68
					4110	4725	3600	4140
2½		48	(44) 10d x 1 ½"	18.28	21.02	16.01	18.42	
				5650	6500	4955	5695	
2½		60	(56) 10d x 1 ½"	25.13	28.91	22.04	25.33	
				7195	7360	6305	7250	
MSTI60		2½	72	(68) 10d x 1 ½"	32.01	32.74	28.05	32.25
					7360	7360	7240	7360
MSTI72		2½	27	(26) 8d	32.74	32.74	32.21	32.74
					2685	3090	2355	2710
MST27		2½	37½	(38) 8d	11.94	13.75	10.48	12.06
					3930	4515	3440	3960
MST37		2½	48	(50) 8d	17.48	20.08	15.30	17.62
					5170	5945	4530	5210
MST48		3¼	16	(16) ¼" x 1 ½" SDS	23.00	26.45	20.15	23.18
					2400	2760	2120	2440
HRS416Z		2½	60	(64) 8d	10.68	12.28	9.43	10.85
					6620	7610	5800	6670
MST60		2½	72	(78) 8d	29.45	33.85	25.80	29.67
	8065				9135	7065	8125	
MST72	2½	72	(78) 8d	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 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.

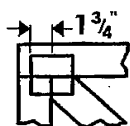


Typical MSTI Installation
(MIT hanger shown)
LSTI similar

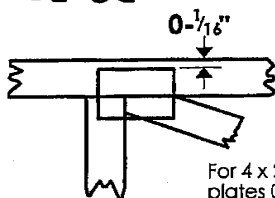


Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.



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

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

PLATE SIZE

4 x 4

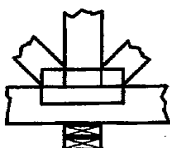
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

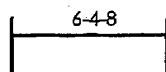


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

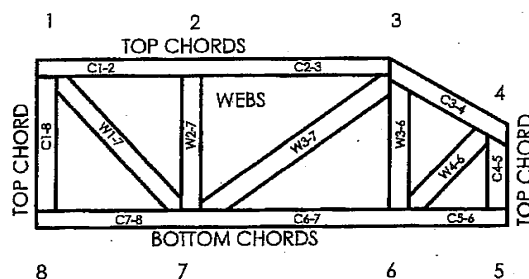
Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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



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

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

PRODUCT CODE APPROVALS

CCMC Reports:

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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