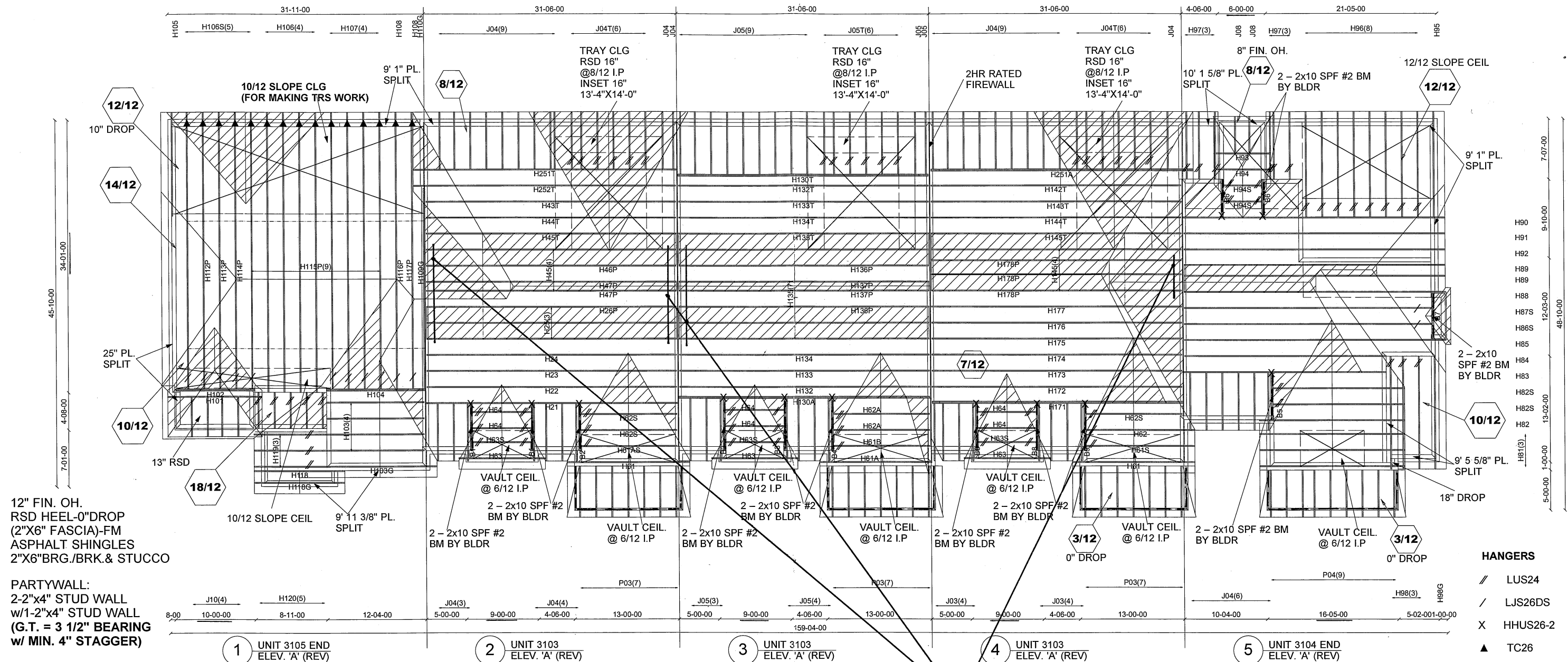




12" FIN. OH.
RSD HEEL-0" DROP
(2"x6" FASCIA)-FM
ASPHALT SHINGLES
2"x6" BRG./BRK. & STUCCO

PARTYWALL:
2-2"x4" STUD WALL
w/1-2"x4" STUD WALL
(G.T. = 3 1/2" BEARING
w/ MIN. 4" STAGGER)

PIGGYBACK TRS
PURLINS BY OTHERS

1 UNIT 3105 END
ELEV. 'A' (REV)

E21103961 - E21103964
E21103994 - E21103996
E21104018 - E21104020
E21104024 - E21104031
E21104056 - E21104064
E21104076 - E21104083
E21104086 - E21104122
E21104124 - E21104126

2 UNIT 3103
ELEV. 'A' (REV)

E21104129 - E21104132
E21104135 - E21104138
E21104139 - E21104153

3 UNIT 3103
ELEV. 'A' (REV)

4 UNIT 3103
ELEV. 'A' (REV)

5 UNIT 3104 END
ELEV. 'A' (REV)

HANGERS

- // LUS24
- / LJS26DS
- X HHUS26-2
- ▲ TC26

BEARING SURFACES AS PER
SHOP DRAWINGS.

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 O.B.C. LATEST EDITION. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE 2X4 SPF #2 @ 24" O.C WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS POINT. VERT. POSTS LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINTS & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

Mitek V. 8.2.0

CONVENTIONAL FRAMING OTHERS



Job Track: 45147

Layout ID: 336336

Plan Log: 113188

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: **PINE VALLEY**

Date: **9/28/2021**

Designer: **JBURROWS/C**

Model / Elevation:

BLOCK 16 / UNIT 1-5

THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA 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 ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

PL: 111206(TYP.), 114170E

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.

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QcS817GKByh/v/ 22CNR3geyx x9W/6Y/13Y/WZi5eit3Ybt M lMfMzyTs

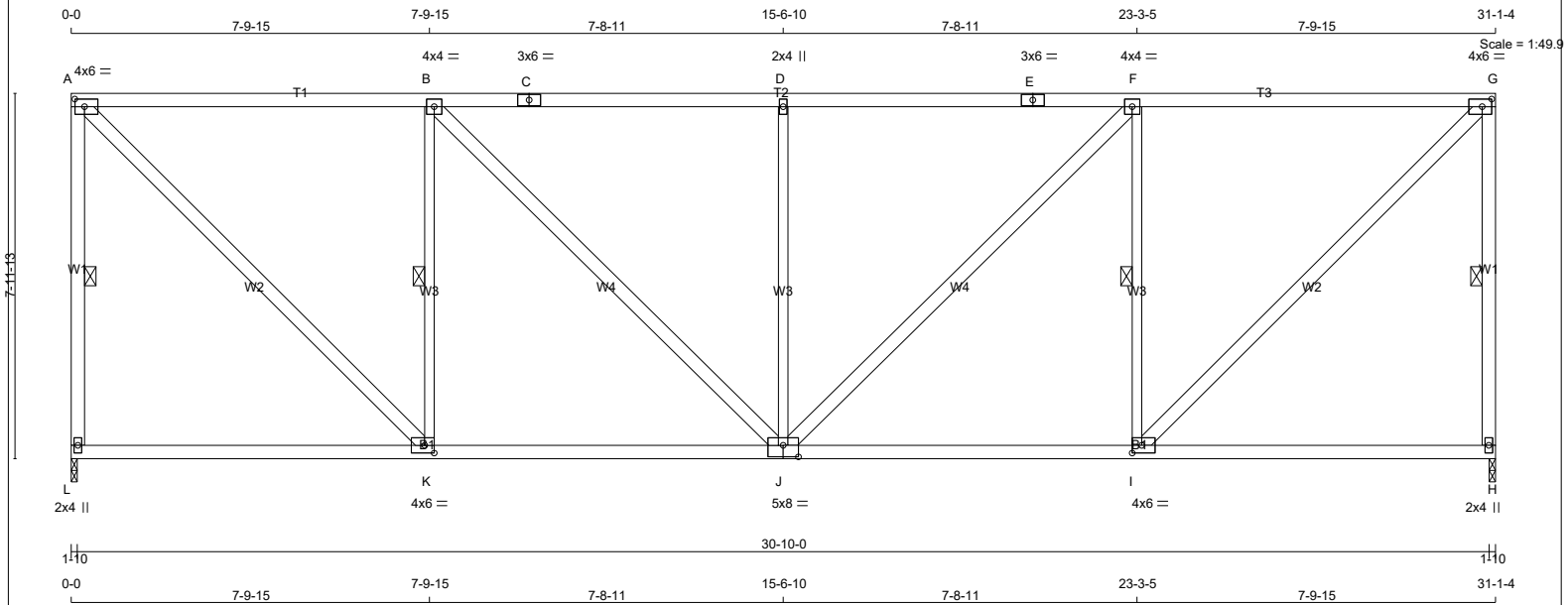


Y. WIDYA
100225448
10/13/2021

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

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

JSI GRIP= 0.88 (G) (INPUT = 0.90)
JSI METAL= 0.36 (G) (INPUT = 1.00)



TOTAL WEIGHT = 154 lb

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-t	MT20	4.0	6.0	2.00	2.50
B	TMWV-t	MT20	4.0	4.0		
C	TS-t	MT20	3.0	6.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWV-t	MT20	4.0	4.0		
G	TMV-t	MT20	4.0	6.0	2.00	2.50
H	BMV1+p	MT20	2.0	4.0		
I	BMWV-t	MT20	4.0	6.0	2.00	2.50
J	BSWVWV-I	MT20	5.0	8.0	3.00	4.00
K	BMWV-t	MT20	4.0	6.0	2.00	2.50
L	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	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
L	1500	0	1500	0	0	1-10	1-10
H	1500	0	1500	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1070	653 / 0	0 / 0	0 / 0	0 / 0	417 / 0	0 / 0
H	1070	653 / 0	0 / 0	0 / 0	0 / 0	417 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF A-L, G-H, B-K, F-I.

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				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO				
L-A	-1445 / 0	0.0	0.0	0.41 (1)	5.44	A-K	0 / 1718	0.28 (1)	
A-B	-1225 / 0	-78.0	-78.0	0.84 (1)	4.46	K-B	-1026 / 0	0.41 (1)	
B-C	-1558 / 0	-78.0	-78.0	0.90 (1)	3.99	B-J	0 / 470	0.08 (1)	
C-D	-1558 / 0	-78.0	-78.0	0.90 (1)	3.99	J-D	-556 / 0	0.67 (1)	
D-E	-1558 / 0	-78.0	-78.0	0.90 (1)	3.99	J-F	0 / 470	0.08 (1)	
E-F	-1558 / 0	-78.0	-78.0	0.90 (1)	3.99	I-F	-1026 / 0	0.41 (1)	
F-G	-1225 / 0	-78.0	-78.0	0.84 (1)	4.46	I-G	0 / 1718	0.28 (1)	
H-G	-1445 / 0	0.0	0.0	0.41 (1)	5.44				
L-K	0 / 0	-18.5	-18.5	0.32 (4)	10.00				
K-J	0 / 1225	-18.5	-18.5	0.44 (4)	10.00				
J-I	0 / 1225	-18.5	-18.5	0.44 (4)	10.00				
I-H	0 / 0	-18.5	-18.5	0.32 (4)	10.00				

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF

TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.04")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=0.90/1.00 (B-D:1), BC=0.44/1.00 (J-K:4),
WB=0.67/1.00 (D-J:1), SSI=0.29/1.00 (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 .

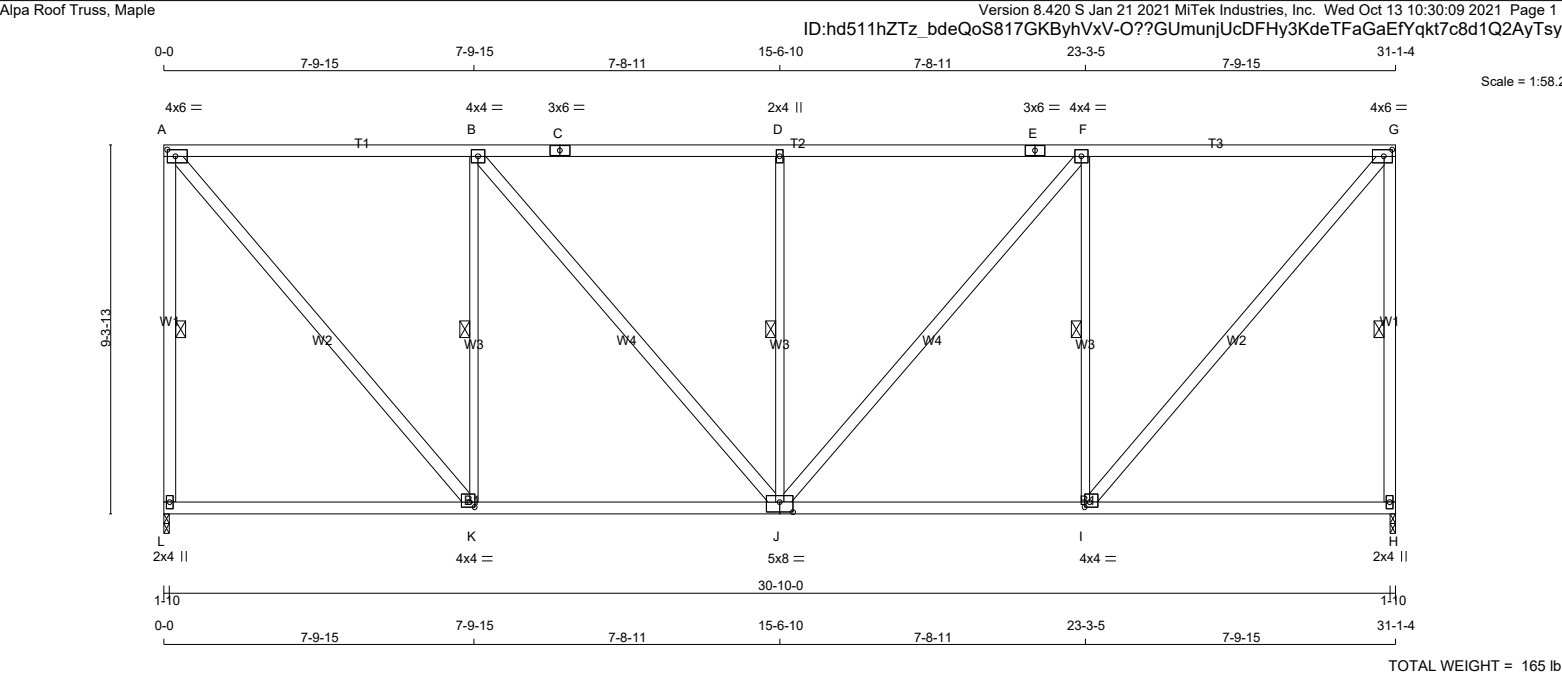
NAIL VALUES						
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (I) (INPUT = 0.90)
JSI METAL= 0.34 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	H24		1	TRUSS DESC. JT 45147	E21103964



Structural diagram of a bridge truss system. The diagram shows a series of truss members (T1, T2, T3) and vertical members (W1, W2, W3, W4, W5, W6, W7, W8, W9) connecting various joints (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S). The diagram includes dimensions and scales, such as 1:52.0 and 1:4.0. The diagram also shows various cross-sections and material specifications for the members.



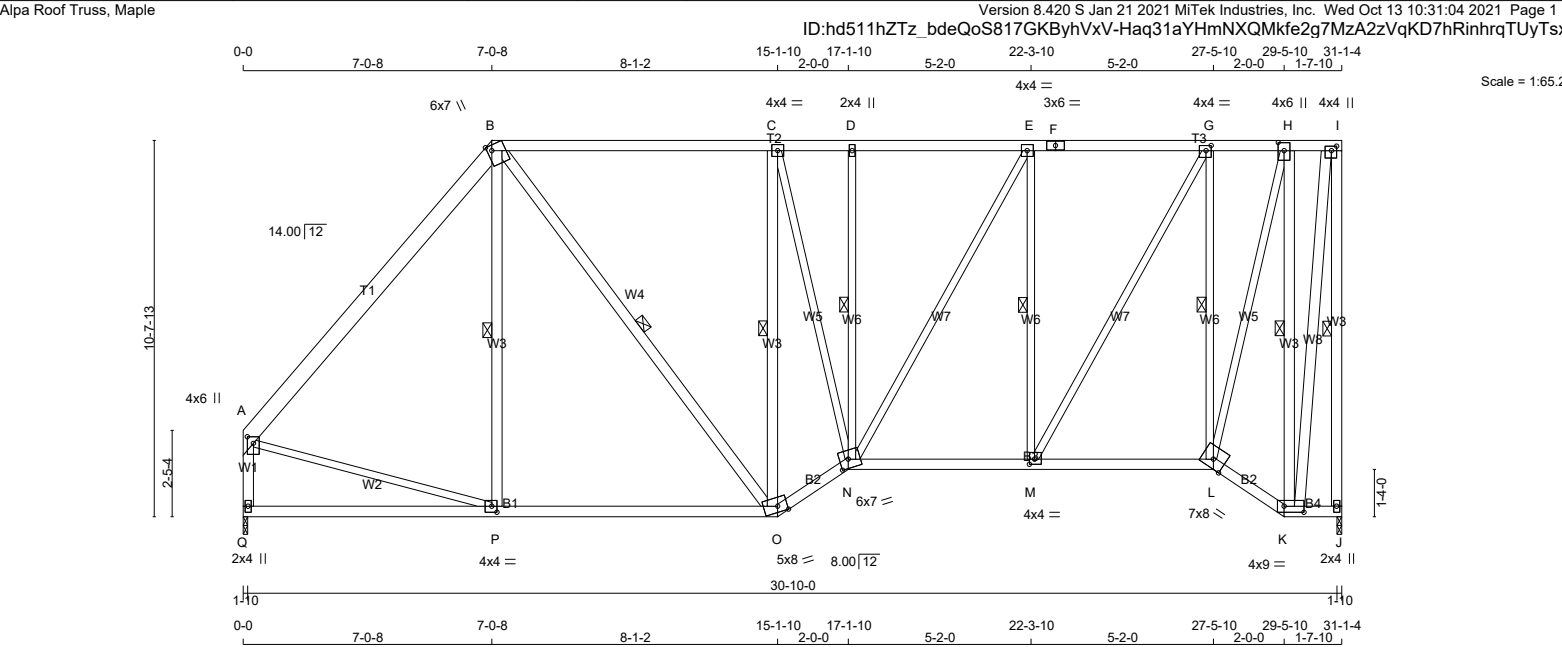
JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.46 (A) (INPUT = 1.00)

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JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.48 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	H45T		1	TRUSS DESC. JT 45147	E21103996



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

A - B	2x6	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
Q - A	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
B - O	2x4	DRY	No.2	SPF
O - C	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMWW-t	MT20	4.0	4.0		
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0	1.75	1.75
H	TMWW+t	MT20	4.0	6.0	2.75	2.00
I	TMVW+p	MT20	4.0	4.0	1.50	1.75
J	BMV1+p	MT20	2.0	4.0		
K	BBWW-l	MT20	4.0	9.0	2.00	6.75
L	BBWW-h	MT20	7.0	8.0	Edge	
M	BMWW-t	MT20	4.0	4.0	1.75	1.75
N	BBWWW-m	MT20	6.0	7.0	3.00	3.00
O	BBWW-m	MT20	5.0	8.0	2.00	3.25
P	BMWW-t	MT20	4.0	4.0	2.00	1.75
Q	BMV1+p	MT20	2.0	4.0		

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

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



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

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
J	1500	0	1500	0	0	1-10	1-10	1-10
Q	1500	0	1500	0	0	1-10	1-10	1-10

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1070	653 / 0	0 / 0	0 / 0	0 / 0	417 / 0	0 / 0
Q	1070	653 / 0	0 / 0	0 / 0	0 / 0	417 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.44 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 I-J, B-P, B-O, C-O, D-N, E-M, G-L, H-K.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX
FR-TO		FROM TO		CSI (LC)		FR-TO		CSI (LC)
A-B	-1256 / 0	-78.0	-78.0	0.36 (1)	6.25	P-B	-46 / 108	0.03 (4)
B-C	-1178 / 0	-78.0	-78.0	0.81 (1)	4.61	B-O	0 / 594	0.10 (1)
C-D	-1285 / 0	-78.0	-78.0	0.69 (1)	4.44	O-C	-1164 / 0	0.66 (1)
D-E	-1286 / 0	-78.0	-78.0	0.33 (1)	5.29	C-N	0 / 530	0.12 (1)
E-F	-1078 / 0	-78.0	-78.0	0.32 (1)	5.66	N-D	-43 / 0	0.02 (1)
F-G	-1078 / 0	-78.0	-78.0	0.32 (1)	5.66	N-E	0 / 417	0.09 (1)
G-H	-543 / 0	-78.0	-78.0	0.13 (1)	6.25	M-E	-818 / 0	0.47 (1)
H-I	-222 / 0	-78.0	-78.0	0.05 (1)	6.25	M-G	0 / 1065	0.24 (1)
J-I	-1485 / 0	0.0	0.0	0.85 (1)	5.38	L-G	-1243 / 0	0.71 (1)
Q-A	-1452 / 0	0.0	0.0	0.18 (1)	6.79	L-H	0 / 1475	0.33 (1)
						K-H	-1508 / 0	0.86 (1)
Q-P	0 / 0	-18.5	-18.5	0.31 (4)	10.00	K-I	0 / 1425	0.23 (1)
P-O	0 / 811	-18.5	-18.5	0.39 (4)	10.00	A-P	0 / 840	0.19 (1)
O-N	0 / 1397	-18.5	-18.5	0.24 (1)	10.00			
N-M	0 / 1078	-18.5	-18.5	0.25 (1)	10.00			
M-L	0 / 557	-18.5	-18.5	0.19 (4)	10.00			
L-K	0 / 242	-18.5	-18.5	0.05 (1)	10.00			
K-J	0 / 0	-18.5	-18.5	0.01 (4)	10.00			

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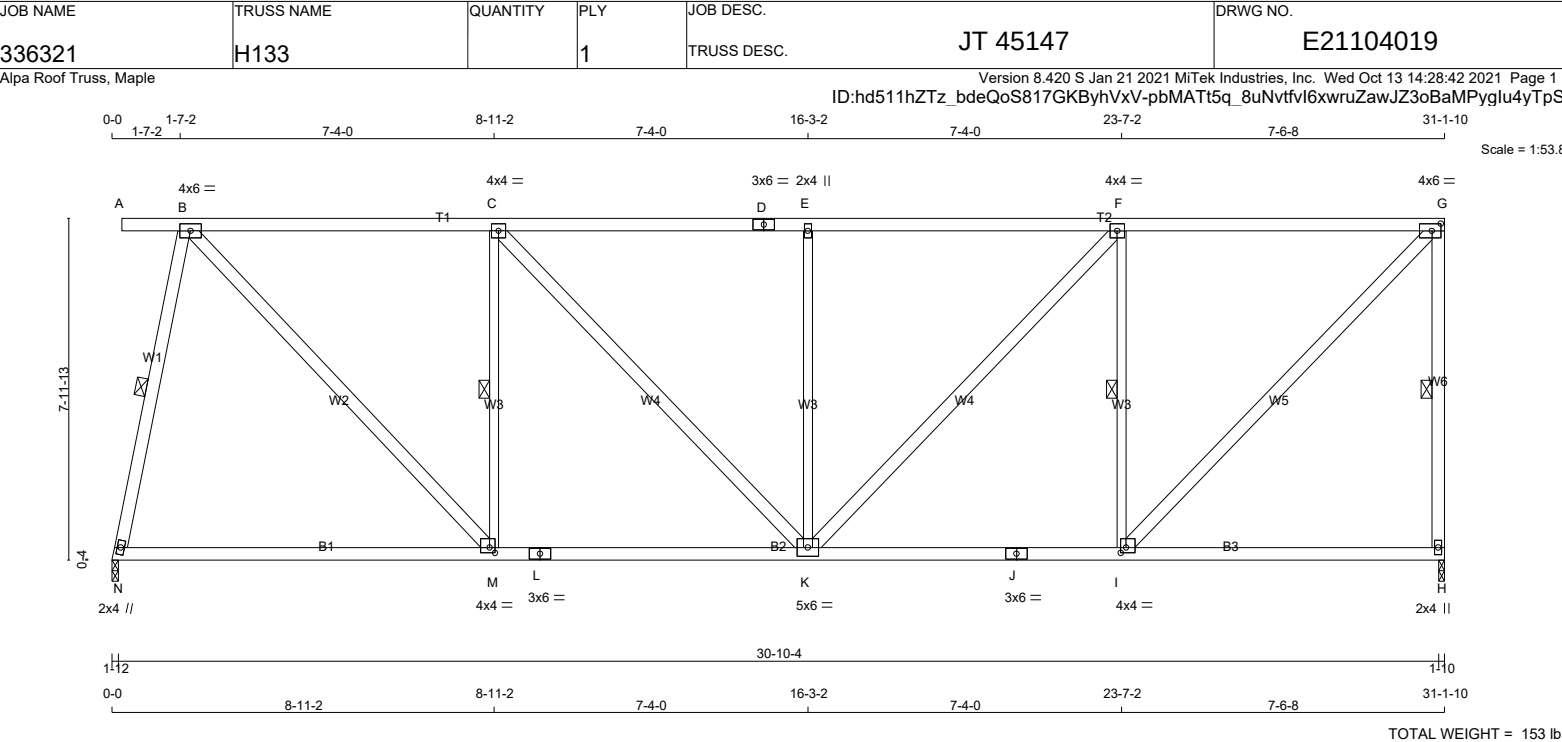
DRY: SEASONED LUMBER.

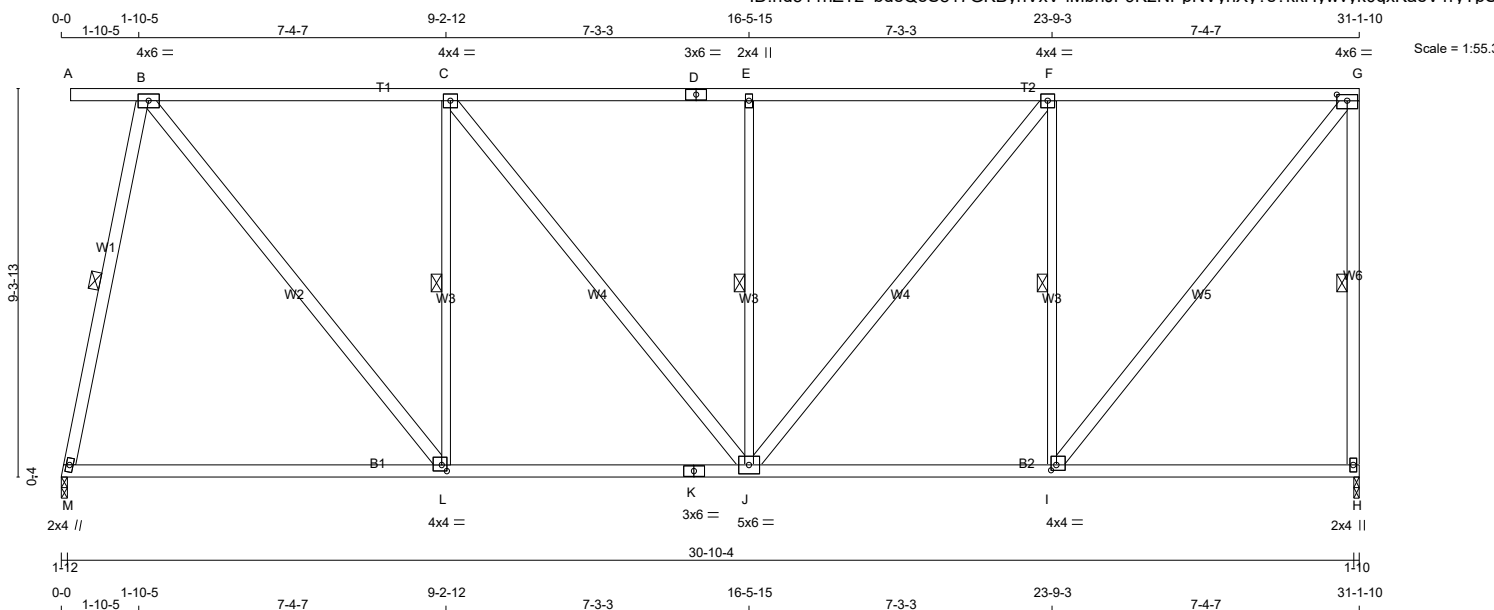
JT	TYPE	PLATES
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3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
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92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

TOTAL LOAD CASES: (4)

MAX. FACTORED		FACTORED		MAX. FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX CSI (LC)	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO	FR-TO		
A-B	0 / 0	-78.0	-78.0 0.08 (1)	10.00	N-B -1451 / 0	0.81 (1)
B-C	-1544 / 0	-78.0	-78.0 0.77 (1)	4.26	B-M 0 / 1681	0.38 (1)
C-D	-1872 / 0	-78.0	-78.0 0.84 (1)	3.89	M-C -934 / 0	0.68 (1)
D-E	-1872 / 0	-78.0	-78.0 0.84 (1)	3.89	C-K 0 / 432	0.10 (1)
E-F	-1872 / 0	-78.0	-78.0 0.88 (1)	3.80	K-E -534 / 0	0.39 (1)
F-G	-1438 / 0	-78.0	-78.0 0.81 (1)	4.30	K-F 0 / 572	0.13 (1)
H-G	-1438 / 0	0.0	0.0 0.29 (1)	5.45	I-F -1042 / 0	0.76 (1)
					I-G 0 / 1874	0.42 (1)

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.55 (L) (INPUT = 1.00)





TOTAL WEIGHT = 163 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW-t	MT20	4.0	6.0	1.75	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BMWWW-t	MT20	5.0	6.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0	1.75	1.50
M	BMW1+w	MT20	2.0	4.0		

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

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
M	1486	0	1486	0	0	1-12	1-10
H	1496	0	1496	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1060	646 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
H	1066	651 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0

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

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 B-M, G-H, C-L, E-J, F-I.

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)

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 0	-78.0	-78.0 0.16 (1)	10.00	M-B	-1446 / 0	0.63 (1)
B-C	-1130 / 0	-78.0	-78.0 0.70 (1)	4.90	B-L	0 / 1359	0.22 (1)
C-D	-1318 / 0	-78.0	-78.0 0.73 (1)	4.59	L-C	-880 / 0	0.50 (1)
D-E	-1318 / 0	-78.0	-78.0 0.73 (1)	4.59	C-J	0 / 300	0.05 (1)
E-F	-1318 / 0	-78.0	-78.0 0.74 (1)	4.55	J-E	-524 / 0	0.30 (1)
F-G	-992 / 0	-78.0	-78.0 0.71 (1)	5.13	F-E	0 / 520	0.08 (1)
H-G	-1442 / 0	0.0	0.0 0.59 (1)	5.44	I-F	-1057 / 0	0.60 (1)
					I-G	0 / 1569	0.25 (1)
M-L	0 / 279	-18.5	-18.5 0.36 (4)	10.00			
L-K	0 / 1130	-18.5	-18.5 0.45 (4)	10.00			
K-J	0 / 1130	-18.5	-18.5 0.45 (4)	10.00			
J-I	0 / 992	-18.5	-18.5 0.35 (4)	10.00			
I-H	0 / 0	-18.5	-18.5 0.25 (4)	10.00			

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF

TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.74/1.00 (E-F:1) , BC=0.45/1.00 (J-L:4) ,
WB=0.63/1.00 (B-M:1) , SSI=0.27/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		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 (I) (INPUT = 0.90)
JSI METAL= 0.35 (I) (INPUT = 1.00)

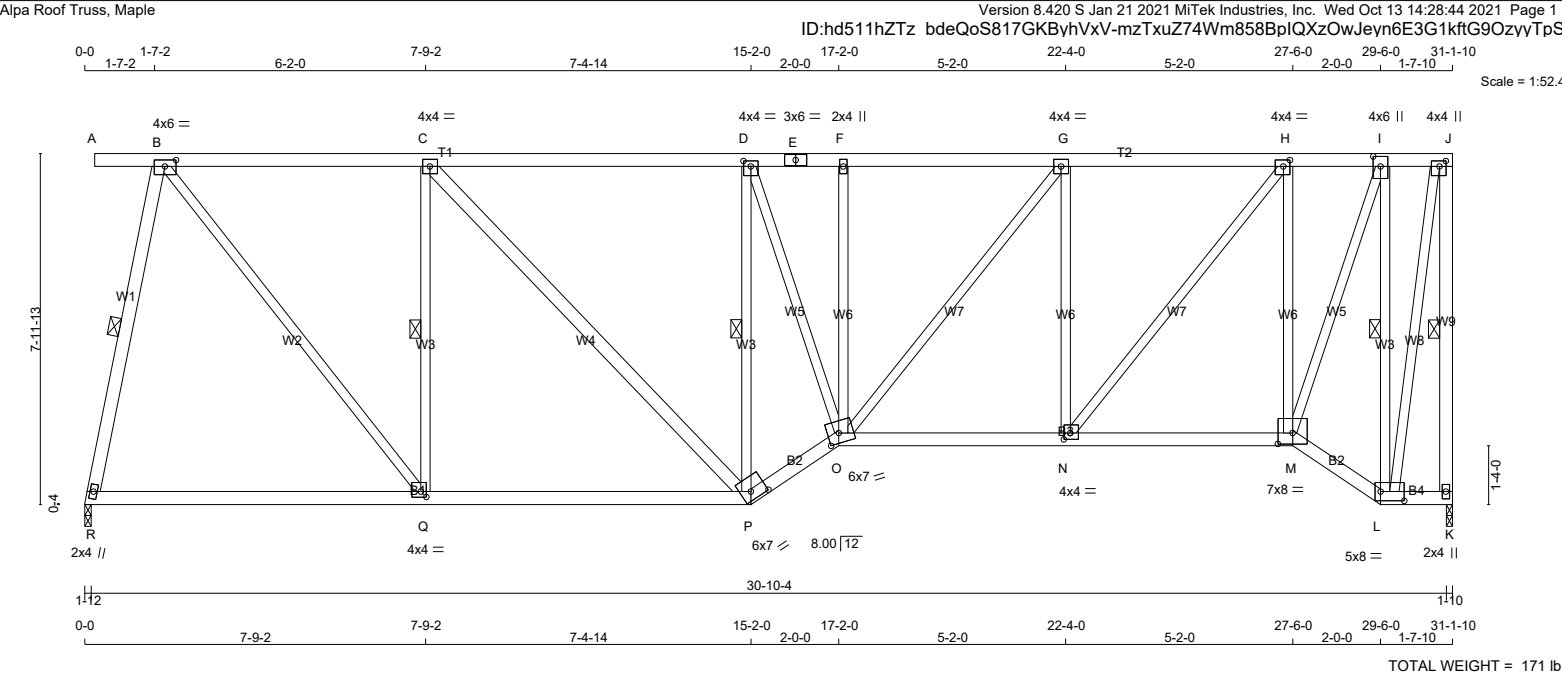
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DRY: SEASONED LUMBER.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.34 (P) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	H133T		1	TRUSS DESC. JT 45147	E21104025



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							DESIGN CRITERIA		
					BEARINGS							SPECIFIED LOADS:		
A - E	2x4	DRY	No.2	SPF	GROSS REACTION			FACTORED		INPUT		REQ'D		
E - J	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG		
K - J	2x4	DRY	No.2	SPF	R	1487	0	1487	0	0	1-12	1-10		
R - P	2x4	DRY	No.2	SPF	K	1495	0	1495	0	0	1-10	1-10		
P - O	2x4	DRY	No.2	SPF										
O - M	2x4	DRY	No.2	SPF										
M - L	2x4	DRY	No.2	SPF										
L - K	2x4	DRY	No.2	SPF										
					UNFACTORED REACTIONS							SPACING = 24.0 IN. C/C		
					1ST LCASE <u>MAX./MIN.</u> COMPONENT REACTIONS									
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
R - B	2x4	DRY	No.2	SPF	R	1060	647 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0		
C - P	2x4	DRY	No.2	SPF	K	1066	651 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0		
					READING MATERIAL TO BE OPENED 2 OR BETTER AT JOINT(S) OF K							THIS TRUSS IS DESIGNED FOR RESIDENTIAL		

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0	1.75	3.00
C	TMWW-t	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0	1.50	2.00
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMWW-t	MT20	4.0	4.0	1.75	1.75
I	TMWW-t	MT20	4.0	6.0	2.75	2.00
J	TMVW+p	MT20	4.0	4.0	1.50	1.75
K	BMV1+p	MT20	2.0	4.0		
L	BBWW-l	MT20	5.0	8.0	2.50	6.50
M	BBWW-l	MT20	7.0	8.0	3.00	4.00
N	BBWW-t	MT20	4.0	4.0	1.75	1.75
O	BBWWW-m	MT20	6.0	7.0	2.75	3.00
P	BBWW-h	MT20	6.0	7.0	2.25	4.25
Q	BMWW-t	MT20	4.0	4.0	1.50	1.50
R	BMW1+w	MT20	2.0	4.0		

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



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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
R	1487	0		1487	0	0	1-12	1-10	
K	1495	0		1495	0	0	1-10	1-10	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	1060	647 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
K	1066	651 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.48 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 B-R, J-K, C-Q, D-P, I-L.

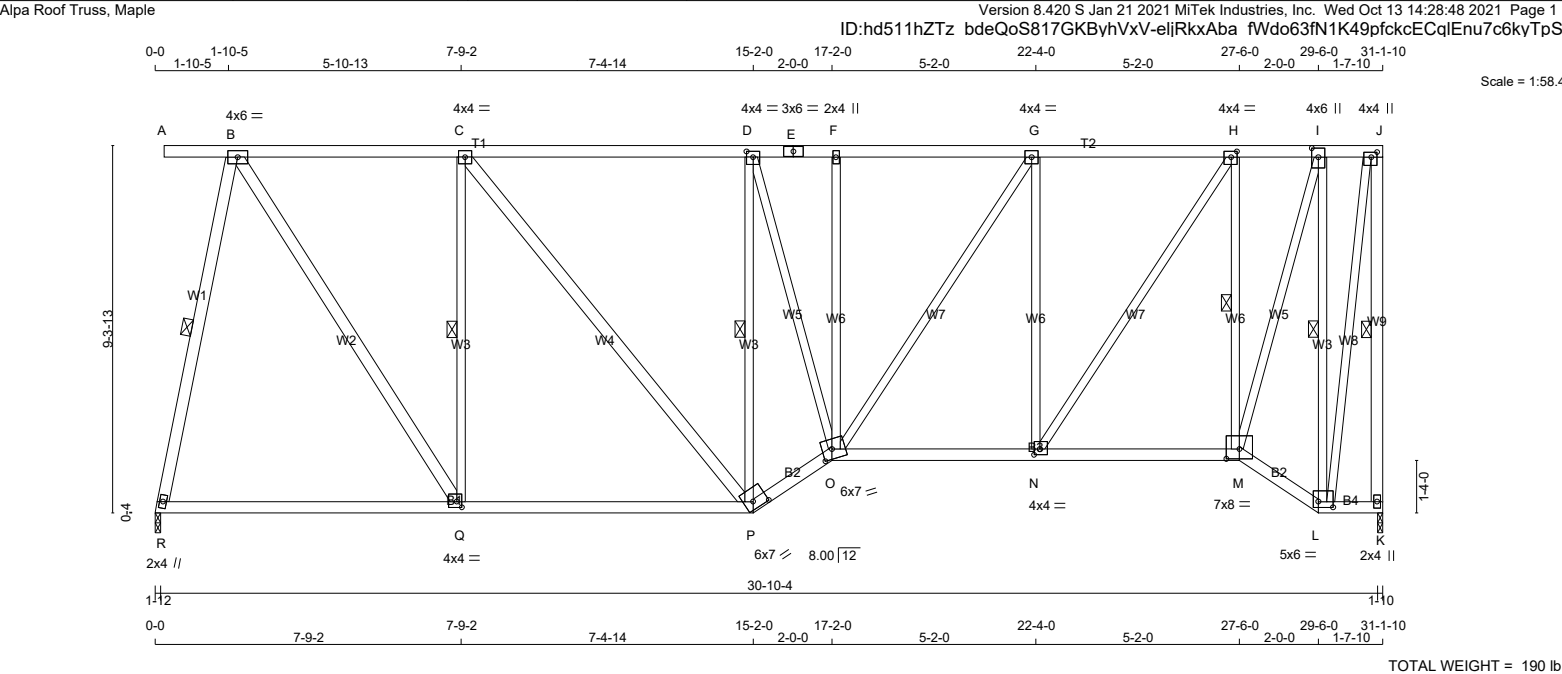
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
FR-TO		FROM	TO	FR-TO			
A-B	0 / 0	-78.0	-78.0 0.12 (1)	R-B	-1461 / 0	0.44 (1)	
B-C	-1180 / 0	-78.0	-78.0 0.57 (1)	B-Q	0 / 1454	0.33 (1)	
C-D	-1544 / 0	-78.0	-78.0 0.66 (1)	Q-C	-974 / 0	0.39 (1)	
D-E	-1816 / 0	-78.0	-78.0 0.40 (1)	C-P	0 / 525	0.08 (1)	
E-F	-1816 / 0	-78.0	-78.0 0.40 (1)	P-D	-1322 / 0	0.53 (1)	
F-G	-1819 / 0	-78.0	-78.0 0.35 (1)	D-O	0 / 922	0.21 (1)	
G-H	-1520 / 0	-78.0	-78.0 0.33 (1)	O-F	-164 / 0	0.12 (1)	
H-I	-770 / 0	-78.0	-78.0 0.15 (1)	O-G	0 / 473	0.11 (1)	
I-J	-294 / 0	-78.0	-78.0 0.09 (1)	N-G	-808 / 0	0.59 (1)	
K-J	-1480 / 0	0.0	0.0 0.42 (1)	N-H	0 / 1172	0.26 (1)	
				M-H	-1257 / 0	0.92 (1)	
R-Q	0 / 281	-18.5	-18.5 0.32 (4)	M-I	0 / 1578	0.36 (1)	
Q-P	0 / 1180	-18.5	-18.5 0.41 (4)	L-I	-1529 / 0	0.61 (1)	
P-O	0 / 1834	-18.5	-18.5 0.31 (1)	L-J	0 / 1411	0.32 (1)	
O-N	0 / 1520	-18.5	-18.5 0.31 (1)				
N-M	0 / 791	-18.5	-18.5 0.21 (4)				
M-L	0 / 328	-18.5	-18.5 0.07 (1)				
L-K	0 / 0	-18.5	-18.5 0.01 (4)				

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	H134T		1	TRUSS DESC. JT 45147	E21104026



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWW-t	MT20	4.0	6.0	
C	TMWW-t	MT20	4.0	4.0	
D	TMWW-t	MT20	4.0	4.0	1.75 2.00
E	TS-t	MT20	3.0	6.0	
F	TMW+w	MT20	2.0	4.0	
G	TMWW-t	MT20	4.0	4.0	
H	TMWW-t	MT20	4.0	4.0	1.75 1.75
I	TMWW+t	MT20	4.0	6.0	2.75 2.00
J	TMVW+p	MT20	4.0	4.0	1.50 1.75
K	BMV1+p	MT20	2.0	4.0	
L	BBWW-l	MT20	5.0	6.0	1.75 4.50
M	BBWW-l	MT20	7.0	8.0	3.00 4.00
N	BMWW-t	MT20	4.0	4.0	1.75 1.75
O	BBWWW-m	MT20	6.0	7.0	3.00 3.00
P	BBWW-h	MT20	6.0	7.0	2.25 4.25
Q	BMWW-t	MT20	4.0	4.0	1.75 1.50
R	BMW1+w	MT20	2.0	4.0	

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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	IN-SX
R	1486	0	1486	0	0	1-12	1-10		
K	1496	0	1496	0	0	1-10	1-10		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1060	646 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
K	1066	651 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.84 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-R, J-K, C-Q, D-P, H-M, I-L.

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

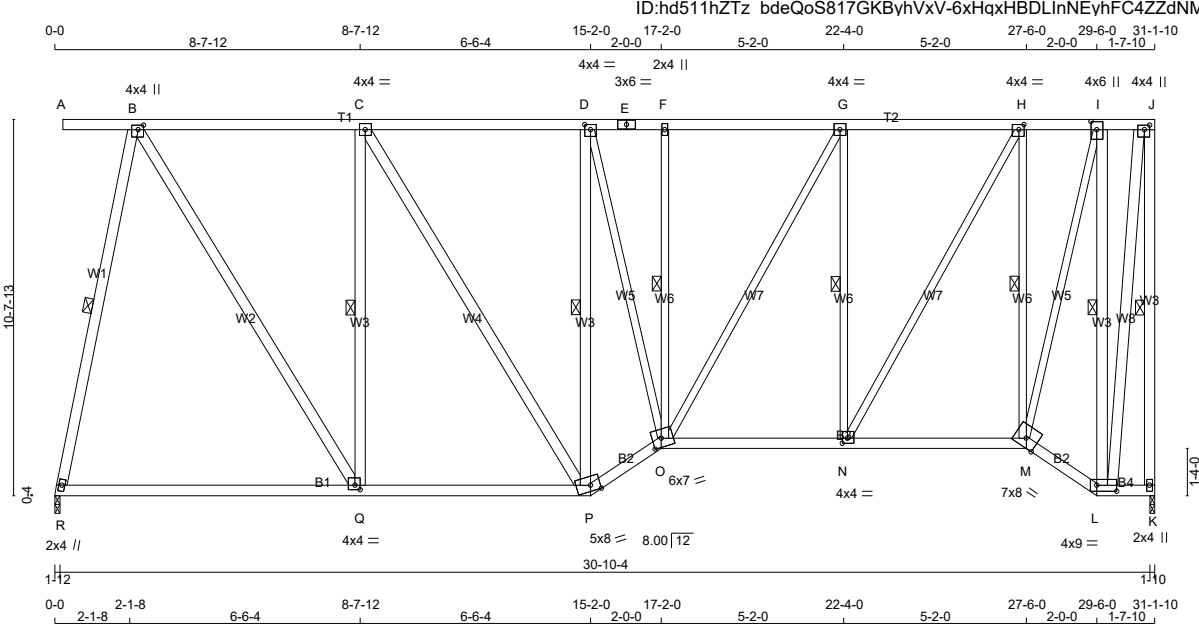
LOADING		TOTAL LOAD CASES: (4)	
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 0	R-B	-1460 / 0
B-C	-1007 / 0	B-Q	0 / 1345
C-D	-1318 / 0	Q-C	-962 / 0
D-E	-1503 / 0	C-P	0 / 490
E-F	-1503 / 0	P-D	-1176 / 0
F-G	-1505 / 0	D-O	0 / 750
G-H	-1259 / 0	O-F	-161 / 0
H-I	-636 / 0	O-G	0 / 442
I-J	-250 / 0	N-G	-809 / 0
K-J	-1481 / 0	N-H	0 / 1101
R-Q	0 / 282	M-H	-1259 / 0
Q-P	0 / 1007	M-I	0 / 1527
P-O	0 / 1568	L-I	-1500 / 0
O-N	0 / 1259	L-J	0 / 1400
N-M	0 / 653		
M-L	0 / 280		
L-K	0 / 0		

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	H135T		1	TRUSS DESC. JT 45147	E21104027

Alpa Roof Truss, Maple

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWW+t	MT20	4.0	4.0	1.50 1.75
C	TMWW-t	MT20	4.0	4.0	
D	TMWW-t	MT20	4.0	4.0	1.75 2.00
E	TS-t	MT20	3.0	6.0	
F	TMW+w	MT20	2.0	4.0	
G	TMWW-t	MT20	4.0	4.0	
H	TMWW-t	MT20	4.0	4.0	1.75 1.75
I	TMWW+t	MT20	4.0	6.0	2.75 2.00
J	TMVW+p	MT20	4.0	4.0	1.50 1.75
K	BMV1+p	MT20	2.0	4.0	
L	BBWW-l	MT20	4.0	9.0	2.00 6.75
M	BBWW-h	MT20	7.0	8.0	3.00 3.00
N	BMWW-t	MT20	4.0	4.0	1.75 1.75
O	BBWWW-m	MT20	6.0	7.0	3.00 3.00
P	BBWW-m	MT20	5.0	8.0	2.00 3.25
Q	BMWW-t	MT20	4.0	4.0	1.50 1.75
R	BMW1+w	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
R	1485	0	1485	0	0	1-12	1-10		
K	1497	0	1497	0	0	1-10	1-10		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	DEAD
R	1059	645 / 0	0 / 0	0 / 0	413 / 0
K	1067	652 / 0	0 / 0	0 / 0	415 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 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 B-R, J-K, C-Q, D-P, F-O, G-N, H-M, I-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 0	-78.0 -78.0	0.22 (1)	10.00	R-B	-1450 / 0	0.88 (1)
B-C	-942 / 0	-78.0 -78.0	0.53 (1)	5.57	B-Q	0 / 1258	0.20 (1)
C-D	-1141 / 0	-78.0 -78.0	0.55 (1)	5.16	Q-C	-898 / 0	0.51 (1)
D-E	-1284 / 0	-78.0 -78.0	0.25 (1)	5.38	C-P	0 / 374	0.06 (1)
E-F	-1284 / 0	-78.0 -78.0	0.25 (1)	5.38	P-D	-1008 / 0	0.58 (1)
F-G	-1286 / 0	-78.0 -78.0	0.32 (1)	5.31	D-O	0 / 675	0.15 (1)
G-H	-1074 / 0	-78.0 -78.0	0.30 (1)	5.69	O-F	-216 / 0	0.12 (1)
H-I	-542 / 0	-78.0 -78.0	0.13 (1)	6.25	O-G	0 / 427	0.10 (1)
I-J	-222 / 0	-78.0 -78.0	0.05 (1)	6.25	N-G	-811 / 0	0.46 (1)
K-J	-1482 / 0	0.0 0.0	0.85 (1)	5.38	N-H	0 / 1058	0.24 (1)
					M-H	-1242 / 0	0.71 (1)
R-Q	0 / 280	-18.5 -18.5	0.34 (4)	10.00	M-I	0 / 1473	0.33 (1)
Q-P	0 / 942	-18.5 -18.5	0.41 (4)	10.00	L-I	-1504 / 0	0.86 (1)
P-O	0 / 1355	-18.5 -18.5	0.23 (1)	10.00	L-J	0 / 1421	0.23 (1)
O-N	0 / 1074	-18.5 -18.5	0.24 (1)	10.00			
N-M	0 / 556	-18.5 -18.5	0.19 (4)	10.00			
M-L	0 / 241	-18.5 -18.5	0.05 (1)	10.00			
L-K	0 / 0	-18.5 -18.5	0.01 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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, NBC2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CSI: TC=0.85/1.00 (J-K:1), BC=0.41/1.00 (P-Q:4), WB=0.88/1.00 (B-R:1), SSI=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.41 (B) (INPUT = 1.00)

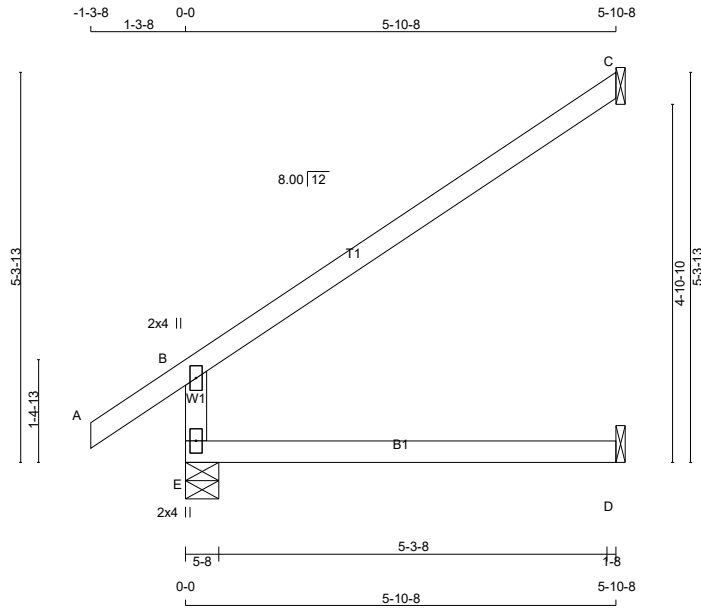
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed Oct 13 10:32:03 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-3xuNPIGIvZ2xog ?ZhCsc 8icW3SaVOMNeS1ayTswQ

Scale = 1:31.4



TOTAL WEIGHT = $83 \times 18 = 1480 \text{ lb}$

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	456	0	456	0	0	5-8	1-8
C	172	0	172	0	0	1-8	1-8
D	46	0	51	0	0	1-8	1-8

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	323	212 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
C	119	93 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

TOTAL LOAD CASES: (4)

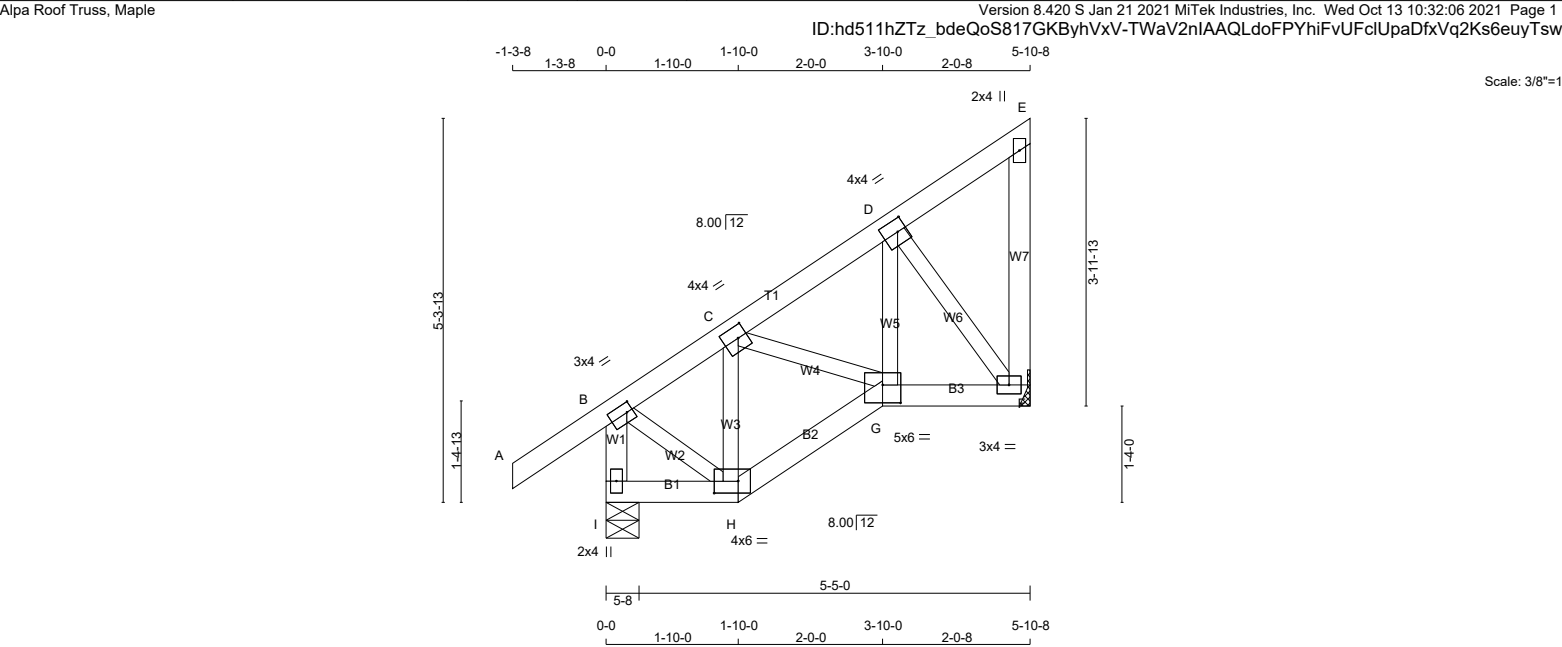
CHORDS					WEBS				
MEMB.	MAX. FACTORED (LBS)	FACTORED (PLF)	VERT. LOAD (LC)	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO			FR-TO			
E-B	-393 / 0	0.0	0.0	0.12 (4)	7.81				
A-B	0 / 30	-78.0	-78.0	0.10 (1)	10.00				
B-C	-32 / 0	-78.0	-78.0	0.46 (1)	6.25				
E-D	0 / 0	-18.5	-18.5	0.13 (4)	10.00				

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.20 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336321	J04T		1	TRUSS DESC. JT 45147	E21104029



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	3.0	4.0	1.50 1.00
C	TMWW-t	MT20	4.0	4.0	2.00 1.50
D	TMWW-t	MT20	4.0	4.0	2.00 1.50
E	TMV+p	MT20	2.0	4.0	
F	BMVW1-t	MT20	3.0	4.0	
G	BBWW-I	MT20	5.0	6.0	3.00 3.00
H	BBWW-I	MT20	4.0	6.0	2.00 4.00
I	BMV1+p	MT20	2.0	4.0	

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	403	0	403	0	5-8	1-8
F	271	0	271	0	MECHANICAL	

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

UNFACTORED REACTIONS

	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS				WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
JT	285	188 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0	0 / 0	0 / 0
F	193	117 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH	WEBS MAX. FACTORED FORCE (LBS)		MAX. UNBRACED LENGTH
	FR-TO	FROM TO	LC1	LC2		FR-TO	FROM TO	
I-B	-386 / 0	0.0	0.0	0.04 (1)	7.81	B-H	0 / 161	0.04 (1)
A-B	0 / 30	-78.0	-78.0	0.10 (1)	10.00	H-C	-134 / 0	0.02 (1)
B-C	-188 / 0	-78.0	-78.0	0.10 (1)	6.25	C-G	0 / 35	0.01 (1)
C-D	-192 / 0	-78.0	-78.0	0.05 (1)	6.25	G-D	0 / 114	0.03 (4)
D-E	-10 / 0	-78.0	-78.0	0.05 (1)	6.25	D-F	-254 / 0	0.05 (1)
F-E	-57 / 0	0.0	0.0	0.01 (1)	7.81			
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00			
H-G	0 / 160	-18.5	-18.5	0.04 (1)	10.00			
G-F	0 / 160	-18.5	-18.5	0.04 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 34.4	PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 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 (0.00")

CSI: TC=0.10/1.00 (A-B:1) , BC=0.04/1.00 (F-G:1) ,
WB=0.05/1.00 (D-F:1) , SSI=0.07/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

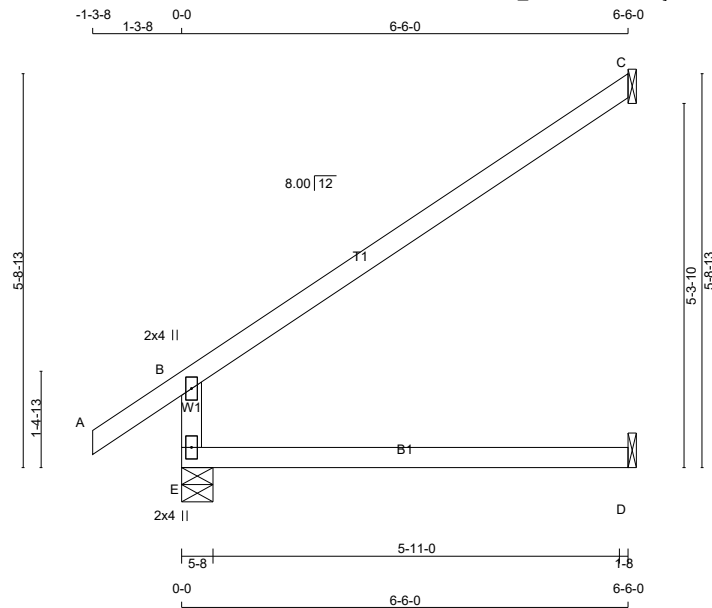
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed Oct 13 10:32:07 2021 Page 1
ID:hd511hZTz_bdeQoS817GKByhVxV-xi8tF7JoxkTUPPzIEPm81S9r3DuZOOU H_cfBLyTsw

Scale = 1:33.5



TOTAL WEIGHT = 17 X 19 = 330 lb

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

	FACTORED		MAXIMUM FACTORED			INPUT	REQD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	494	0	494	0	0	5-8	1-8
C	190	0	190	0	0	1-8	1-8
D	50	0	56	0	0	1-8	1-8

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	349	228 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0
C	132	102 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0
D	40	0 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO					
E-B	-424 / 0	0.0	0.0	0.13 (4)	7.81			
A-B	0 / 30	-78.0	-78.0	0.10 (1)	10.00			
B-C	-35 / 0	-78.0	-78.0	0.44 (1)	6.25			
E-D	0 / 0	-18.5	-18.5	0.16 (4)	10.00			

SPECIFIED LOADS:

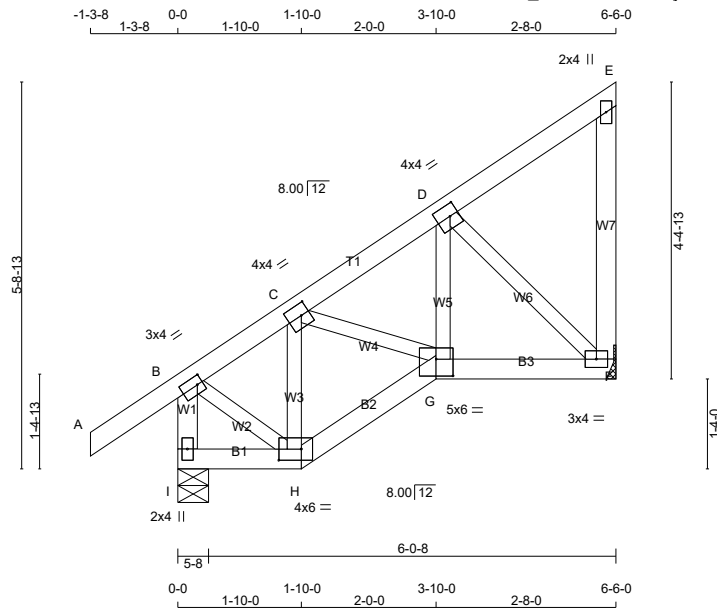
TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

JSI GRIP= 0.26 (B) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed Oct 13 10:32:09 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-u5FegoL2TLkBf77Mqoc6tEGj1bcsl0Gkl5mFDyTswK

Scale = 1:34.2



TOTAL WEIGHT = 7 X 33 = 232 lb

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

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TMVW-t	MT20	4.0	4.0	2.00	1.00
D	TMWW-t	MT20	4.0	4.0	2.00	1.50
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BBWW-l	MT20	5.0	6.0	3.00	3.00
H	BBWW-l	MT20	4.0	6.0	2.00	4.00
I	BMV1+p	MT20	2.0	4.0		

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	432	0	432	0	0	5-8	1-8
F	302	0	302	0	0	MECHANICAL	

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	305	200 / 0	0 / 0	0 / 0	0 / 0	105 / 0	0 / 0
F	216	130 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)		
FR-TO		FROM TO			FR-TO				
I-B	-415 / 0	0.0	0.0	0.04 (1)	7.81	B-H	0 / 185	0.04 (1)	
A-B	0 / 30	-78.0	-78.0	0.10 (1)	10.00	H-C	-160 / 0	0.03 (1)	
B-C	-215 / 0	-78.0	-78.0	0.08 (1)	6.25	C-G	0 / 73	0.02 (1)	
C-D	-253 / 0	-78.0	-78.0	0.05 (1)	6.25	G-D	0 / 118	0.03 (4)	
D-E	-11 / 0	-78.0	-78.0	0.05 (1)	6.25	D-F	-293 / 0	0.06 (1)	
F-E	-80 / 0	0.0	0.0	0.02 (1)	7.81				
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00				
H-G	0 / 184	-18.5	-18.5	0.04 (1)	10.00				
G-F	0 / 215	-18.5	-18.5	0.06 (4)	10.00				

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

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

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10/1.00 (A-B:1), BC=0.06/1.00 (F-G:4),
WB=0.06/1.00 (D-F:1), SSI=0.08/1.00 (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 .

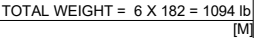
PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

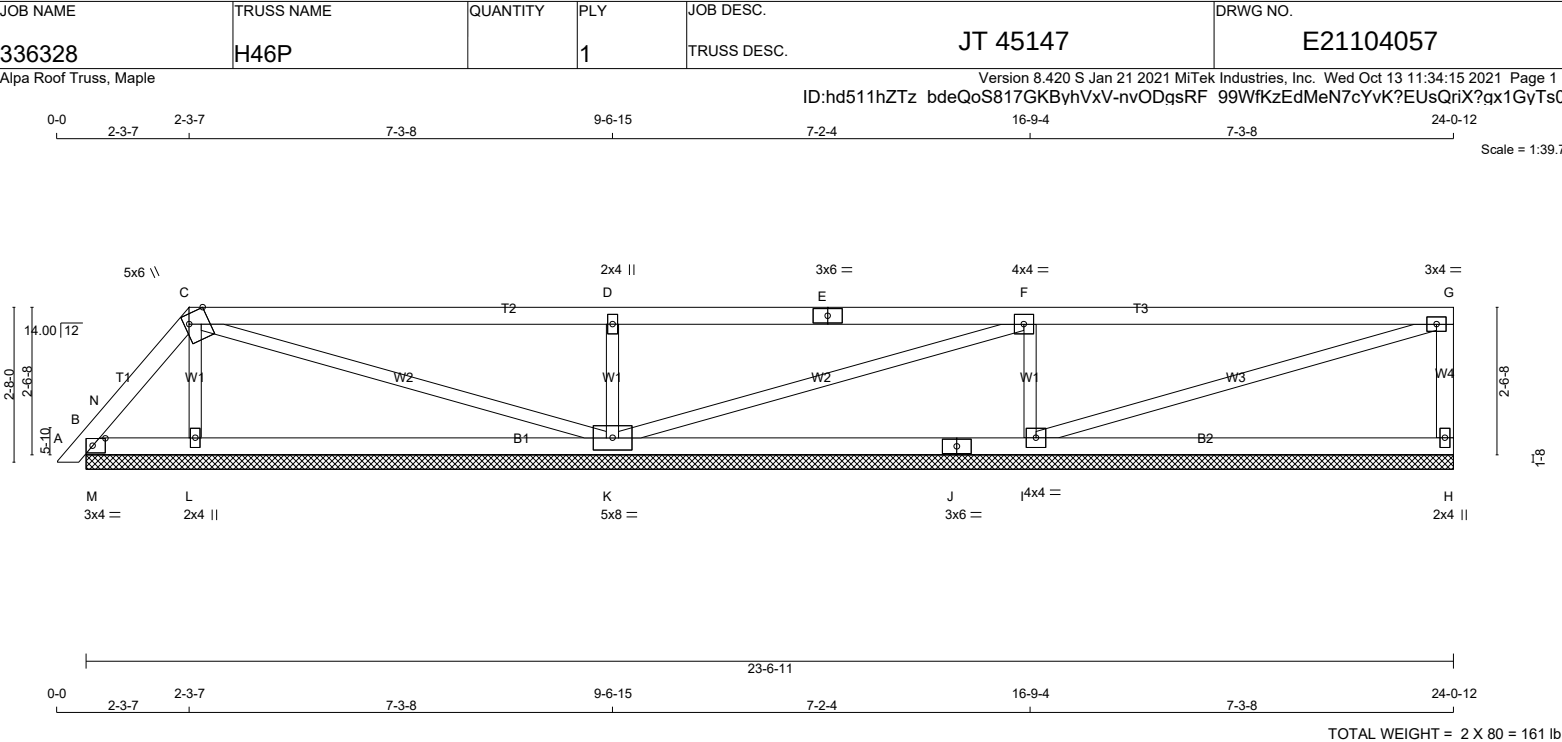
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (B) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

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JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.51 (A) (INPUT = 1.00)



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED	GROSS REACTION	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL	PSF
A - C	2x4	DRY	No.2	VERT	HORZ	DOWN	HORZ	UPLIFT	DL	=	6.0
C - E	2x4	DRY	No.2	H	284	0	284	0	23-6-11 (8-6-11)	PSF	
E - G	2x4	DRY	No.2	B	131	0	131	0	23-6-11 (8-6-11)	PSF	
H - G	2x4	DRY	No.2	L	354	0	354	0	23-6-11 (8-6-11)	PSF	
B - J	2x4	DRY	No.2	K	769	0	769	0	23-6-11 (8-6-11)	PSF	
J - H	2x4	DRY	No.2	I	764	0	764	0	23-6-11 (8-6-11)	PSF	
ALL WEBS	2x3	DRY	No.2	VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH				SPACING = 24.0 IN. C/C			
DRY: SEASONED LUMBER.				UNFACTORED REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
				1ST LCASE				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
				MAX./MIN. COMPONENT REACTIONS				THIS DESIGN COMPLIES WITH:			
				JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
				H	203	124 / 0	0 / 0	0 / 0	0 / 0	78 / 0	0 / 0
				B	88	83 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
				L	259	124 / 0	0 / 0	0 / 0	0 / 0	135 / 0	0 / 0
				K	546	344 / 0	0 / 0	0 / 0	0 / 0	203 / 0	0 / 0
				I	545	330 / 0	0 / 0	0 / 0	0 / 0	215 / 0	0 / 0
				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, B, L, K, I				(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD			
				BRACING				CSI: TC=0.56/1.00 (C-D:1) , BC=0.24/1.00 (I-K:4) , WB=0.10/1.00 (D-K:1) , SSI=0.27/1.00 (F-G:1)			
				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.				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				COMPANION LIVE LOAD FACTOR = 1.00			
				LOADING				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
				TOTAL LOAD CASES: (4)				NAIL VALUES			
				CHORDS				PLATE GRIP(DRY) SHEAR SECTION			
				MAX. FACTORED				(PSI) (PLI) (PLI)			
				MEMB. FORCE (LBS)				MAX MIN MAX MIN MAX MIN			
				FR-TO				MT20 650 371 1747 788 1987 1873			
				FROM TO				PLATE PLACEMENT TOL. = 0.250 inches			
				A-B				PLATE ROTATION TOL. = 5.0 Deg.			
				B-N				JSI GRIP= 0.83 (G) (INPUT = 0.90)			
				N-C				JSI METAL= 0.25 (E) (INPUT = 1.00)			
				C-D							
				D-E							
				E-F							
				F-G							
				H-G							
				B-M							
				M-L							
				L-K							
				K-J							
				J-I							
				I-H							

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.50
C	TTWW+m	MT20	5.0	6.0	Edge	4.00
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		
I	BMWW1-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW1-t	MT20	5.0	8.0		
L	BMW1+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

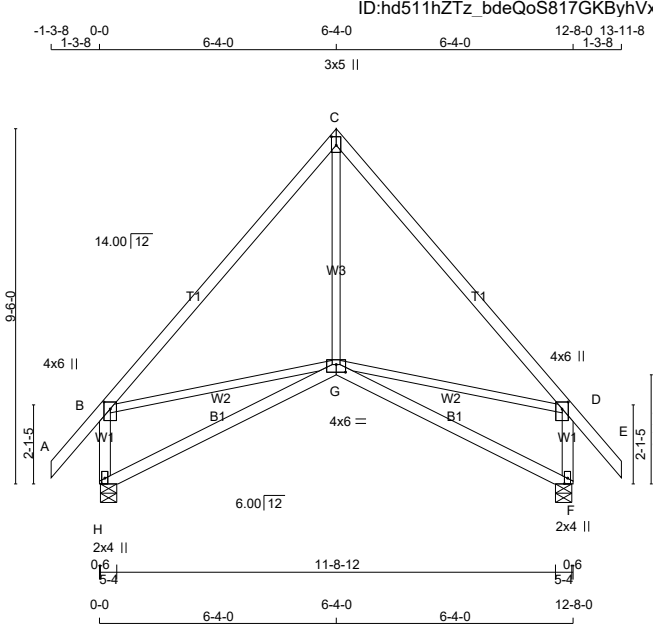




JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336328	H61		1	TRUSS DESC. JT 45147	E21104059

Alpa Roof Truss, Maple

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Scale = 1:61.6

TOTAL WEIGHT = 2 X 63 = 126 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY 2100F 1.8E	SPF	
C - E	2x4	DRY 2100F 1.8E	SPF	
H - B	2x4	DRY No.2	SPF	
F - D	2x4	DRY No.2	SPF	
H - G	2x4	DRY No.2	SPF	
G - 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
B	TMVW+p	MT20	4.0	6.0	2.25 2.00
C	TTW+p	MT20	3.0	5.0	2.75 1.50
D	TMVW+p	MT20	4.0	6.0	2.25 2.00
F	BMV1+p	MT20	2.0	4.0	Edge
G	BBWWW+p	MT20	4.0	6.0	2.50 3.00
H	BMV1+p	MT20	2.0	4.0	Edge

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	720	0	720	0	5-4	1-8	
F	720	0	720	0	0	5-4	1-8

UNFACTORED REACTIONS							
JT	1ST CASE	MAX.	MIN.	COMPONENT	REACTIONS		
H	511	325 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
F	511	325 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 42	-78.0 -78.0	0.07 (1)	10.00	G-C	0 / 235	0.06 (4)
B-C	-480 / 0	-78.0 -78.0	0.27 (1)	6.25	B-G	0 / 318	0.07 (1)
C-D	-480 / 0	-78.0 -78.0	0.27 (1)	6.25	G-D	0 / 318	0.07 (1)
D-E	0 / 42	-78.0 -78.0	0.07 (1)	10.00			
H-B	-662 / 0	0.0 0.0	0.08 (1)	7.81			
F-D	-662 / 0	0.0 0.0	0.08 (1)	7.81			
H-G	0 / 0	-18.5 -18.5	0.22 (4)	10.00			
G-F	0 / 0	-18.5 -18.5	0.22 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:		
TOP CH.	LL	= 21.0 PSF
	DL	= 6.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.4 PSF
TOTAL LOAD = 34.4 PSF		

SPACING = 24.0 IN./C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.27/1.00 (C-D:1) , BC=0.22/1.00 (F-G:4) , WB=0.07/1.00 (B-G:1) , SSI=0.13/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (G) (INPUT = 0.90)
JSI METAL= 0.27 (H) (INPUT = 1.00)

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

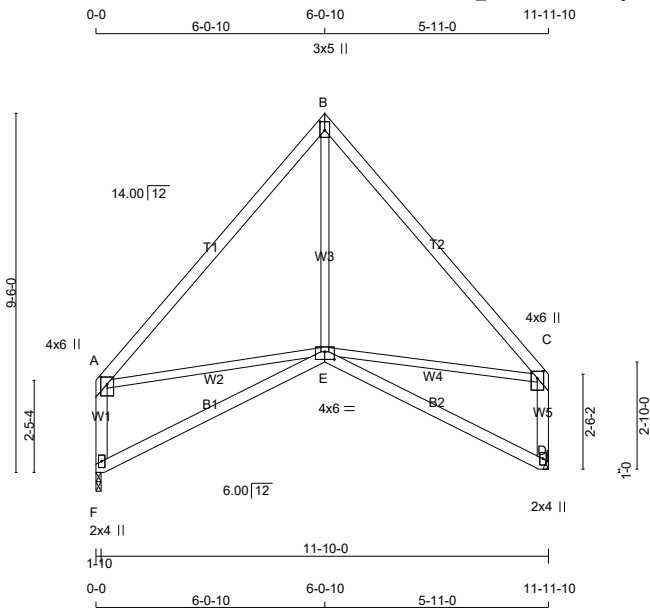


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336328	H61AS		1	TRUSS DESC. JT 45147	E21104060

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 56 lb

[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY 1650F 1.5E	SPF	
B - C	2x4	DRY No.2	SPF	
F - A	2x4	DRY No.2	SPF	
D - C	2x4	DRY No.2	SPF	
F - E	2x4	DRY No.2	SPF	
E - D	2x4	DRY No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY No.2	SPF	
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTW+p	MT20	3.0	5.0	2.75	1.50
C	TMVW+p	MT20	4.0	6.0	2.25	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BBWWW-p	MT20	4.0	6.0	2.50	3.00
F	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
F	577	0	577	0	1-10	1-8
D	577	0	577	0	0	MECHANICAL

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-12.

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS					
		1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD
F	412	251 / 0	0 / 0	0 / 0	0 / 0	0 / 0	160 / 0
D	412	251 / 0	0 / 0	0 / 0	0 / 0	0 / 0	160 / 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO				FR-TO			
A-B	-428 / 0	-78.0 -78.0	0.31 (1)	6.25	E-B	0 / 184	0.05 (4)		
B-C	-428 / 0	-78.0 -78.0	0.36 (1)	6.25	A-E	0 / 282	0.06 (1)		
F-A	-521 / 0	0.0 0.0	0.07 (1)	7.81	E-C	0 / 281	0.06 (1)		
D-C	-523 / 0	0.0 0.0	0.07 (1)	7.81					
F-E	0 / 0	-18.5 -18.5	0.20 (4)	10.00					
E-D	0 / 0	-18.5 -18.5	0.19 (4)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	34.4	PSF

SPACING = 24.0 IN./C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.36/1.00 (B-C:1) , BC=0.20/1.00 (E-F:4) ,
WB=0.06/1.00 (A-E:1) , SSI=0.12/1.00 (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= 0.45 (E) (INPUT = 0.90)
JSI METAL= 0.22 (D) (INPUT = 1.00)

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

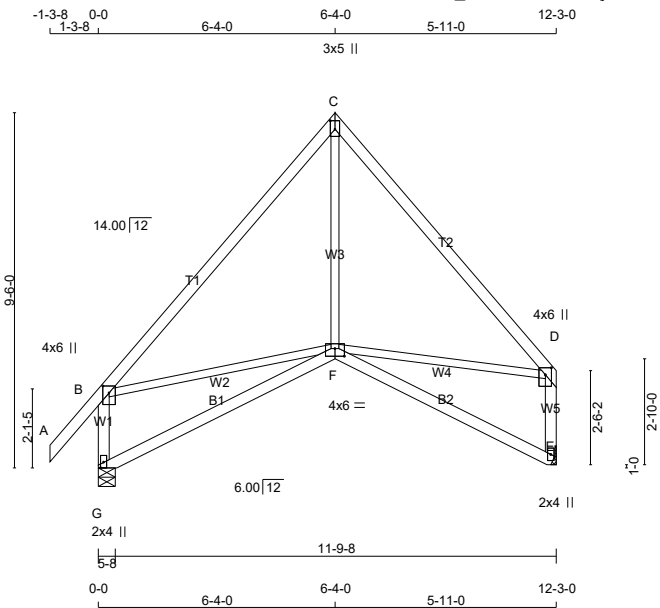


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336328	H61S		1	TRUSS DESC. JT 45147	E21104061

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-c3mUxvV?a?wgOFRO_clnMto_yQHEG8rbvw7FFvyTs00

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TOTAL WEIGHT = 59 lb

[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER		DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - D	2x4	DRY	No.2	SPF
G - B	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
F - E	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	2.25 2.00
C	TTW+p	MT20	3.0	5.0	2.75 1.50
D	TMVW+p	MT20	4.0	6.0	2.25 2.00
E	BMV1+p	MT20	2.0	4.0	
F	BBWWW-p	MT20	4.0	6.0	2.50 3.00
G	BMV1+p	MT20	2.0	4.0	Edge
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
G	700	0	700	0
E	591	0	591	0
MECHANICAL				

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-12.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	497	316 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0
E	421	257 / 0	0 / 0	0 / 0	0 / 0	164 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
A-B	0 / 42	-78.0	-78.0	0.07 (1)	10.00	F- C	0 / 203	0.06 (4)	
B- C	-448 / 0	-78.0	-78.0	0.27 (1)	6.25	B- F	0 / 297	0.07 (1)	
C- D	-448 / 0	-78.0	-78.0	0.36 (1)	6.25	F- D	0 / 294	0.07 (1)	
G- B	-642 / 0	0.0	0.0	0.08 (1)	7.81				
E- D	-536 / 0	0.0	0.0	0.07 (1)	7.81				
G- F	0 / 0	-18.5	-18.5	0.22 (4)	10.00				
F- E	0 / 0	-18.5	-18.5	0.19 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	34.4	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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.36/1.00 (C-D:1) , BC=0.22/1.00 (F-G:4) ,
WB=0.07/1.00 (B-F:1) , SSI=0.13/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (F) (INPUT = 0.90)
JSI METAL= 0.27 (G) (INPUT = 1.00)

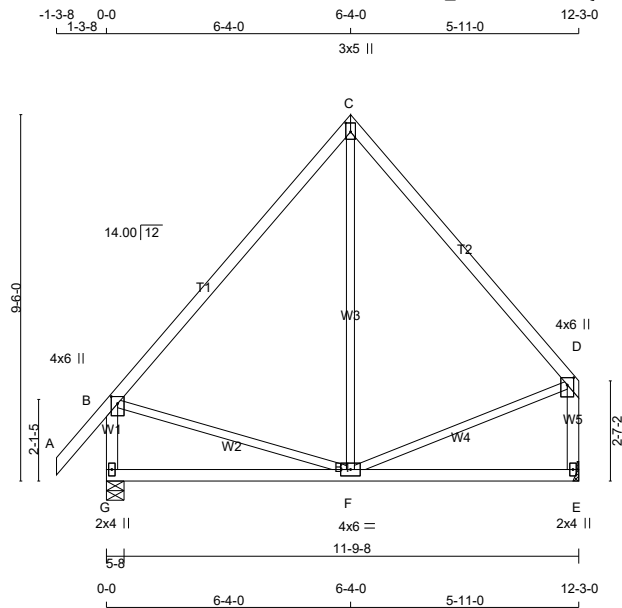
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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Scale = 1:59.8



TOTAL WEIGHT = 2 X 60 = 120 lb	[M][F]
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N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR
A - C	2x4	DRY	2100F 1.8E	SPF
C - D	2x4	DRY	No.2	SPF
G - B	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

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

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTW+p	MT20	3.0	5.0	2.75	1.50
D	TMVW+p	MT20	4.0	6.0	2.25	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

BEARINGS

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	700	0	700	0	0	5-8	1-8
E	591	0	591	0	0	MECHANICAL	

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

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	497	316 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0
E	421	257 / 0	0 / 0	0 / 0	0 / 0	164 / 0	0 / 0

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

TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MAX. FACTORED		FACTORED			MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A - B	0 / 42	-78.0	-78.0	0.07 (1)	10.00	F - C	0 / 101 0.04 (4)	
B - C	-318 / 0	-78.0	-78.0	0.27 (1)	6.25	B - F	0 / 215 0.05 (1)	
C - D	-318 / 0	-78.0	-78.0	0.35 (1)	6.25	F - D	0 / 221 0.05 (1)	
G - B	-655 / 0	0.0	0.0	0.08 (1)	7.81			
E - D	-550 / 0	0.0	0.0	0.08 (1)	7.81			
G - F	0 / 0	-18.5	-18.5	0.20 (4)	10.00			
F - E	0 / 0	-18.5	-18.5	0.20 (4)	10.00			

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



SPECIFIED LOADS:

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.35/1.00 (C-D:1), BC=0.20/1.00 (E-F:4),
WB=0.05/1.00 (D-F:1), SSI=0.13/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

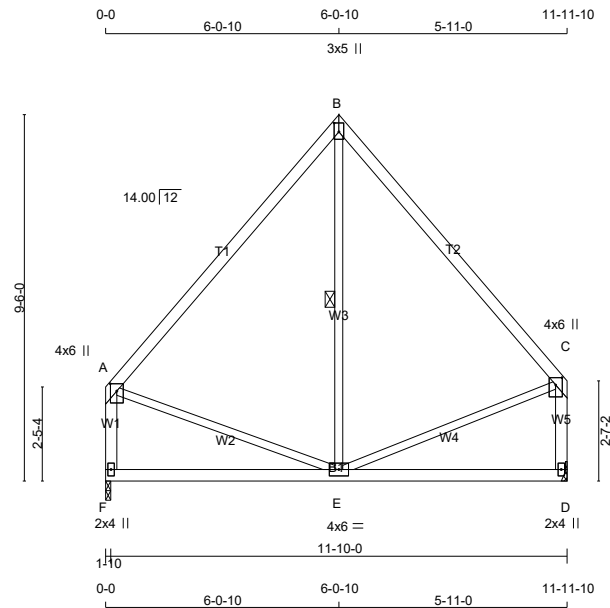
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (B) (INPUT = 0.90)
JSI METAL= 0.20 (B) (INPUT = 1.00)

Alpa Roof Truss, Maple

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Scale = 1:59.8

TOTAL WEIGHT = $2 \times 57 = 114 \text{ lb}$

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR
A - B	2x4	DRY	1650F 1.5E	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
--------------------	-----	-----	------	-----

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTW+p	MT20	3.0	5.0	2.75	1.50
C	TMVW+p	MT20	4.0	6.0	2.25	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	577	0	577	0	0	1-10	1-8
D	577	0	577	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	412	251 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
D	412	251 / 0	0 / 0	0 / 0	0 / 0	160 / 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 B-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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LO. C1 (LC)	MAX. UNBRAC. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	-304 / 0	-78.0	-78.0	0.31 (1)	6.25	E-B	-5 / 94 0.03 (4)		
B-C	-304 / 0	-78.0	-78.0	0.35 (1)	6.25	A-E	0 / 209 0.05 (1)		
F-A	-535 / 0	0.0	0.0	0.07 (1)	7.81	E-C	0 / 211 0.05 (1)		
D-C	-536 / 0	0.0	0.0	0.07 (1)	7.81				
F-E	0 / 0	-18.5	-18.5	0.19 (4)	10.00				
E-D	0 / 0	-18.5	-18.5	0.19 (4)	10.00				

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF

TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.35/1.00 (B-C:1), BC=0.19/1.00 (E-F:4),
WB=0.05/1.00 (C-E:1), SSI=0.12/1.00 (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 .

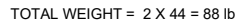
NAIL VALUES

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

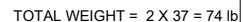
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (E) (INPUT = 0.90)
JSI METAL= 0.16 (A) (INPUT = 1.00)

Scale = 1:47.0

JSI GRIP= 0.31 (F) (INPUT = 0.90)
JSI METAL= 0.19 (H) (INPUT = 1.00)

Scale = 1:45.9

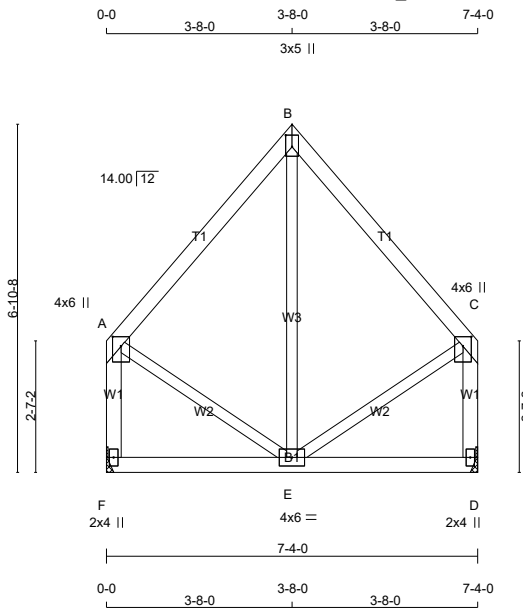
JSI GRIP= 0.18 (E) (INPUT = 0.90)
JSI METAL= 0.13 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336328	H64		1	TRUSS DESC. JT 45147	E21104066

Alpa Roof Truss, Maple

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Scale = 1:45.5

TOTAL WEIGHT = 4 X 38 = 154 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTW+p	MT20	3.0	5.0	2.75	1.50
C	TMVW+p	MT20	4.0	6.0	2.25	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMWWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
JT						
F	354	0	354	0	0	MECHANICAL
D	354	0	354	0	0	MECHANICAL

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

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT							
F	252	154 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 0
D	252	154 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	
		FROM	TO			FROM	TO
FR-TO							
A-B	-160 / 0	-78.0	-78.0 0.13 (1)	6.25	E-B	-43 / 41	0.03 (1)
B-C	-160 / 0	-78.0	-78.0 0.13 (1)	6.25	A-E	0 / 122	0.03 (1)
F-A	-328 / 0	0.0	0.0 0.05 (1)	7.81	E-C	0 / 122	0.03 (1)
D-C	-328 / 0	0.0	0.0 0.05 (1)	7.81			
F-E	0 / 0	-18.5	-18.5 0.07 (4)	10.00			
E-D	0 / 0	-18.5	-18.5 0.07 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	34.4	PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (B-C:1) , BC=0.07/1.00 (D-E:4) ,
WB=0.03/1.00 (B-E:1) , SSI=0.07/1.00 (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) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (A) (INPUT = 0.90)
JSI METAL= 0.09 (C) (INPUT = 1.00)

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

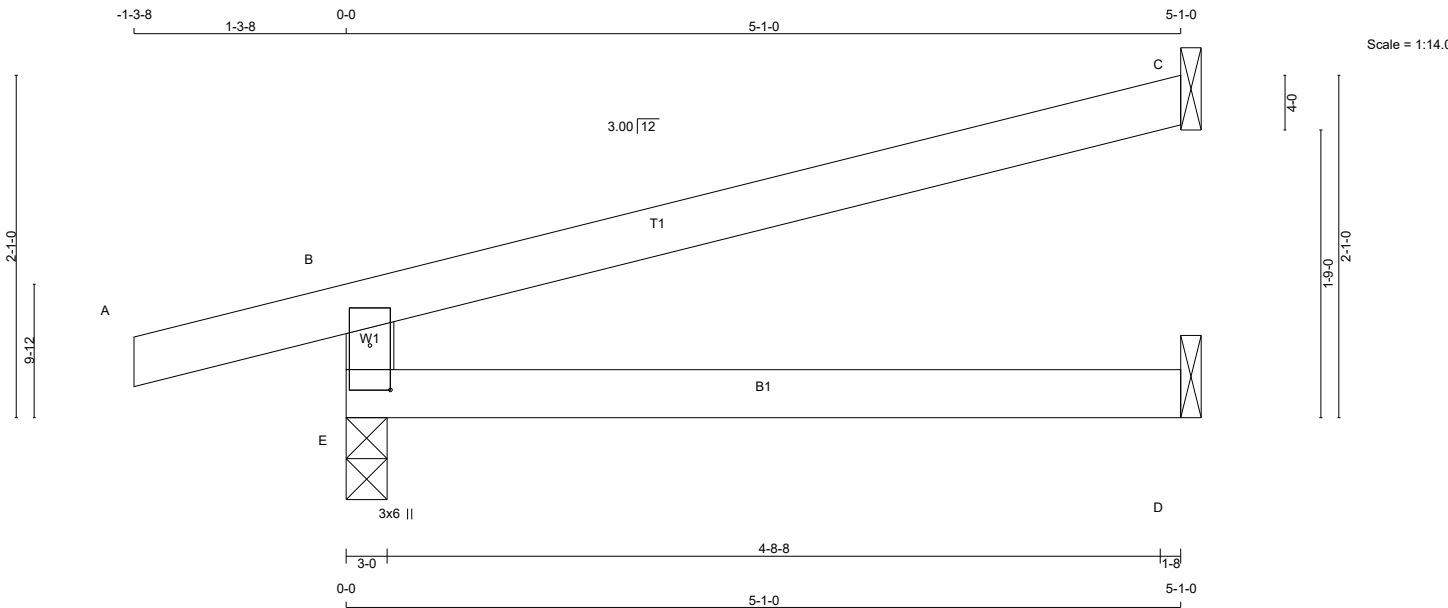


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336328	P03		1	TRUSS DESC. JT 45147	E21104067

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ID:hd511hZTz bdeQoS817GKBvhVxV-roouq cfSm2Ozdd70?QuEngWv2O3tE6vzqpD2uyTs?t



TOTAL WEIGHT = 14 X 14 = 192 lb

[M]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B						
E	TMBMV1+p	MT20	3.0	6.0	3.25	1.50

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	407	0	407	0	3-0	1-8
C	149	0	149	0	1-8	1-8
D	38	0	43	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	288	189 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0
C	103	80 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	30	0 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
E-B	-351 / 0	0.0	0.0 0.11 (4)	7.81			
A-B	0 / 13	-78.0	-78.0 0.10 (1)	10.00			
B-C	-12 / 0	-78.0	-78.0 0.34 (1)	6.25			
E-D	0 / 0	-18.5	-18.5 0.11 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD =					34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.34/1.00 (B-C:1) , BC=0.11/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (E) (INPUT = 0.90)
JSI METAL= 0.05 (E) (INPUT = 1.00)

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

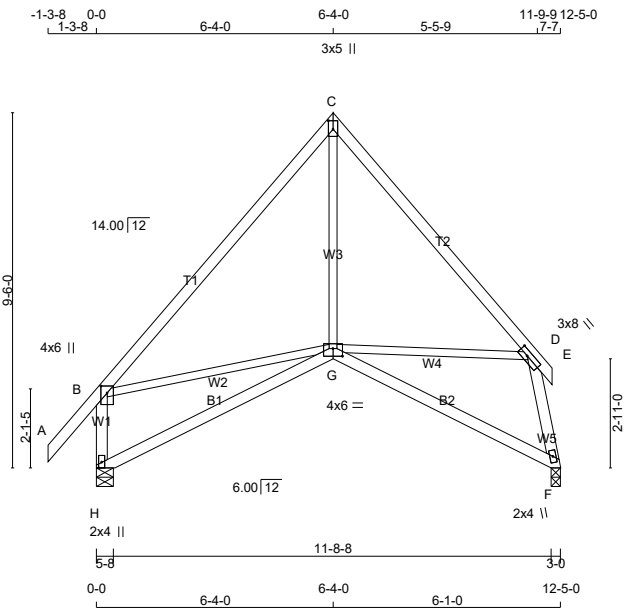


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H61A		1	TRUSS DESC. JT 45147	E21104076

Alpa Roof Truss, Maple

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Scale = 1:61.6

TOTAL WEIGHT = 60 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER		DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
G - C	2x3	DRY	No.2	SPF
G - D	2x3	DRY	No.2	SPF
B - G	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	6.0	2.25	2.00
C	TTW+p	MT20	3.0	5.0	2.75	1.50
D	TMWW-t	MT20	3.0	8.0	1.50	3.00
F	BMW1+w	MT20	2.0	4.0		
G	BBWWW-p	MT20	4.0	6.0	2.50	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
F	596	0	596	0	3-0	1-8
H	696	0	696	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE			
F	425	261 / 0	0 / 0	0 / 0	164 / 0	0 / 0
H	494	314 / 0	0 / 0	0 / 0	180 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 42	-78.0	-78.0 0.07 (1)	D-F	-601 / 0	0.09 (1)	
B-C	-442 / 0	-78.0	-78.0 0.27 (1)	G-C	0 / 217	0.06 (4)	
C-D	-442 / 0	-78.0	-78.0 0.29 (1)	G-D	0 / 188	0.04 (1)	
D-E	0 / 19	-78.0	-78.0 0.02 (1)	B-G	0 / 293	0.07 (1)	
H-B	-638 / 0	0.0	0.0 0.08 (1)				
H-G	0 / 0	-18.5	-18.5 0.22 (4)				
G-F	0 / 112	-18.5	-18.5 0.19 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN./C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.29/1.00 (C-D:1) , BC=0.22/1.00 (G-H:4) ,
WB=0.09/1.00 (D-F:1) , SSI=0.13/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (G) (INPUT = 0.90)
JSI METAL= 0.28 (F) (INPUT = 1.00)

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



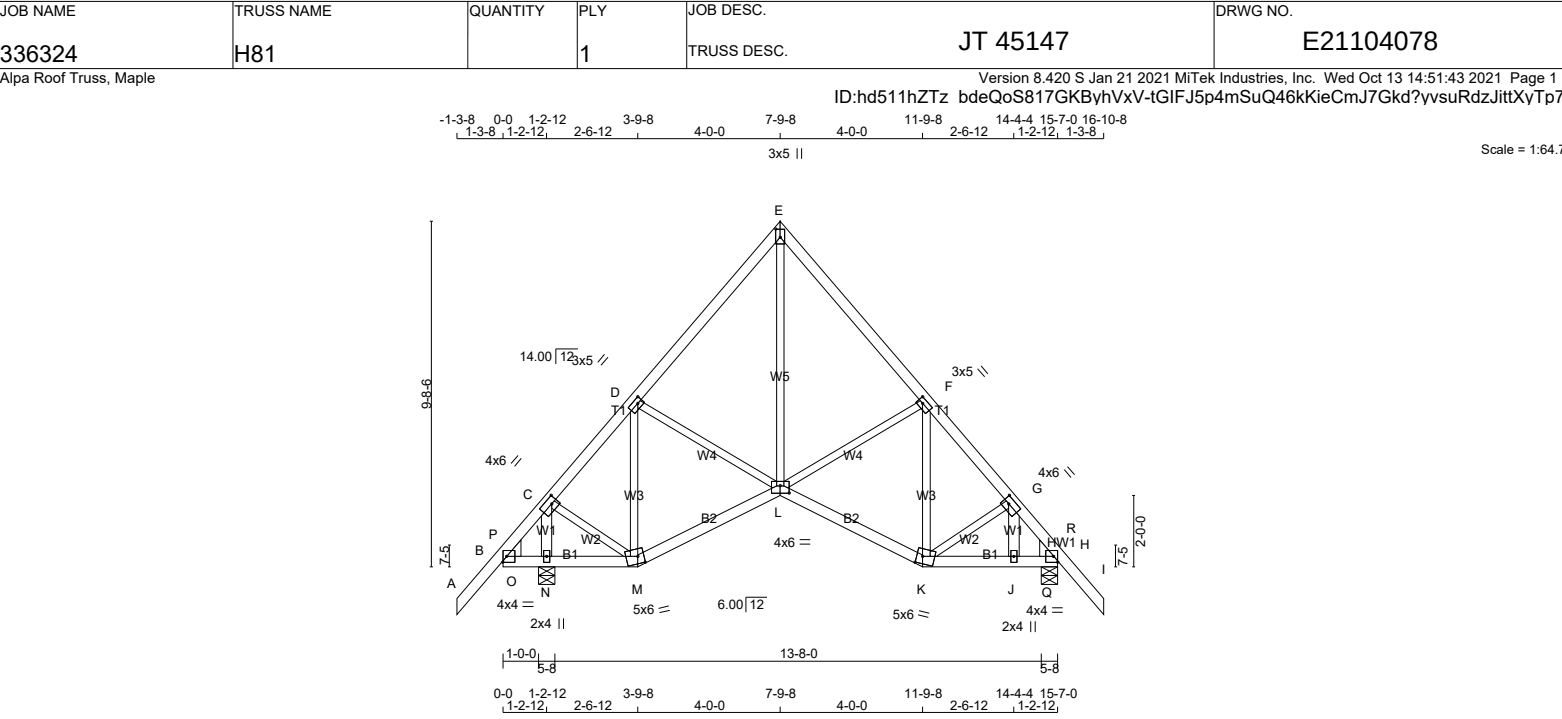
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TOTAL WEIGHT = 56 lb

JSI GRIP= 0.43 (F) (INPUT = 0.90)
JSI METAL= 0.27 (E) (INPUT = 1.00)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY No.2	SPF
E - I	2x4	DRY No.2	SPF
B - M	2x4	DRY No.2	SPF
M - L	2x4	DRY No.2	SPF
L - K	2x4	DRY No.2	SPF
K - H	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

J - G 2x4 DRY No.2 SPF

N - C 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH-I	MT20	4.0	4.0		Edge
C	TMWW-t	MT20	4.0	6.0	2.00	2.00
D	TMWW-t	MT20	3.0	5.0	1.50	1.75
E	TTW+p	MT20	3.0	5.0	2.75	1.50
F	TMWW-t	MT20	3.0	5.0	1.50	1.75
G	TMWW-t	MT20	4.0	6.0	2.00	2.00
H	TMBH-I	MT20	4.0	4.0		Edge
J	BMW+w	MT20	2.0	4.0		
K	BBWW-m	MT20	5.0	6.0	2.50	2.00
L	BBWWW-p	MT20	4.0	6.0	2.50	3.00
M	BBWW-m	MT20	5.0	6.0	2.50	2.00
N	BMW1+w	MT20	2.0	4.0		

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



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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	HEEL WEDGE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	787	0	787	0	5-8
N	935	0	935	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	559	353 / 0	0 / 0	0 / 0	0 / 0	0 / 0	206 / 0	0 / 0
N	664	419 / 0	0 / 0	0 / 0	0 / 0	0 / 0	245 / 0	0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 39	-78.0	-78.0 0.11 (1)	10.00	L-E	0 / 465	0.10 (1)
B-P	0 / 145	-78.0	-78.0 0.13 (1)	10.00	L-F	-119 / 0	0.05 (1)
P-C	0 / 215	-78.0	-78.0 0.06 (1)	10.00	K-F	-158 / 0	0.06 (1)
C-D	-409 / 0	-78.0	-78.0 0.12 (1)	6.25	K-G	-4 / 36	0.01 (1)
D-E	-500 / 0	-78.0	-78.0 0.15 (1)	6.25	J-G	-54 / 19	0.01 (1)
E-F	-501 / 0	-78.0	-78.0 0.15 (1)	6.25	D-L	0 / 37	0.01 (1)
F-G	-596 / 0	-78.0	-78.0 0.13 (1)	6.25	M-D	-375 / 0	0.13 (1)
G-R	-652 / 0	-78.0	-78.0 0.06 (1)	6.25	C-M	0 / 519	0.12 (1)
R-H	-960 / 0	-78.0	-78.0 0.09 (1)	6.25	N-C	-865 / 0	0.09 (1)
H-I	0 / 39	-78.0	-78.0 0.11 (1)	10.00	O-P	-6 / 20	0.00 (1)
					Q-R	0 / 305	0.00 (1)
B-O	-147 / 0	-18.5	-18.5 0.01 (1)	6.25			
O-N	-147 / 0	-18.5	-18.5 0.03 (1)	6.25			
N-M	-147 / 0	-18.5	-18.5 0.03 (1)	6.25			
M-L	0 / 313	-18.5	-18.5 0.12 (4)	10.00			
L-K	0 / 462	-18.5	-18.5 0.13 (4)	10.00			
K-J	0 / 387	-18.5	-18.5 0.10 (1)	10.00			
J-Q	0 / 387	-18.5	-18.5 0.14 (1)	10.00			
Q-H	0 / 387	-18.5	-18.5 0.14 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.48")

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

ALLOWABLE DEFL.(TL)= L/360 (0.48")

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

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")

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

ALLOWABLE DEFL.(TL)= L/120 (0.19")

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

CSI: TC=0.15/1.00 (D-E:1), BC=0.14/1.00 (J-Q:1), WB=0.13/1.00 (D-M:1), SSI=0.17/1.00 (H-Q: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
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (M) (INPUT = 0.90)

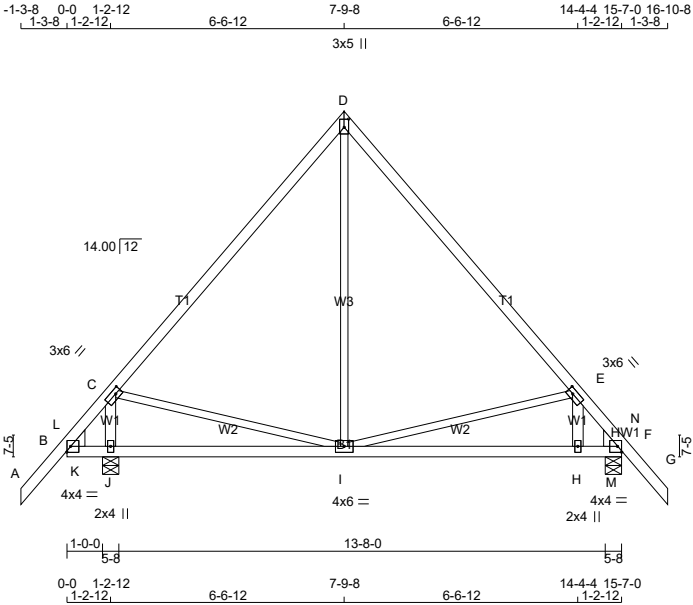
JSI METAL= 0.31 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H82		1	TRUSS DESC. JT 45147	E21104079

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Scale = 1:64.7

TOTAL WEIGHT = 73 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBH-I	MT20	4.0	4.0	Edge
C	TMWW-t	MT20	3.0	6.0	1.50 2.00
D	TTW+p	MT20	3.0	5.0	2.75 1.50
E	TMWW-t	MT20	3.0	6.0	1.50 2.00
F	TMBH1-I	MT20	4.0	4.0	Edge
H	BMW+w	MT20	2.0	4.0	
I	BMWWW-t	MT20	4.0	6.0	
J	BMW1+w	MT20	2.0	4.0	

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

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

BEARINGS									
	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		
	GROSS REACTION		GROSS REACTION		BRG		BRG		HEEL
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		WEDGE
F	787	0	787	0	0	5-8	1-8		2x6 R
J	935	0	935	0	0	5-8	1-8		2x6 L

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
F	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	559	353 / 0	0 / 0	0 / 0	0 / 0	206 / 0	0 / 0
J	664	419 / 0	0 / 0	0 / 0	0 / 0	245 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED	FACTORED			MEMB.	MAX. FACTORED			
	FORCE	VERT. LOAD	LC1	MAX		FORCE	MAX		
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	0 / 39	-78.0	-78.0	0.11 (1)	10.00	I-D	0 / 186	0.06 (4)	
B-L	-391 / 0	-78.0	-78.0	0.08 (1)	6.25	I-E	-375 / 0	0.32 (1)	
L-C	-4 / 177	-78.0	-78.0	0.52 (1)	10.00	H-E	-142 / 66	0.02 (4)	
C-D	-431 / 0	-78.0	-78.0	0.43 (1)	6.25	C-I	0 / 192	0.04 (1)	
D-E	-429 / 0	-78.0	-78.0	0.43 (1)	6.25	J-C	-981 / 0	0.10 (1)	
E-N	-709 / 0	-78.0	-78.0	0.36 (1)	6.25	K-L	0 / 645	0.00 (1)	
N-F	-1521 / 0	-78.0	-78.0	0.10 (1)	5.24	M-N	0 / 939	0.00 (1)	
F-G	0 / 39	-78.0	-78.0	0.11 (1)	10.00				
B-K	0 / 67	-18.5	-18.5	0.20 (1)	10.00				
K-J	0 / 67	-18.5	-18.5	0.20 (1)	10.00				
J-I	0 / 67	-18.5	-18.5	0.18 (4)	10.00				
I-H	0 / 617	-18.5	-18.5	0.23 (4)	10.00				
H-M	0 / 617	-18.5	-18.5	0.37 (1)	10.00				
M-F	0 / 617	-18.5	-18.5	0.37 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.48")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.52/1.00 (C-L:1) , BC=0.37/1.00 (F-M:1) ,
WB=0.32/1.00 (E-I:1) , SSI=0.57/1.00 (F-M: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
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (E) (INPUT = 0.90)
JSI METAL= 0.33 (F) (INPUT = 1.00)

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

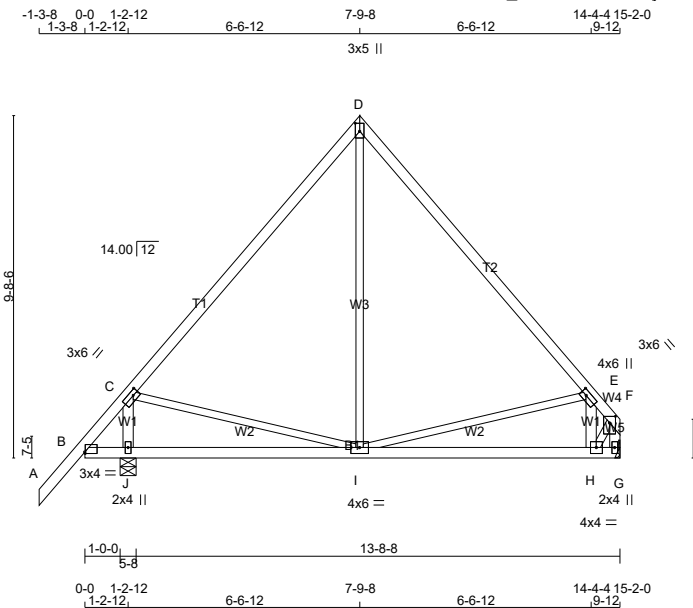


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H82S		1	TRUSS DESC. JT 45147	E21104080

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 2 X 70 = 139 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y
B	TMB-I	MT20	3.0	4.0	0.50
C	TMWW-t	MT20	3.0	6.0	1.50
D	TTW+p	MT20	3.0	5.0	2.75
E	TMWW-t	MT20	3.0	6.0	1.50
F	TMVW+p	MT20	4.0	6.0	2.25
G	BMV1+p	MT20	2.0	4.0	
H	BMWW-t	MT20	4.0	4.0	
I	BMWW-t	MT20	4.0	6.0	
J	BMW1+w	MT20	2.0	4.0	

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
JT	652	0	652	0	MECHANICAL		
G	652	0	652	0	MECHANICAL		
J	921	0	921	0	5-8	1-8	

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

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	465	282 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0
G	654	413 / 0	0 / 0	0 / 0	0 / 0	240 / 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	FACTORED			MEMB.	MAX. FACTORED			
	FORCE (LBS)	VERT.	LOAD	LC1		MAX.	FORCE	MAX	
		(PLF)				CSI	(LC)	UNBRAC	(LBS)
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0 / 39	-78.0	-78.0	0.11 (1)	10.00	J-C	-801 / 0	0.08 (1)	
B-C	-25 / 54	-78.0	-78.0	0.48 (1)	6.25	C-I	0 / 175	0.04 (1)	
C-D	-411 / 0	-78.0	-78.0	0.43 (1)	6.25	I-D	0 / 160	0.05 (4)	
D-E	-413 / 0	-78.0	-78.0	0.43 (1)	6.25	I-E	-307 / 0	0.26 (1)	
E-F	-489 / 0	-78.0	-78.0	0.38 (1)	6.25	H-E	-367 / 0	0.04 (1)	
G-F	-696 / 0	0.0	0.0	0.07 (1)	7.81	H-F	0 / 723	0.16 (1)	
B-J	0 / 72	-18.5	-18.5	0.14 (4)	10.00				
J-I	0 / 72	-18.5	-18.5	0.18 (4)	10.00				
I-H	0 / 539	-18.5	-18.5	0.22 (4)	10.00				
H-G	0 / 0	-18.5	-18.5	0.12 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.48/1.00 (B-C:1) , BC=0.22/1.00 (H-I:4) , WB=0.26/1.00 (E-I:1) , SSI=0.24/1.00 (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
MT20	650	371	1747

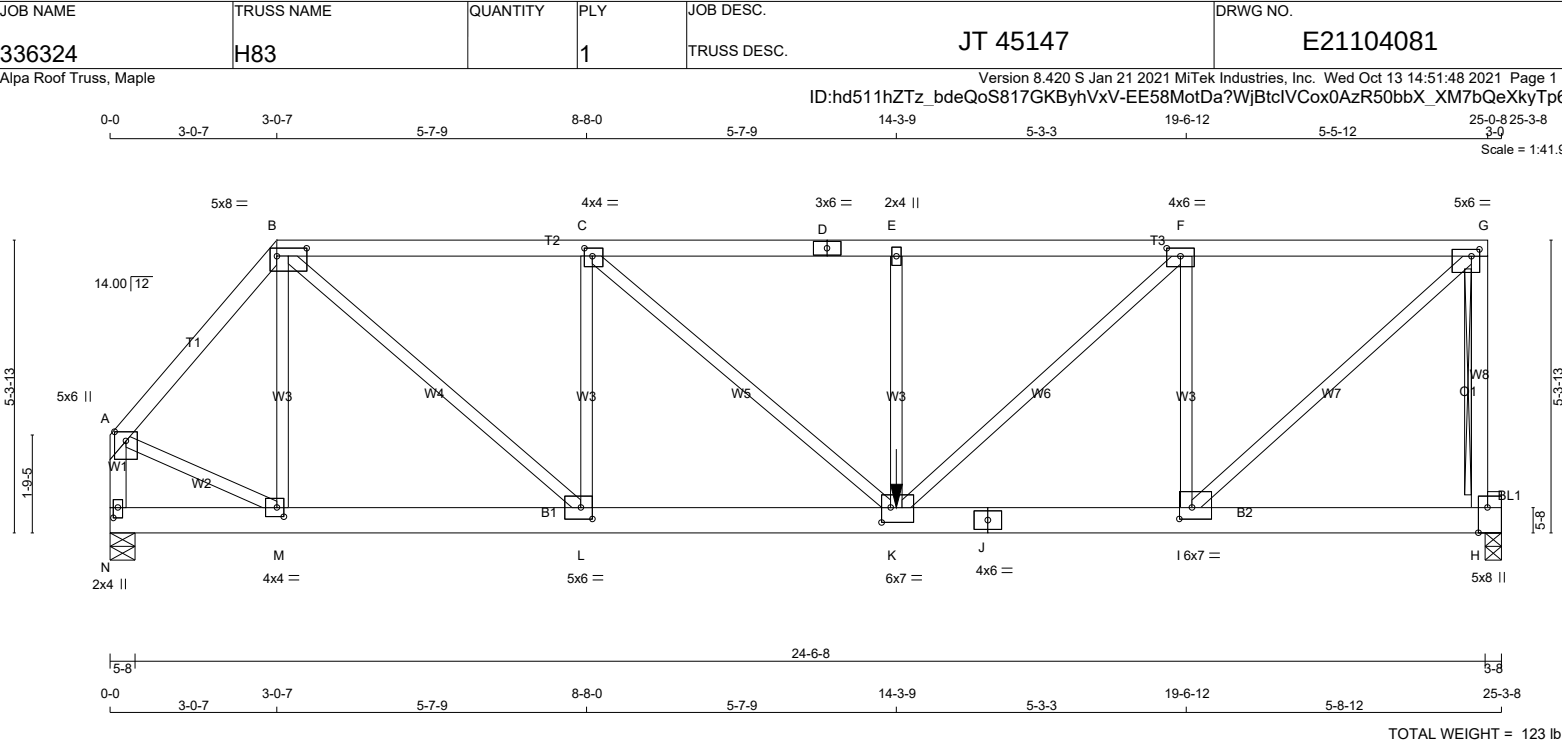
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (H) (INPUT = 0.90)
JSI METAL= 0.20 (H) (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	SPF
B - D	2x4	DRY 1650F 1.5E	SPF
D - G	2x4	DRY 1650F 1.5E	SPF
H - G	2x4	DRY No.2	SPF
N - A	2x4	DRY No.2	SPF
N - J	2x6	DRY No.2	SPF
J - H	2x6	DRY No.2	SPF

BEARING BLOCKS			
BL1	2x4	DRY No.2	SPF
ALL WEBS EXCEPT			
2x3	DRY No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	2.00	2.50
B	TTWW-l	MT20	5.0	8.0	1.75	6.50
C	CTWW-t	MT20	4.0	4.0	1.75	1.75
D	TS-t	MT20	3.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	6.0	1.75	3.00
G	TMVW-t	MT20	5.0	6.0	1.50	1.75
H	BMVK1+t	MT20	5.0	8.0	Edge	2.00
I	BMVW-t	MT20	6.0	7.0	2.50	2.75
J	BS-t	MT20	4.0	6.0		
K	BMVWW-t	MT20	6.0	7.0	3.25	2.00
L	BMVW-t	MT20	5.0	6.0	2.50	2.50
M	BMVW-t	MT20	4.0	4.0	2.00	1.50
N	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
H	2702	0		2702	0	0	3-8	3-8	
N	1930	0		1930	0	0	5-8	2-12	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	1926	1178	0	0	0	0	0	748	0
N	1376	840	0	0	0	0	0	536	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.21 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.

2x3 DRY SPF No.2 T-BRACE AT G-H

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	-1740 / 0	-78.0 -78.0 0.19 (1)	4.85
B-C	-2705 / 0	-78.0 -78.0 0.41 (1)	4.33
C-D	-3614 / 0	-78.0 -78.0 0.48 (1)	3.80
D-E	-3614 / 0	-78.0 -78.0 0.48 (1)	3.80
E-F	-3614 / 0	-153.5 -153.5 0.81 (1)	3.21
F-G	-2456 / 0	-153.5 -153.5 0.73 (1)	3.92
H-G	-2620 / 0	0.0 0.0 0.69 (1)	6.92
N-A	-1920 / 0	0.0 0.0 0.22 (1)	6.02
N-M	0 / 0	-18.5 -18.5 0.06 (4)	10.00
M-L	0 / 1118	-18.5 -18.5 0.19 (1)	10.00
L-K	0 / 2706	-18.5 -18.5 0.43 (1)	10.00
K-J	0 / 2456	-36.4 -36.4 0.42 (1)	10.00
J-I	0 / 2456	-36.4 -36.4 0.42 (1)	10.00
I-H	-77 / 0	-36.4 -36.4 0.12 (4)	6.25

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	14-3-9	-1217	-1217	---	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 =	21.0	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 3-0-7
 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 GSL.
 LOADS APPLIED TO FIRST 10-11-15 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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.83")
 CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
 ALLOWABLE DEFL.(TL)= L/360 (0.83")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.81/1.00 (E-F:1) , BC=0.43/1.00 (K-L:1) , WB=0.84/1.00 (G-I:1) , SSI=0.44/1.00 (F-G: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

CONTINUED ON PAGE 2

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



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PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	5.0	6.0	1.75	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	4.0	1.50	1.75
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	4.0	4.0	1.75	1.50
I	BS-t	MT20	3.0	6.0		
J	BMWWW-t	MT20	5.0	6.0		
K	BMWW-t	MT20	4.0	4.0		
L	BMV1+p	MT20	2.0	4.0		

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	864	528 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0
L	864	528 / 0	0 / 0	0 / 0	0 / 0	337 / 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 = 4.91 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)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	-1052 / 0	-78.0	-78.0	0.27 (1)	5.80	K-B	-105 / 42	0.08 (1)	
B-C	-1251 / 0	-78.0	-78.0	0.61 (1)	4.92	B-J	0 / 770	0.17 (1)	
C-D	-1252 / 0	-78.0	-78.0	0.61 (1)	4.91	J-C	-589 / 0	0.43 (1)	
D-E	-1252 / 0	-78.0	-78.0	0.61 (1)	4.91	J-E	0 / 291	0.07 (1)	
E-F	-1037 / 0	-78.0	-78.0	0.59 (1)	5.30	H-E	-794 / 0	0.58 (1)	
G-F	-1160 / 0	0.0	0.0	0.24 (1)	5.91	H-F	0 / 1399	0.31 (1)	
L-A	-1188 / 0	0.0	0.0	0.13 (1)	7.32	A-K	0 / 717	0.16 (1)	
L-K	0 / 0	-18.5	-18.5	0.15 (4)	10.00				
K-J	0 / 679	-18.5	-18.5	0.23 (4)	10.00				
J-I	0 / 1037	-18.5	-18.5	0.32 (4)	10.00				
I-H	0 / 1037	-18.5	-18.5	0.32 (4)	10.00				
H-G	0 / 0	-18.5	-18.5	0.22 (4)	10.00				

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF

TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (0.84")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.05")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.84")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.10")

CSI: TC=0.61/1.00 (C-E:1), BC=0.32/1.00 (H-J:4),
WB=0.58/1.00 (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)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (F) (INPUT = 0.90)
JSI METAL= 0.39 (A) (INPUT = 1.00)

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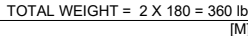


DRY: SEASONED LUMBER.

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

C H O R D S				W E B S					
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
	FORCE							(LBS)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	P-C	-113 / 50	0.06 (1)	
B-C	-1304 / 0	-78.0	-78.0	0.64 (1)	4.94	C-O	0 / 779	0.13 (1)	
C-D	-1307 / 0	-78.0	-78.0	0.65 (1)	4.71	O-D	-550 / 0	0.28 (1)	
D-E	-1538 / 0	-78.0	-78.0	0.12 (1)	5.19	D-N	-1021 / 0	0.57 (1)	
E-F	-1012 / 0	-78.0	-78.0	0.32 (1)	5.79	N-E	0 / 888	0.14 (1)	
F-G	-943 / 0	-78.0	-78.0	0.35 (1)	5.90	N-F	0 / 170	0.03 (1)	
G-H	-943 / 0	-78.0	-78.0	0.35 (1)	5.90	L-F	-604 / 0	0.47 (1)	
H-I	-619 / 0	-78.0	-78.0	0.34 (1)	6.25	L-H	0 / 773	0.12 (1)	
J-I	-1468 / 0	0.0	0.0	0.48 (1)	5.41	K-H	-1177 / 0	0.92 (1)	
Q-B	-1577 / 0	0.0	0.0	0.19 (1)	6.57	K-I	0 / 1432	0.23 (1)	
						B-P	0 / 881	0.20 (1)	
Q-P	0 / 0	-18.5	-18.5	0.18 (4)	10.00				
P-O	0 / 844	-18.5	-18.5	0.26 (4)	10.00				
O-N	0 / 1314	-18.5	-18.5	0.24 (1)	10.00				
N-M	0 / 943	-18.5	-18.5	0.20 (1)	10.00				
M-L	0 / 943	-18.5	-18.5	0.20 (1)	10.00				
L-K	0 / 619	-18.5	-18.5	0.19 (4)	10.00				
K-J	0 / 0	-18.5	-18.5	0.14 (4)	10.00				

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.52 (B) (INPUT = 1.00)

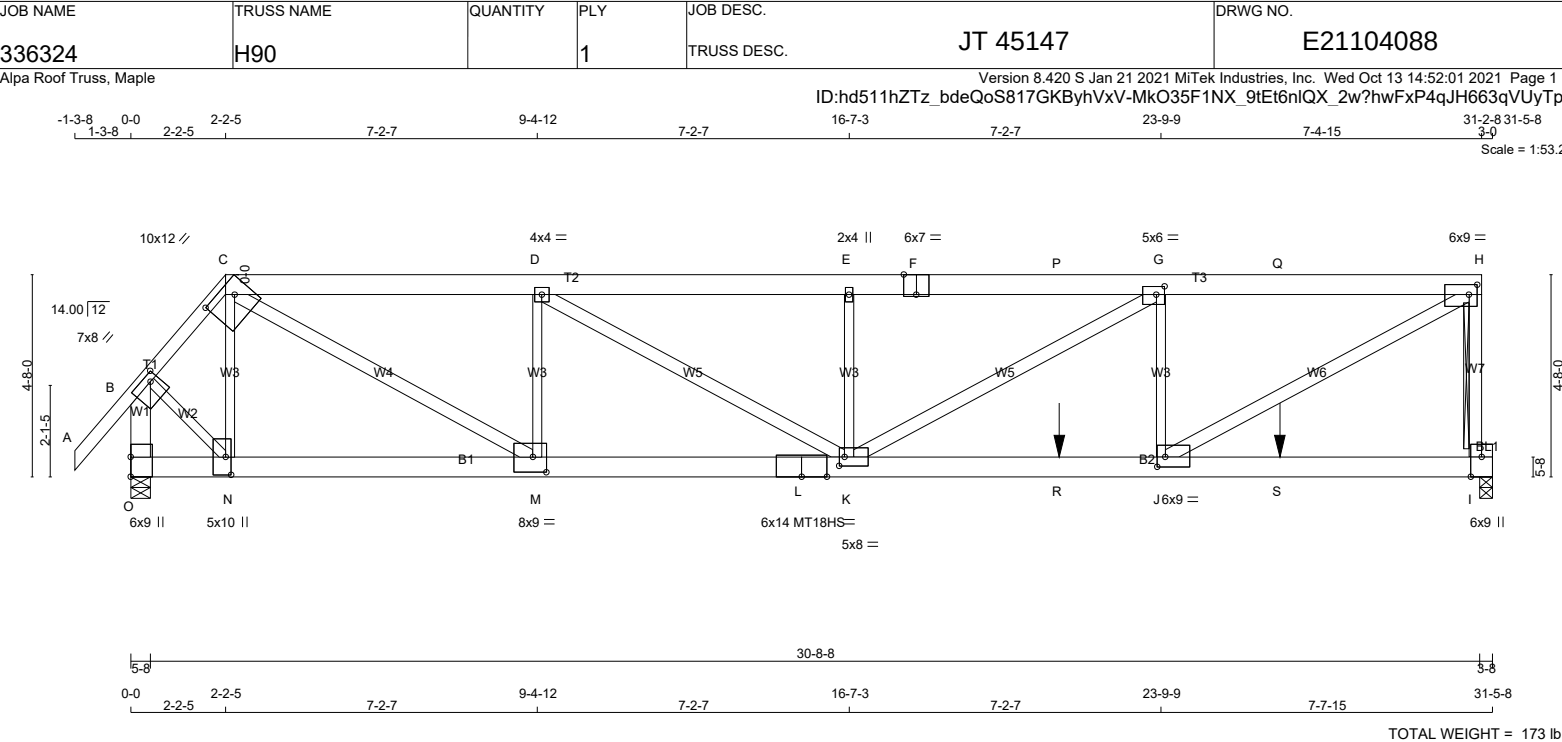


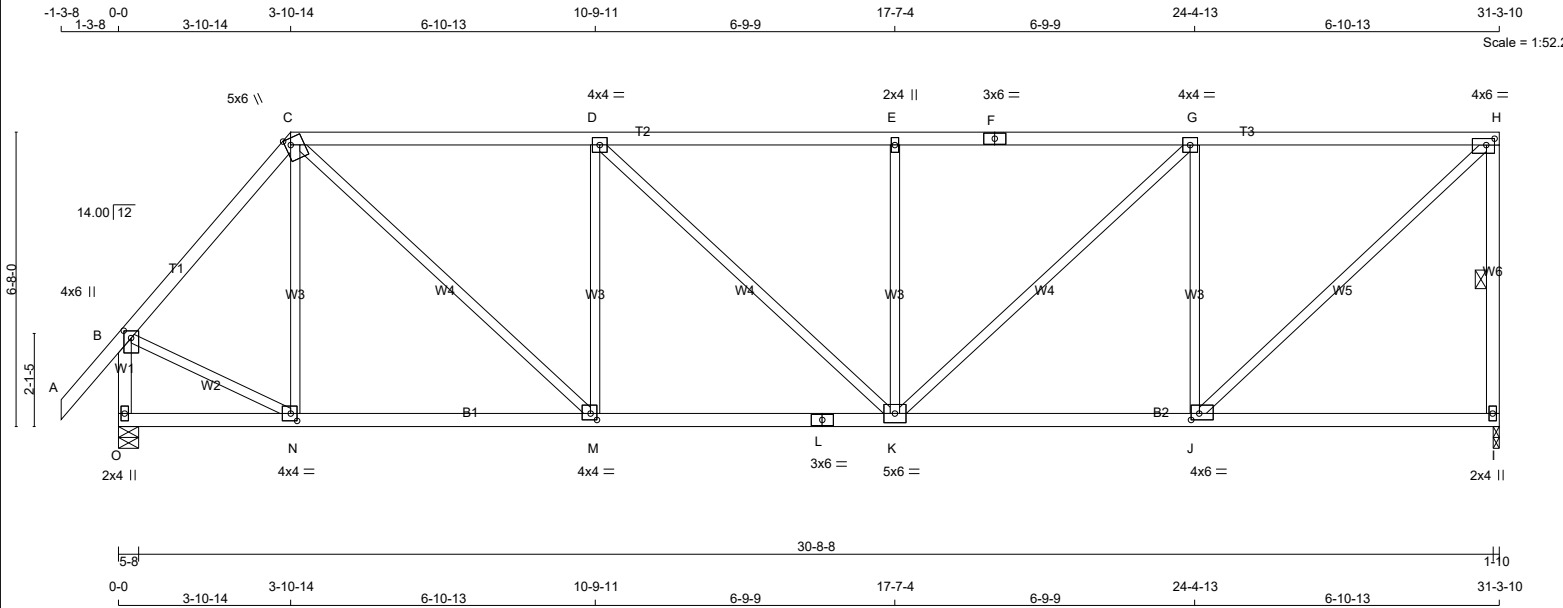
Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD.

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

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE
	(LBS)	(PLF)	CSI (LC)	UNBRAC			(LBS)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C-N	0 / 48
B-C	0 / 24	-78.0	-78.0	0.16 (1)	10.00	N-D	0 / 139
C-D	-1308 / 0	-78.0	-78.0	0.20 (1)	5.45	D-L	0 / 597
D-E	-1201 / 0	-78.0	-78.0	0.83 (1)	4.54	L-E	-678 / 0
E-F	-1202 / 0	-78.0	-78.0	0.83 (1)	4.53	L-G	0 / 436
F-G	-1202 / 0	-78.0	-78.0	0.83 (1)	4.53	J-G	-1030 / 0
G-H	-936 / 0	-78.0	-78.0	0.79 (1)	5.03	J-H	0 / 1521
I-H	-1451 / 0	0.0	0.0	0.82 (1)	5.43	O-C	-1576 / 0
O-B	-217 / 0	0.0	0.0	0.03 (1)	7.81		
O-N	0 / 816	-18.5	-18.5	0.34 (4)	10.00		
N-M	0 / 833	-18.5	-18.5	0.35 (4)	10.00		
M-L	0 / 833	-18.5	-18.5	0.35 (4)	10.00		
L-K	0 / 936	-18.5	-18.5	0.38 (4)	10.00		
K-J	0 / 936	-18.5	-18.5	0.38 (4)	10.00		
J-I	0 / 0	-18.5	-18.5	0.29 (4)	10.00		

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.53 (C) (INPUT = 1.00)





TOTAL WEIGHT = 138 lb

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	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)

J	T	TYPE	PLATES	W	LEN	Y	X
B	T	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	T	TTWW+m	MT20	5.0	6.0	1.75	1.50
D	T	TMVW-t	MT20	4.0	4.0		
E	T	TMVW+w	MT20	2.0	4.0		
F	T	TS-t	MT20	3.0	6.0		
G	T	TMVW-t	MT20	4.0	4.0		
H	T	TMVW-t	MT20	4.0	6.0	1.75	2.25
I	T	BMV1+p	MT20	2.0	4.0		
J	T	BMVW-t	MT20	4.0	6.0	1.75	2.25
K	T	BMVWW-t	MT20	5.0	6.0		
L	T	BS-t	MT20	3.0	6.0		
M	T	BMVW-t	MT20	4.0	4.0	1.75	1.75
N	T	BMVW-t	MT20	4.0	4.0	2.00	1.75
O	T	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	1510	0	1510	0	0	1-10	1-10
O	1619	0	1619	0	0	5-8	1-12

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1076	657 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0
O	1152	716 / 0	0 / 0	0 / 0	0 / 0	436 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF H-I.

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)

C H O R D S					W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
A-B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	N-C	-246 / 0	0.18 (1)
B-C	-1280 / 0	-78.0	-78.0	0.25 (1)	5.43	C-M	0 / 1251	0.28 (1)
C-D	-1746 / 0	-78.0	-78.0	0.70 (1)	4.21	M-D	-717 / 0	0.53 (1)
D-E	-1871 / 0	-78.0	-78.0	0.71 (1)	4.08	D-K	0 / 170	0.04 (1)
E-F	-1871 / 0	-78.0	-78.0	0.71 (1)	4.08	K-E	-489 / 0	0.36 (1)
F-G	-1871 / 0	-78.0	-78.0	0.71 (1)	4.08	K-G	0 / 718	0.16 (1)
G-H	-1348 / 0	-78.0	-78.0	0.64 (1)	4.72	J-G	-1102 / 0	0.81 (1)
I-H	-1458 / 0	0.0	0.0	0.30 (1)	5.42	J-H	0 / 1835	0.41 (1)
O-B	-1597 / 0	0.0	0.0	0.19 (1)	6.54	B-N	0 / 904	0.20 (1)
O-N	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
N-M	0 / 825	-18.5	-18.5	0.25 (4)	10.00			
M-L	0 / 1747	-18.5	-18.5	0.37 (1)	10.00			
L-K	0 / 1747	-18.5	-18.5	0.37 (1)	10.00			
K-J	0 / 1348	-18.5	-18.5	0.34 (4)	10.00			
J-I	0 / 0	-18.5	-18.5	0.21 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	34.4	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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.04")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.71/1.00 (E-G:1), BC=0.37/1.00 (K-M:1),
WB=0.81/1.00 (G-J:1), SSI=0.25/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

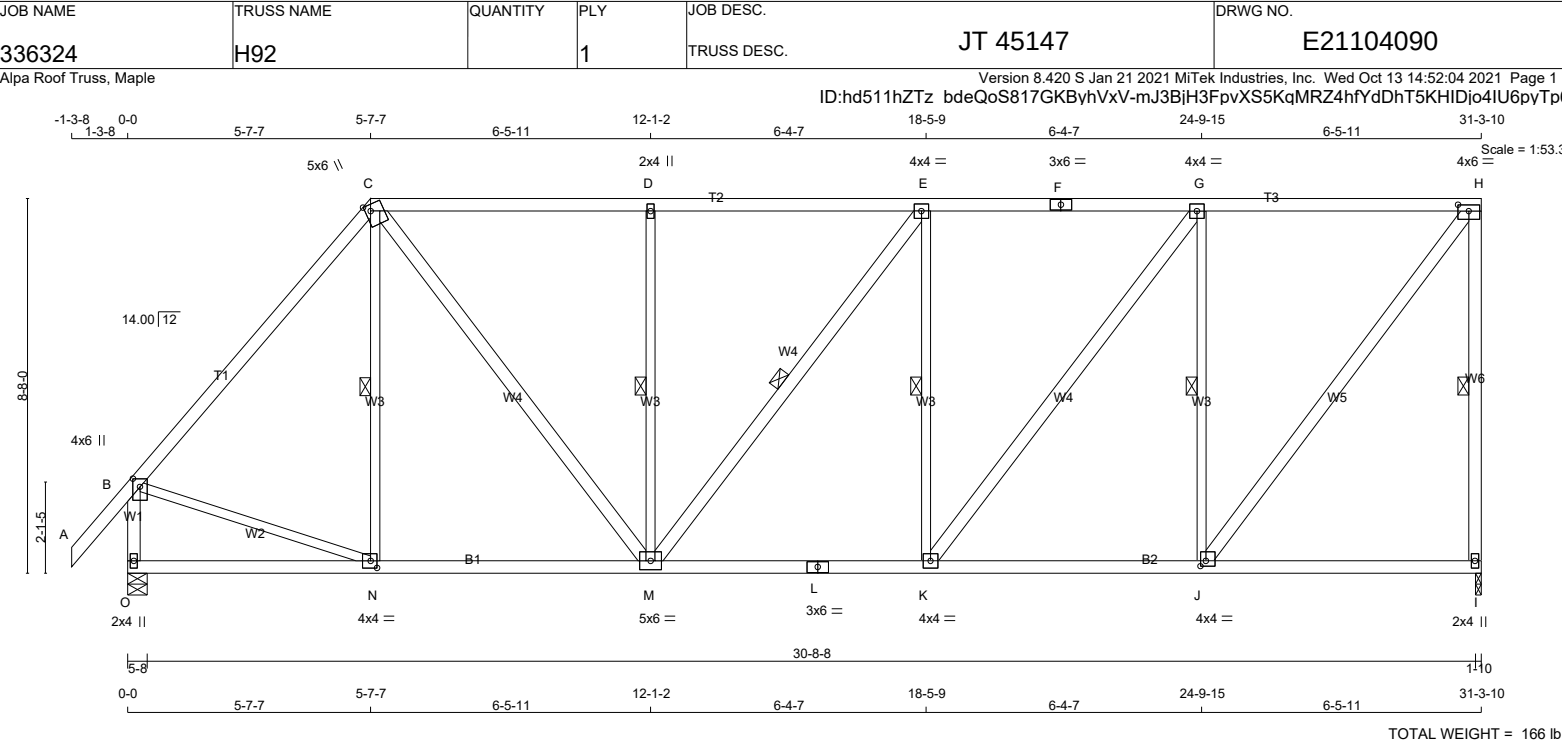
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.54 (L) (INPUT = 1.00)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
I - H	2x4	DRY	No.2
O - B	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - I	2x4	DRY	No.2

ALL WEBS EXCEPT

C - M	2x4	DRY	No.2
M - E	2x4	DRY	No.2
K - G	2x4	DRY	No.2
J - H	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 BRG	REQRD BRG
JT	VERT 1510	HORZ 0	DOWN 1510	HORZ 0
I	1510	0	1510	0
O	1619	0	1619	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	1076	657 / 0	0 / 0	0 / 0	419 / 0	0 / 0
I	1152	716 / 0	0 / 0	0 / 0	436 / 0	0 / 0

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTWW+m	MT20	5.0	6.0	1.75	1.50
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMVW-t	MT20	4.0	6.0	1.75	3.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	4.0	1.50	1.50
K	BMWW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMWWW-t	MT20	5.0	6.0		
N	BMWW-t	MT20	4.0	4.0	2.00	1.75
O	BMV1+p	MT20	2.0	4.0		

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	N-C	-131 / 38
B-C	-1304 / 0	-78.0	-78.0	0.58 (1)	5.02	C-M	0 / 881
C-D	-1384 / 0	-78.0	-78.0	0.56 (1)	4.81	M-D	-563 / 0
D-E	-1385 / 0	-78.0	-78.0	0.55 (1)	4.81	M-E	-22 / 0
E-F	-1398 / 0	-78.0	-78.0	0.56 (1)	4.79	K-E	-442 / 0
F-G	-1398 / 0	-78.0	-78.0	0.56 (1)	4.79	K-G	0 / 698
G-H	-975 / 0	-78.0	-78.0	0.52 (1)	5.54	J-G	-1127 / 0
H-I	-1462 / 0	0.0	0.0	0.50 (1)	5.41	J-H	0 / 1595
O-B	-1578 / 0	0.0	0.0	0.19 (1)	6.57	B-N	0 / 884

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.79 FT.

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

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

1 LATERAL BRACE(S) AT 1 / 2 LENGTH OF H-I, C-N, D-M, E-M, E-K, G-J.

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 34.4	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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.04")

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

ALLOWABLE DEFL.(TL)= L/360 (1.04")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.58/1.00 (B-C:1) , BC=0.30/1.00 (K-M:1) , WB=0.54/1.00 (G-J:1) , SSI=0.24/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
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.

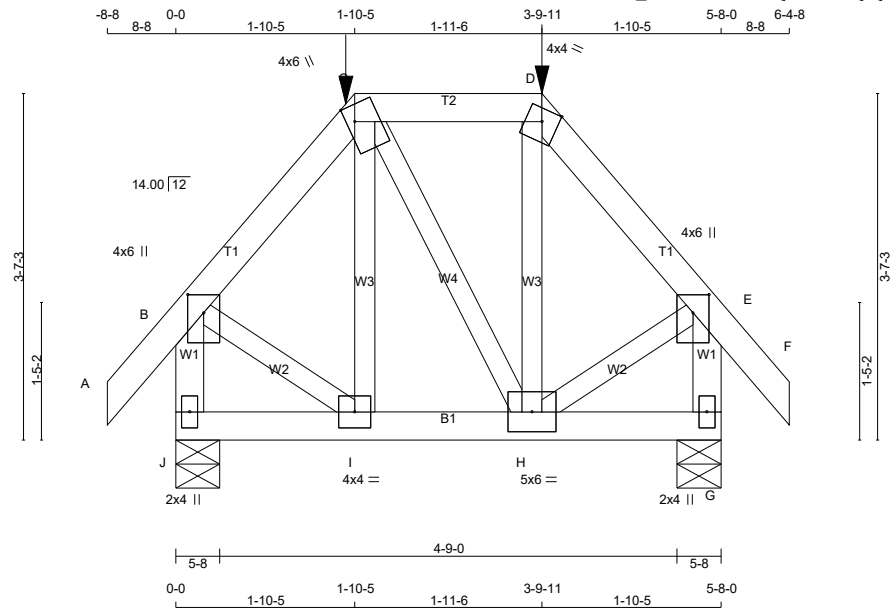
JSI GRIP= 0.89 (B) (INPUT = 0.90)

JSI METAL= 0.52 (B) (INPUT = 1.00)

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed Oct 13 14:52:06 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-iiBy8y5VLXn9Le IY 79IzjhZGqtIKQ0GOnbAiyTp6d

Scale: 1/2"=1'



TOTAL WEIGHT = 32 lb

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

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

JT	TYPE	PLATES	W	LEN	Y	X
B	TTWVW+p	MT20	4.0	6.0	2.25	2.00
C	TTWVW+m	MT20	4.0	6.0	2.00	1.00
D	TTW-m	MT20	4.0	4.0	Edge	
E	TTWVW+p	MT20	4.0	6.0	2.25	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWWWW-t	MT20	5.0	6.0		
I	BMWW-t	MT20	4.0	4.0		
J	BMV1+p	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	455	0	455	0	0	5-8	1-8
G	455	0	455	0	0	5-8	1-8

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	323	203 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
G	323	203 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0

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

TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 24	-78.0	-78.0	0.04 (1)	10.00	I-C	-38 / 25 0.01 (4)	
B-C	-265 / 0	-78.0	-78.0	0.05 (1)	6.25	C-H	0 / 0 0.00 (1)	
C-D	-169 / 0	-114.5	-114.5	0.08 (1)	6.25	H-D	-39 / 26 0.01 (4)	
D-E	-265 / 0	-78.0	-78.0	0.05 (1)	6.25	B-I	0 / 194 0.05 (1)	
E-F	0 / 24	-78.0	-78.0	0.04 (1)	10.00	H-E	0 / 194 0.05 (1)	
J-B	-431 / 0	0.0	0.0	0.05 (1)	7.81			
G-E	-431 / 0	0.0	0.0	0.05 (1)	7.81			
J-I	0 / 0	-27.2	-27.2	0.02 (4)	10.00			
I-H	0 / 170	-27.2	-27.2	0.04 (4)	10.00			
H-G	0 / 0	-27.2	-27.2	0.02 (4)	10.00			

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	1-10-5	-57	-57	---	FRONT	VERT	TOTAL	---	C1
D	3-9-11	-57	-57	---	FRONT	VERT	TOTAL	---	C1

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



SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 1-10-5
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'T'L LOADS BASED ON 55 % OF GSL.

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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.08/1.00 (C-D:1), BC=0.04/1.00 (H-I:4),
WB=0.05/1.00 (B-I:1), SSI=0.10/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

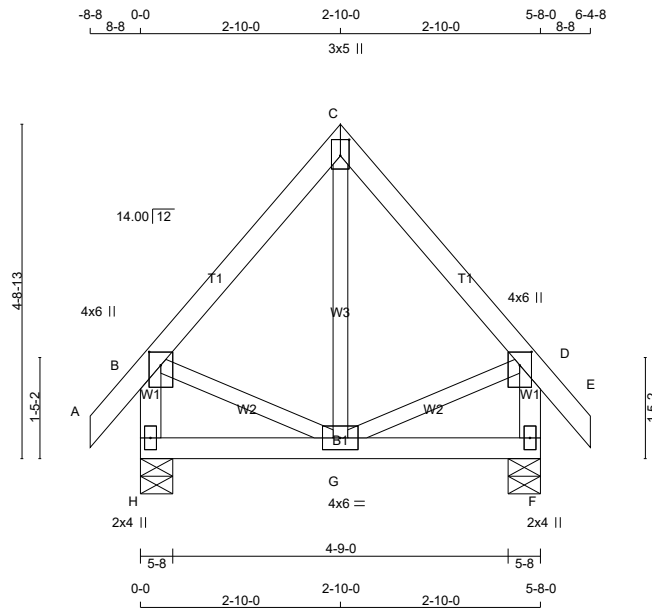
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)

Alpa Roof Truss, Maple

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ID:hd511hZTz bdeQoS817GKByhVxV-AuIKLI676qv0yoZx6heOHBFSkgA6Un49U2W8i8yTp6c

Scale = 1:32.6



TOTAL WEIGHT = 30 lb

N. L. G. A. RULES				
CHORDS	SIZE		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 EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTW+p	MT20	3.0	5.0	2.75	1.50
D	TMVW+p	MT20	4.0	6.0	2.25	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	2.0	4.0		

BEARINGS		FACTORED			MAXIMUM FACTORED			INPUT	REQD
	GROSS REACTION		GROSS REACTION			BRG	BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
H	337	0	337	0	0	5-8	1-8		
F	337	0	337	0	0	5-8	1-8		

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	239	153 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0
F	239	153 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0

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.

TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 24	-78.0	-78.0	0.04 (1)	10.00	G-C	-6 / 43 0.01 (4)	
B-C	-142 / 0	-78.0	-78.0	0.08 (1)	6.25	B-G	0 / 98 0.02 (1)	
C-D	-142 / 0	-78.0	-78.0	0.08 (1)	6.25	G-D	0 / 98 0.02 (1)	
D-E	0 / 24	-78.0	-78.0	0.04 (1)	10.00			
H-B	-316 / 0	0.0	0.0	0.03 (1)	7.81			
F-D	-316 / 0	0.0	0.0	0.03 (1)	7.81			
H-G	0 / 0	-18.5	-18.5	0.04 (4)	10.00			
G-F	0 / 0	-18.5	-18.5	0.04 (4)	10.00			

SPECIFIED LOADS:				
TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	34.4	PSF

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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.08/1.00 (C-D:1), BC=0.04/1.00 (F-G:4),
WB=0.02/1.00 (B-G:1), SSI=0.06/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

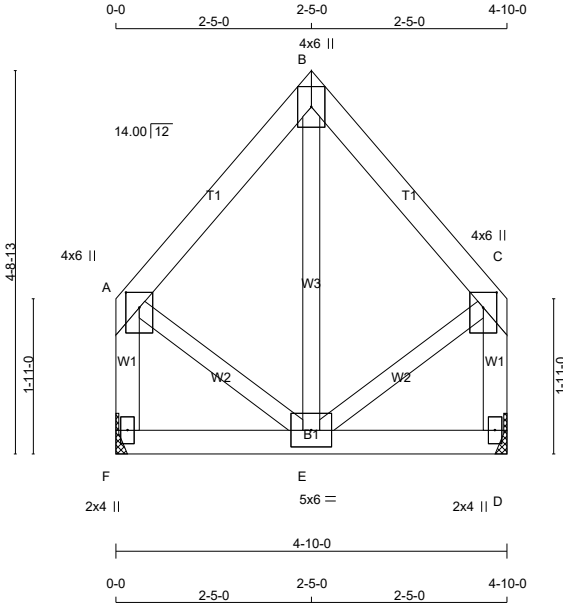
JSI GRIP= 0.18 (D) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H94S		1	TRUSS DESC. JT 45147	E21104093

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed Oct 13 14:52:08 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-f4JiZe6m81tay88gO9dqOo2q4WWDEPJjiGiFayTp6b



TOTAL WEIGHT = 2 X 26 = 51 lb

[M][F]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTW+p	MT20	4.0	6.0		
C	TMVW+p	MT20	4.0	6.0	2.25	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMWWW-t	MT20	5.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	233	0	233	0
D	233	0	233	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	166	101 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
D	166	101 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-103 / 0	-78.0	-78.0 0.06 (1)	6.25	E-B	-32 / 25	0.01 (1)
B-C	-103 / 0	-78.0	-78.0 0.06 (1)	6.25	A-E	0 / 80	0.02 (1)
F-A	-215 / 0	0.0	0.0 0.02 (1)	7.81	E-C	0 / 80	0.02 (1)
D-C	-215 / 0	0.0	0.0 0.02 (1)	7.81			
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			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018 , ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

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

CSI: TC=0.06/1.00 (A-B:1) , BC=0.03/1.00 (E-F:4) ,

WB=0.02/1.00 (C-E:1) , SSI=0.05/1.00 (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= 0.12 (C) (INPUT = 0.90)

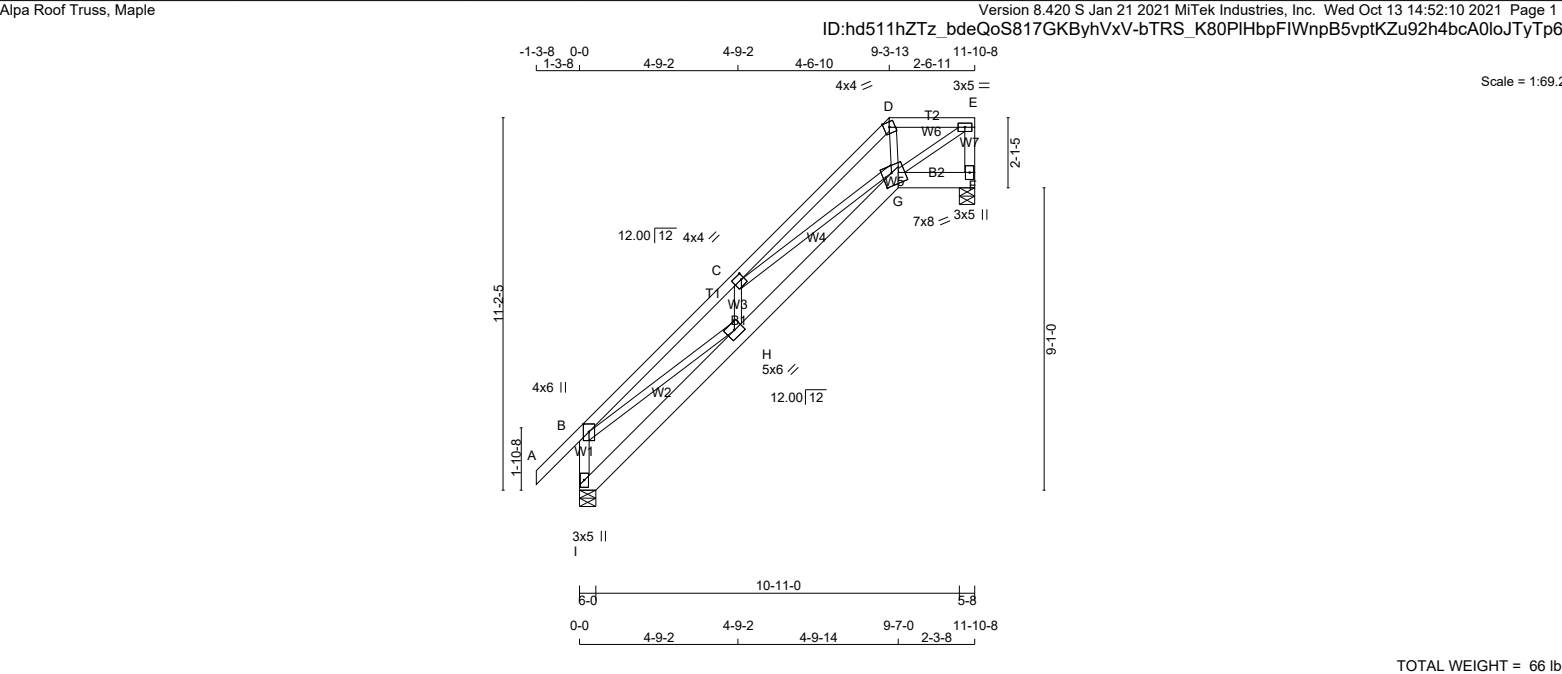
JSI METAL= 0.06 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE

2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H95		1	TRUSS DESC. JT 45147	E21104094



TOTAL WEIGHT = 66 lb [M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
I - B	2x4	DRY No.2	SPF
A - D	2x4	DRY No.2	SPF
D - E	2x4	DRY No.2	SPF
F - E	2x4	DRY No.2	SPF
I - G	2x6	DRY No.2	SPF
G - F	2x6	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	6.0	2.75 2.00
C	TMWW-t	MT20	4.0	4.0	2.00 1.00
D	TTW-m	MT20	4.0	4.0	Edge
E	TMVW-t	MT20	3.0	5.0	
F	BMV1+p	MT20	3.0	5.0	
G	BBWWW-m	MT20	7.0	8.0	4.50 3.50
H	BMWW-t	MT20	5.0	6.0	
I	BMV1+p	MT20	3.0	5.0	

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

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



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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
I	682	0	682	0	6-0	1-8
F	573	0	573	0	5-8	1-8

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND	DEAD	SOIL
	VERT	HORZ	VERT	HORZ	VERT	HORZ	VERT	HORZ			
I	484	308 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	176 / 0	0 / 0
F	408	249 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.31 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.

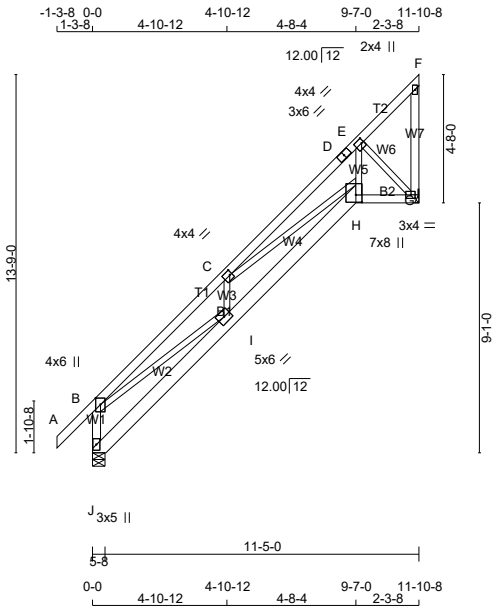
CHORDS						WEBS					
MEMB.	FR-TO	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MEMB.	FR-TO	MAX. FACTORED FORCE (LBS)		MAX	CSI (LC)
		FROM	TO	FROM	TO			FROM	TO		
I-B	-623 / 0	0.0	0.0	0.0	0.07 (1)	7.81	B-H	0 / 1174	0.26 (1)		
A-B	0 / 38	-78.0	-78.0	0.11 (1)	10.00	H-C	-257 / 0	0.04 (1)			
B-C	-1379 / 0	-78.0	-78.0	0.23 (1)	5.31	C-G	-440 / 0	0.29 (1)			
C-D	-839 / 0	-78.0	-78.0	0.21 (1)	6.25	D-G	0 / 329	0.07 (1)			
D-E	-624 / 0	-78.0	-78.0	0.07 (1)	6.25	G-E	0 / 775	0.17 (1)			
F-E	-552 / 0	0.0	0.0	0.06 (1)	7.81						
I-H	-9 / 2	-18.5	-18.5	0.07 (1)	10.00						
H-G	0 / 1342	-18.5	-18.5	0.22 (1)	10.00						
G-F	0 / 0	-18.5	-18.5	0.01 (4)	10.00						

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H96		1	TRUSS DESC. JT 45147	E21104095

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 8 X 69 = 556 lb

[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
J - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
H - G	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	6.0	2.75 2.00
C	TMWW-t	MT20	4.0	4.0	2.00 1.00
D	TS-t	MT20	3.0	6.0	
E	TMWW-t	MT20	4.0	4.0	2.00 1.00
F	TMV+p	MT20	2.0	4.0	
G	BMVW1-t	MT20	3.0	4.0	1.50 1.75
H	BBWW+p	MT20	7.0	8.0	3.25 2.75
I	BMWW-t	MT20	5.0	6.0	
J	BMV1+p	MT20	3.0	5.0	

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	
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
JT	682	0	682	0	5-8	1-8	
G	573	0	573	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	484	308 / 0	0 / 0	0 / 0	0 / 0	176 / 0	0 / 0
G	408	249 / 0	0 / 0	0 / 0	0 / 0	159 / 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 = 5.29 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			MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED		
		VERT. LOAD (PLF)	LC1	MAX CSI (LC)			UNBRAC LENGTH	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO				
J-B	-622 / 0	0.0	0.0	0.07 (1)	7.81	B-I	0 / 1181	0.27 (1)	
A-B	0 / 38	-78.0	-78.0	0.11 (1)	10.00	I-C	-242 / 0	0.04 (1)	
B-C	-1383 / 0	-78.0	-78.0	0.24 (1)	5.29	C-H	-416 / 0	0.29 (1)	
C-D	-850 / 0	-78.0	-78.0	0.19 (1)	6.25	H-E	0 / 819	0.18 (1)	
D-E	-850 / 0	-78.0	-78.0	0.19 (1)	6.25	E-G	-770 / 0	0.14 (1)	
E-F	-35 / 0	-78.0	-78.0	0.11 (1)	6.25				
G-F	-36 / 0	0.0	0.0	0.01 (1)	7.81				
J-I	-9 / 2	-18.5	-18.5	0.07 (1)	10.00				
I-H	0 / 1342	-18.5	-18.5	0.22 (1)	10.00				
H-G	0 / 553	-18.5	-18.5	0.11 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	34.4	PSF	

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 20.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.09")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.22/1.00 (H-I:1) ,
WB=0.29/1.00 (C-H:1) , SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (E) (INPUT = 0.90)
JSI METAL= 0.59 (B) (INPUT = 1.00)

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

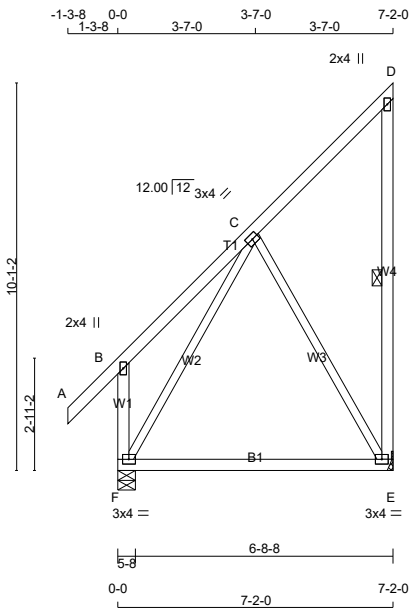


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H97		1	TRUSS DESC. JT 45147	E21104096

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 6 X 47 = 279 lb

[M][F]

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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C	TMWW-t	MT20	3.0	4.0
D	TMV+p	MT20	2.0	4.0
E	BMVW1-t	MT20	3.0	4.0
F	BMVW1-t	MT20	3.0	4.0

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
JT	246	0	346	0	0	0
E	346	0	346	0	0	0
F	454	0	454	0	5-8	1-8

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

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	246	150 / 0	0 / 0	0 / 0	0 / 0	96 / 0
E	322	209 / 0	0 / 0	0 / 0	0 / 0	113 / 0
F	322	209 / 0	0 / 0	0 / 0	0 / 0	113 / 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 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)		MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
		FROM	TO				
FR-TO							
A-B	0 / 38	-78.0	-78.0	0.11 (1)	10.00	C-E	-199 / 0
B-C	0 / 25	-78.0	-78.0	0.17 (1)	10.00	F-C	-205 / 0
C-D	-24 / 0	-78.0	-78.0	0.13 (1)	6.25		
E-D	-109 / 0	0.0	0.0	0.05 (1)	6.25		
F-B	-210 / 0	0.0	0.0	0.03 (1)	7.81		
F-E	0 / 102	-18.5	-18.5	0.28 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/723 (0.12")

CSI: TC=0.17/1.00 (B-C:1) , BC=0.28/1.00 (E-F:4) ,
WB=0.19/1.00 (C-E:1) , SSI=0.10/1.00 (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
MT20	650	371	1747	788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (C) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

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

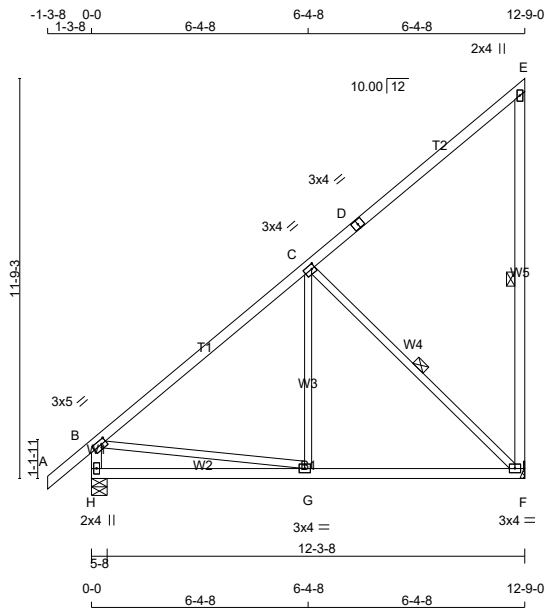


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H98		1	TRUSS DESC. JT 45147	E21104097

Alpa Roof Truss, Maple

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ID:hd511hZTz bdeQoS817GKByhVxV-xQEL11C9EIwuw1AUaNNgcta8GvsMKwLKHSZ qyTp6U



TOTAL WEIGHT = 3 X 66 = 197 lb

[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER		DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
H - B	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
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	TMWW-t	MT20	3.0	4.0	1.50	1.25
D	TS-t	MT20	3.0	4.0		
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BMWW-t	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT	REQRD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG IN-SX
F	615	0	615	0	0	MECHANICAL
H	723	0	723	0	0	5-8 1-8

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	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	438	268 / 0	0 / 0	0 / 0	0 / 0	171 / 0	0 / 0
H	513	326 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0

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

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

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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		LENGTH FR-TO			
A-B	0 / 35	-78.0 -78.0	0.11 (1)	10.00	G-C	0 / 145	0.05 (4)
B-C	-480 / 0	-78.0 -78.0	0.43 (1)	6.25	C-F	-553 / 0	0.29 (1)
C-D	-39 / 0	-78.0 -78.0	0.42 (1)	6.25	B-G	0 / 402	0.09 (1)
D-E	-39 / 0	-78.0 -78.0	0.42 (1)	6.25			
F-E	-187 / 0	0.0 0.0	0.14 (1)	6.25			
H-B	-678 / 0	0.0 0.0	0.07 (1)	7.81			
H-G	0 / 0	-18.5 -18.5	0.21 (4)	10.00			
G-F	0 / 399	-18.5 -18.5	0.25 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	34.4	PSF	

SPACING = 24.0 IN./C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.43/1.00 (B-C:1) , BC=0.25/1.00 (F-G:4) ,
WB=0.29/1.00 (C-F:1) , SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (C) (INPUT = 0.90)
JSI METAL= 0.20 (B) (INPUT = 1.00)

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

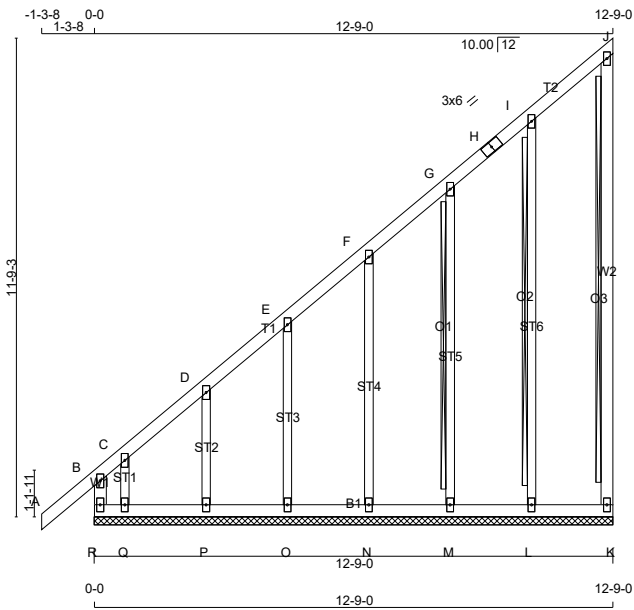


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H98G		1	TRUSS DESC. JT 45147	E21104098

Alpa Roof Truss, Maple

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ID:hd511hZTz bdeQoS817GKByhVxV-QdokENDn b2IXAlq84IV847O1IFi5p1UZxC7X7yTp6T



Scale = 1:56.6

TOTAL WEIGHT = 75 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER		DESCR.
R - B	2x4 DRY	No.2		SPF
A - H	2x4 DRY	No.2		SPF
H - J	2x4 DRY	No.2		SPF
K - J	2x4 DRY	No.2		SPF
R - K	2x4 DRY	No.2		SPF
ALL WEBS	2x3 DRY	No.2		SPF
ALL GABLE WEBS	2x3 DRY	No.2		SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2'-0.0 OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C, D, E, F, G, I					
C	TMW+w	MT20	2.0	4.0	
H	TS-t	MT20	3.0	6.0	
J	TMV+p	MT20	2.0	4.0	
K	BMV1+p	MT20	2.0	4.0	
L, M, N, O, P, Q					
L	BMW1+w	MT20	2.0	4.0	
R	BMV1+p	MT20	2.0	4.0	

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

2x4 DRY SPF No.2 T-BRACE AT J-K, I-L
2x3 DRY SPF No.2 T-BRACE AT G-M

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
R-B	-223 / 0	0.0	0.0	0.03 (1)	7.81	L-I	-169 / 0	0.13 (1)	
A-B	0 / 35	-78.0	-78.0	0.11 (1)	10.00	M-G	-153 / 0	0.17 (1)	
B-C	-70 / 0	-78.0	-78.0	0.09 (1)	6.25	N-F	-155 / 0	0.12 (1)	
C-D	-15 / 0	-78.0	-78.0	0.04 (1)	6.25	O-E	-152 / 0	0.06 (1)	
D-E	-14 / 0	-78.0	-78.0	0.04 (1)	6.25	P-D	-161 / 0	0.03 (1)	
E-F	-9 / 0	-78.0	-78.0	0.04 (1)	10.00	Q-C	-19 / 0	0.00 (1)	
F-G	-6 / 0	-78.0	-78.0	0.04 (1)	10.00				
G-H	-3 / 0	-78.0	-78.0	0.04 (1)	10.00				
H-I	-3 / 0	-78.0	-78.0	0.04 (1)	10.00				
I-J	-8 / 0	-78.0	-78.0	0.04 (1)	10.00				
K-J	-71 / 0	0.0	0.0	0.02 (1)	7.81				
R-Q	0 / 16	-18.5	-18.5	0.03 (1)	10.00				
Q-P	0 / 15	-18.5	-18.5	0.02 (4)	10.00				
P-O	0 / 10	-18.5	-18.5	0.02 (4)	10.00				
O-N	0 / 7	-18.5	-18.5	0.02 (4)	10.00				
N-M	0 / 4	-18.5	-18.5	0.02 (4)	10.00				
M-L	0 / 3	-18.5	-18.5	0.02 (4)	10.00				
L-K	0 / 1	-18.5	-18.5	0.02 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0 PSF
	DL = 6.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.4 PSF
TOTAL LOAD	= 34.4 PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (A-B:1) , BC=0.03/1.00 (Q-R:1) ,
WB=0.17/1.00 (G-M:1) , SSI=0.06/1.00 (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) (PSI)	SHEAR (PLI)	SECTION (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= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

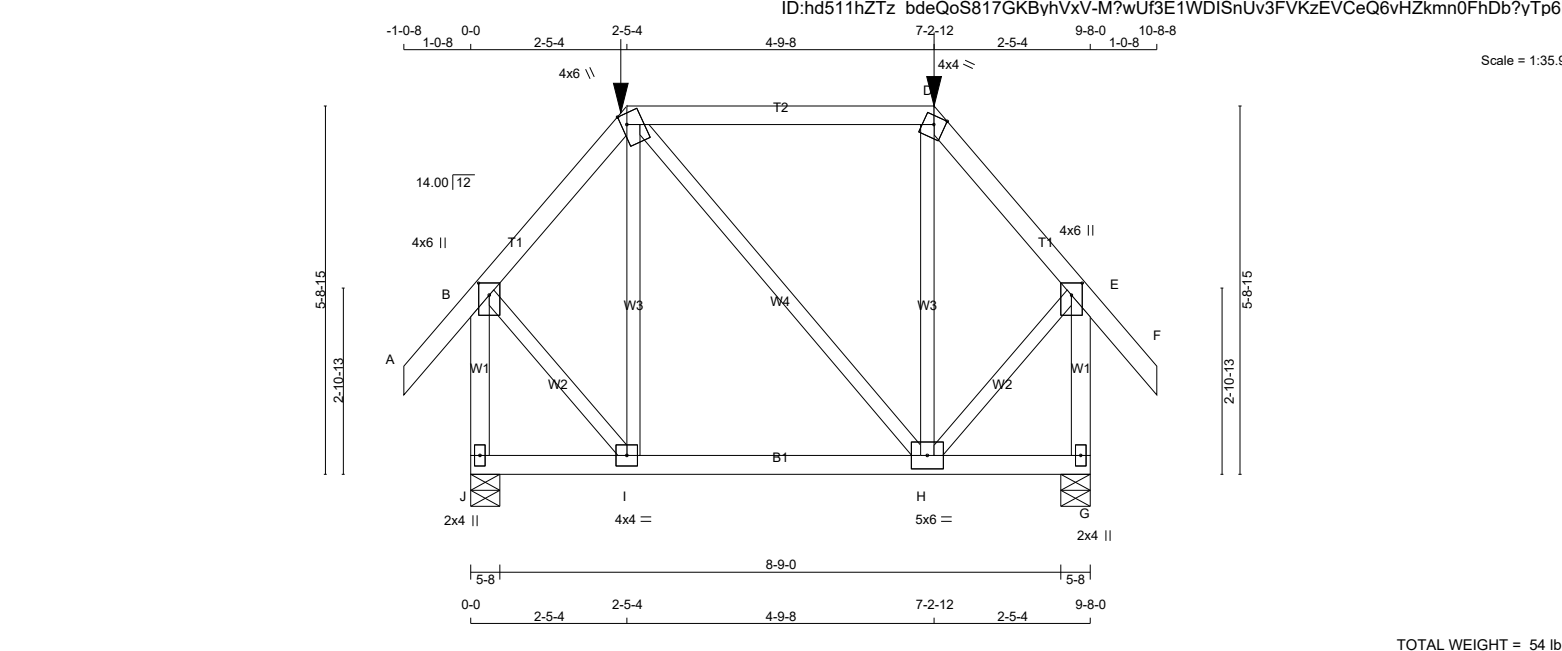
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H101		1	TRUSS DESC. JT 45147	E21104099

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TOTAL WEIGHT = 54 lb [M]

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED GROSS REACTION				TOP CH. LL = 21.0 PSF			
A - C	2x4	DRY	No.2	MAXIMUM FACTORED GROSS REACTION				DL = 6.0 PSF			
C - D	2x4	DRY	No.2	INPUT BRG				BOT CH. LL = 0.0 PSF			
D - F	2x4	DRY	No.2	REQD BRG				DL = 7.4 PSF			
J - B	2x4	DRY	No.2	JT VERT HORZ DOWN HORZ UPLIFT IN-SX				TOTAL LOAD = 34.4 PSF			
G - E	2x4	DRY	No.2	J 761 0 761 0 0 5-8 1-8							
J - G	2x4	DRY	No.2	G 761 0 761 0 0 5-8 1-8							

ALL WEBS 2x3 DRY No.2				UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
EXCEPT				1ST LCASE MAX./MIN. COMPONENT REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
DRY: SEASONED LUMBER.				JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL				GIRDER TYPE: CPrimeHip			
				J 541 339 / 0 0 / 0 0 / 0 0 / 0 202 / 0 0 / 0				SIDE SETBACK = 2-5-4			
				G 541 339 / 0 0 / 0 0 / 0 0 / 0 202 / 0 0 / 0				END SETBACK = 3-10-8			

PLATES (table is in inches)				BRACING				THIS DESIGN COMPLIES WITH:			
JT TYPE	PLATES	W	LEN Y X	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.				- PART 9 OF CBC 2018 , ABC 2019			
B TMVW+p	MT20	4.0	6.0 2.25 2.00	MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
C TTWW+m	MT20	4.0	6.0 2.00 1.00	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				- CSA 086-14			
D TTW-m	MT20	4.0	4.0 Edge	LOADING				- TPIC 2014			
E TMVW+p	MT20	4.0	6.0 2.25 2.00	TOTAL LOAD CASES: (4)				(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD			
G BMV1+p	MT20	2.0	4.0	CHORDS				ALLOWABLE DEFL.(LL)= L/360 (0.32")			
H BMWWW-t	MT20	5.0	6.0	MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. UNBRAC. LENGTH				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")			
I BMWW-t	MT20	4.0	4.0	MAX. FACTORED FORCE (LBS)				ALLOWABLE DEFL.(TL)= L/360 (0.32")			
J BMV1+p	MT20	2.0	4.0	FACTORED VERT. LOAD LC1 MAX. MEMB. UNBRAC. LENGTH				CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")			

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				FACTORED CONCENTRATED LOADS (LBS)				CSI: TC=0.50/1.00 (C-D:1) , BC=0.13/1.00 (H-I:4) , WB=0.09/1.00 (B-I:1) , SSI=0.24/1.00 (C-D:1)			
				JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE HEEL CONN.				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00			
				C 2-5-4 -75 -75 --- FRONT VERT TOTAL --- C1				COMP=1.00 SHEAR=1.00 TENS= 1.00			
				D 7-2-12 -75 -75 --- FRONT VERT TOTAL --- C1				COMPANION LIVE LOAD FACTOR = 1.00			

CONNECTION REQUIREMENTS

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

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



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.

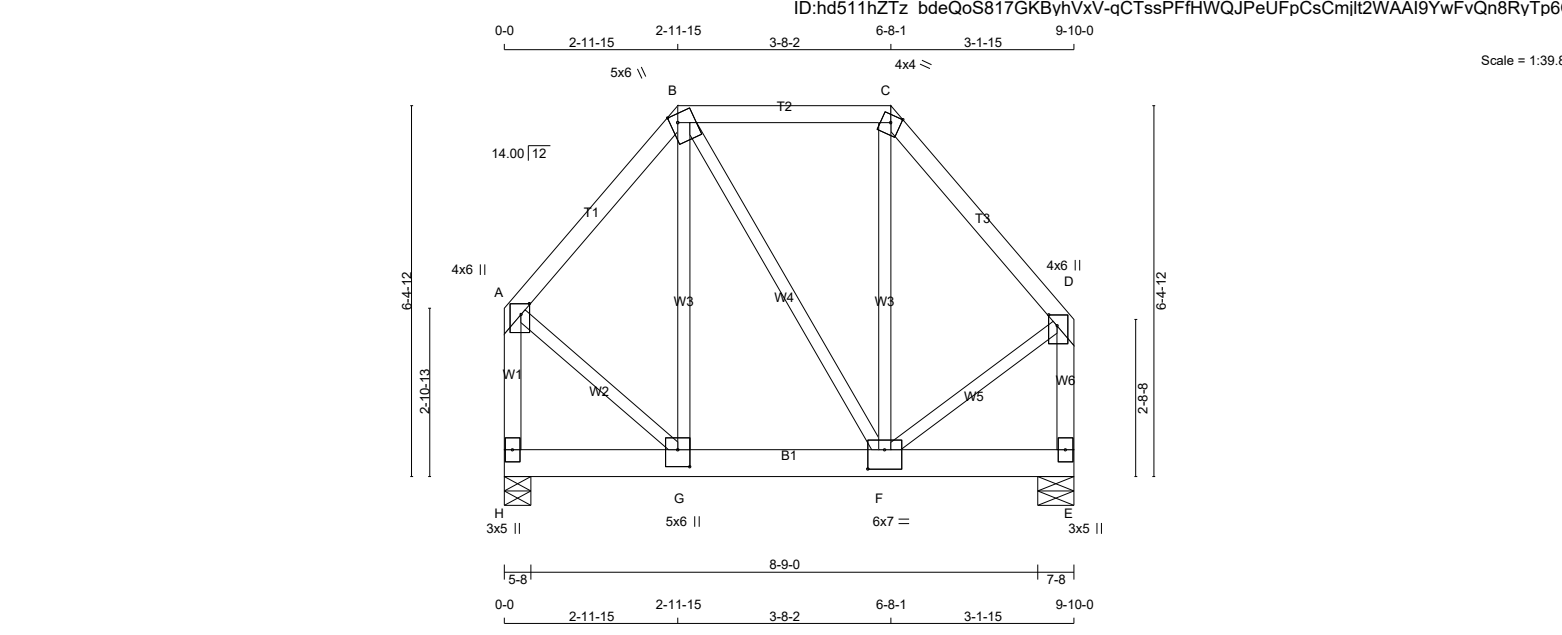
JSI GRIP= 0.42 (B) (INPUT = 0.90)

JSI METAL= 0.18 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H102		2	TRUSS DESC. JT 45147	E21104100

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TOTAL WEIGHT = 2 X 59 = 118 lb

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

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A- B	1 12	TOP
B- C	1 12	TOP
C- D	1 12	TOP
H- A	1 12	TOP
E- D	1 12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H- E	2 6	SIDE(376.8)
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 TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+p	MT20	4.0	6.0	2.25 1.75
B	TTWW+m	MT20	5.0	6.0	1.75 1.50
C	TTW-m	MT20	4.0	4.0	Edge

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 IN-SX		REQRD BRG IN-SX	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
H	4180	0	4180	0	0	5-8	3-5		
E	4180	0	4180	0	0	7-8	3-5		

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
H	2980	1819 / 0	0 / 0	0 / 0	0 / 0	1161 / 0	0 / 0	
E	2980	1819 / 0	0 / 0	0 / 0	0 / 0	1161 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)
FR-TO		FROM TO		FR-TO			
A- B	-2418 / 0	-78.0 -78.0	0.09 (1)	5.71	G- B	0 / 1465	0.18 (1)
B- C	-1660 / 0	-78.0 -78.0	0.11 (1)	6.25	B- F	0 / 139	0.02 (1)
C- D	-2522 / 0	-78.0 -78.0	0.10 (1)	5.61	F- C	0 / 1657	0.21 (1)
H- A	-3196 / 0	0.0 0.0	0.25 (1)	6.49	A- G	0 / 1992	0.25 (1)
E- D	-3172 / 0	0.0 0.0	0.23 (1)	6.52	F- D	0 / 1982	0.25 (1)
H- G	0 / 0	-772.2 -772.2	0.24 (1)	10.00			
G- F	0 / 1589	-772.2 -772.2	0.41 (1)	10.00			
F- E	0 / 0	-772.2 -772.2	0.30 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	=	21.0 PSF
	DL	=	6.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.4 PSF
TOTAL LOAD = 34.4 PSF			

SPACING = 24.0 IN./C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 33-3-0
END DISTANCE = 9-10-0
END SPAN CARRIED = 33-3-0
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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.33")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.25/1.00 (A-H:1) , BC=0.41/1.00 (F-G:1) , WB=0.25/1.00 (A-G:1) , SSI=0.50/1.00 (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
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (A) (INPUT = 0.90)
JSI METAL= 0.44 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H102		2	JT 45147	E21104100(2)

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	TMVW+p	MT20	4.0	6.0	2.25	1.75
E	BMV1+p	MT20	3.0	5.0		
F	BMWWW-t	MT20	6.0	7.0	4.00	3.50
G	BMWW+t	MT20	5.0	6.0	3.50	2.50
H	BMV1+p	MT20	3.0	5.0		

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

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

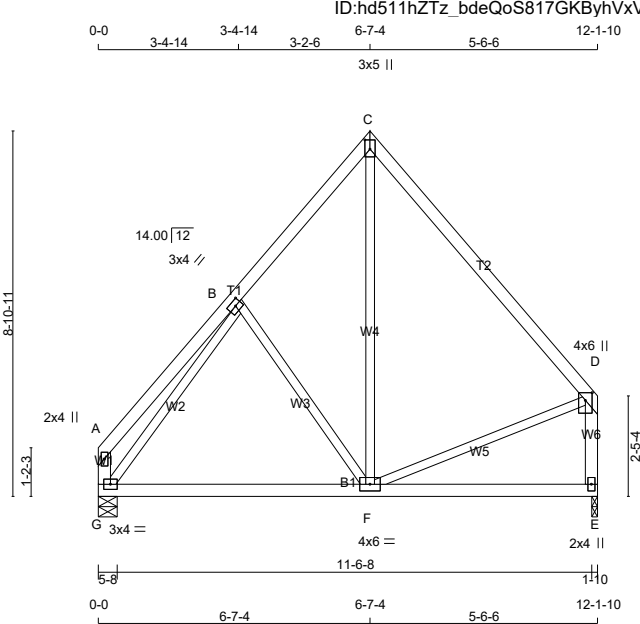


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H103		1	TRUSS DESC. JT 45147	E21104101

Alpa Roof Truss, Maple

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ID:hd511hZTz_bdeQoS817GKByhVxV-mabdH5Hwp8g1eyddwdugr8qCeJvUm2PDiDvuCKyTp6O



TOTAL WEIGHT = 4 X 59 = 236 lb

[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMV+p	MT20	2.0	4.0	
B	TMWW-t	MT20	3.0	4.0	1.50 1.75
C	TTW+p	MT20	3.0	5.0	2.75 1.50
D	TMVW+p	MT20	4.0	6.0	2.25 2.00
E	BMV1+p	MT20	2.0	4.0	
F	BMWWW-t	MT20	4.0	6.0	
G	BMVW1-t	MT20	3.0	4.0	

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	585	0	585	0	1-10	1-8
G	585	0	585	0	5-8	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	417	255 / 0	0 / 0	0 / 0	0 / 0	163 / 0	0 / 0
G	417	255 / 0	0 / 0	0 / 0	0 / 0	163 / 0	0 / 0

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

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)		MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)		MAX CSI (LC)
		FROM	TO						
A-B	0 / 23	-78.0	-78.0	0.14 (1)	10.00	B-F	-160 / 0	0.09 (1)	
B-C	-355 / 0	-78.0	-78.0	0.11 (1)	6.25	F-C	0 / 188	0.05 (4)	
C-D	-333 / 0	-78.0	-78.0	0.31 (1)	6.25	G-B	-539 / 0	0.29 (1)	
G-A	-96 / 0	0.0	0.0	0.01 (1)	7.81	F-D	0 / 231	0.05 (1)	
E-D	-549 / 0	0.0	0.0	0.07 (1)	7.81				
G-F	0 / 311	-18.5	-18.5	0.23 (4)	10.00				
F-E	0 / 0	-18.5	-18.5	0.20 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")

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

ALLOWABLE DEFL.(TL)= L/360 (0.40")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.31/1.00 (C-D:1) , BC=0.23/1.00 (F-G:4) , WB=0.29/1.00 (B-G:1) , SSI=0.11/1.00 (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
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)

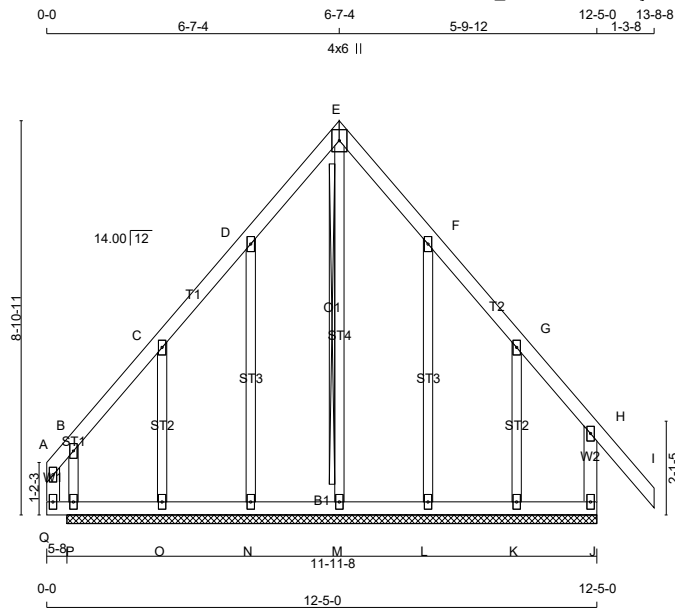
JSI METAL= 0.20 (B) (INPUT = 1.00)

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



Alpa Roof Truss, Maple

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Scale = 1:52.0

TOTAL WEIGHT = 65 lb

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
Q - A	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
Q - 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 2-0-0 OC.

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B, C, D, F, G						
B	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	4.0	6.0		
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O, P						
K	BMW1+w	MT20	2.0	4.0		
Q	BMV+p	MT20	2.0	4.0		

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)

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.

2x3 DRY SPF No.2 T-BRACE AT E-M

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

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
Q-A	-2/1 1	0.0	0.0	0.01 (1)	10.00	M-E	-179 / 0 0.22 (1)
A-B	0 / 10	-78.0	-78.0	0.03 (1)	10.00	N-D	-159 / 0 0.11 (1)
B-C	0 / 3	-78.0	-78.0	0.04 (1)	10.00	O-C	-153 / 0 0.04 (1)
C-D	0 / 8	-78.0	-78.0	0.04 (1)	10.00	P-B	-115 / 0 0.02 (1)
D-E	0 / 11	-78.0	-78.0	0.04 (1)	10.00	L-F	-168 / 0 0.12 (1)
E-F	0 / 10	-78.0	-78.0	0.04 (1)	10.00	K-G	-104 / 0 0.03 (1)
F-G	0 / 14	-78.0	-78.0	0.04 (1)	10.00		
G-H	-19 / 0	-78.0	-78.0	0.08 (1)	6.25		
H-I	0 / 42	-78.0	-78.0	0.11 (1)	10.00		
J-H	-202 / 0	0.0	0.0	0.02 (1)	7.81		
Q-P	0 / 9	-18.5	-18.5	0.01 (4)	10.00		
P-O	0 / 0	-18.5	-18.5	0.02 (4)	10.00		
O-N	-5 / 0	-18.5	-18.5	0.02 (4)	10.00		
N-M	-7 / 0	-18.5	-18.5	0.01 (4)	10.00		
M-L	-7 / 0	-18.5	-18.5	0.01 (4)	10.00		
L-K	-4 / 0	-18.5	-18.5	0.01 (4)	10.00		
K-J	-1 / 0	-18.5	-18.5	0.02 (1)	10.00		

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



SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

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

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (H-I:1), BC=0.02/1.00 (J-K:1),
WB=0.22/1.00 (E-M:1), SSI=0.06/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

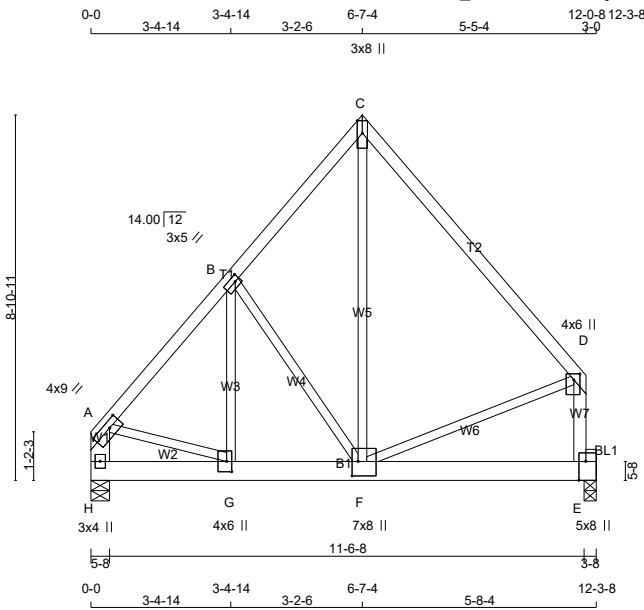
JSI GRIP= 0.16 (H) (INPUT = 0.90)
JSI METAL= 0.10 (H) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H104		2	TRUSS DESC. JT 45147	E21104103

Alpa Roof Truss, Maple

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Scale = 1:56.0

TOTAL WEIGHT = 2 X 69 = 138 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - D	2x4	DRY No.2	SPF
H - A	2x6	DRY No.2	SPF
E - D	2x4	DRY No.2	SPF
H - E	2x6	DRY No.2	SPF

BEARING BLOCKS			
BL1	2x4	DRY No.2	SPF
ALL WEBS			
EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A- C	1 12	TOP
C- D	1 12	TOP
E- D	1 12	TOP
H- A	2 12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H- E	2 6	SIDE(376.8)
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 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-t	MT20	4.0	9.0	1.75	3.50
B	TMWW-t	MT20	3.0	5.0	1.50	1.50

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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX		REQRD BRG IN-SX	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT			
H	5056	0		5056	0	5-8		2-12	
E	5068	0		5068	0	3-8		3-8	

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
H	3605	2200 / 0	0 / 0	0 / 0	0 / 0	1405 / 0	0 / 0		
E	3613	2207 / 0	0 / 0	0 / 0	0 / 0	1407 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

		CHORDS				WEBS			
		MAX. FACTORED	FACTORED			MAX. FACTORED	FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)		MAX. UNBRAC LENGTH	MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM TO				FR-TO			
A- B	-4135 / 0	-78.0 -78.0	0.15 (1)	4.58	G- B	0 / 1625	0.20 (1)		
B- C	-3044 / 0	-78.0 -78.0	0.10 (1)	5.22	B- F	-1288 / 0	0.36 (1)		
C- D	-3033 / 0	-78.0 -78.0	0.36 (1)	5.02	F- C	0 / 4283	0.53 (1)		
H- A	-3844 / 0	0.0 0.0	0.14 (1)	7.22	A- G	0 / 2759	0.34 (1)		
E- D	-3373 / 0	0.0 0.0	0.23 (1)	6.35	F- D	0 / 2366	0.29 (1)		
H- G	0 / 0	-772.2 -772.2	0.35 (1)	10.00					
G- F	0 / 2698	-772.2 -772.2	0.84 (1)	10.00					
F- E	-234 / 0	-772.2 -772.2	0.69 (1)	6.25					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	34.4	PSF	

SPACING = 24.0 IN./C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 33-3-0
END DISTANCE = 12-3-8
END SPAN CARRIED = 33-3-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 923 (0.15")

CSI: TC=0.36/1.00 (C-D:1), BC=0.84/1.00 (F-G:1), WB=0.53/1.00 (C-F:1), SSI=0.79/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (A) (INPUT = 0.90)
JSI METAL= 0.61 (G) (INPUT = 1.00)

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H104		2	JT 45147	E21104103(2)

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
C	TTW+p	MT20	3.0	8.0	3.75	Edge
D	TMVW+p	MT20	4.0	6.0	1.75	1.75
E	BMVK1+t	MT20	5.0	8.0	Edge	2.00
F	BMWWW+t	MT20	7.0	8.0	4.25	1.75
G	BMWW+t	MT20	4.0	6.0	3.00	1.50
H	BMV1+p	MT20	3.0	4.0		

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

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



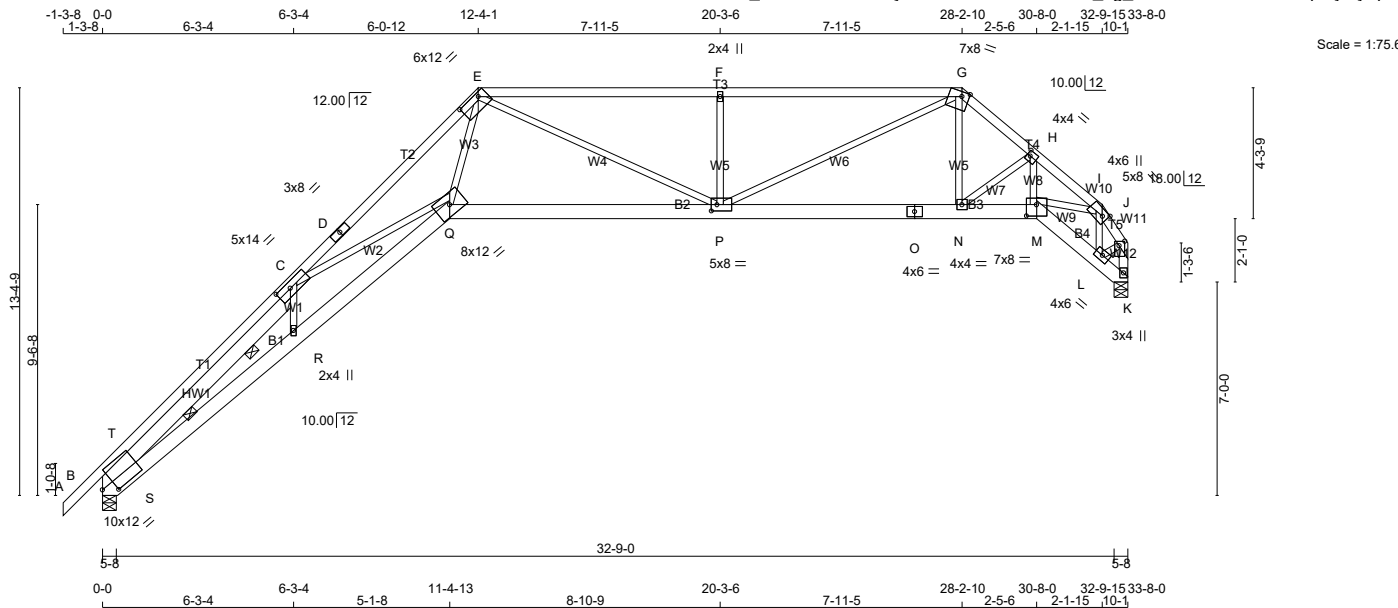


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H106		1	TRUSS DESC. JT 45147	E21104105

Alpa Roof Truss, Maple

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY 2100F 1.8E	SPF
D - E	2x4	DRY 2100F 1.8E	SPF
E - G	2x4	DRY 2100F 1.8E	SPF
G - I	2x4	DRY 1650F 1.5E	SPF
I - J	2x4	DRY 1650F 1.5E	SPF
K - J	2x4	DRY No.2	SPF
B - Q	2x6	DRY No.2	SPF
Q - O	2x6	DRY No.2	SPF
O - M	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
REINFORCING MEMBERS			
HW1	2x6	DRY No.2	SPF
ALL WEBS 2x3 DRY EXCEPT			
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	4.00 5.00
C	TMWWW-t	MT20	5.0	14.0	2.25 5.75
D	TS-t	MT20	3.0	8.0	
E	TTWW-h	MT20	6.0	12.0	1.50 8.75
F	TMW+w	MT20	2.0	4.0	
G	TTWW-m	MT20	7.0	8.0	Edge 2.75
H	TMWW-t	MT20	4.0	4.0	2.00 1.25
I	TTWW-m	MT20	5.0	8.0	Edge 2.00
J	TMVW+p	MT20	4.0	6.0	1.75 2.25
K	BMV1+p	MT20	3.0	4.0	
L	BMWW-t	MT20	4.0	6.0	
M	BBWW-I	MT20	7.0	8.0	4.50 4.00
N	BMWW-t	MT20	4.0	4.0	
O	BS-t	MT20	4.0	6.0	
P	BMWWW-t	MT20	5.0	8.0	2.50 2.25
Q	BBWW-h	MT20	8.0	12.0	
R	BMW+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



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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	1780	0	1780	0	0	5-8	1-11
K	1696	0	1696	0	0	5-8	1-10

ALLOW FOR 0.9" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	1271	765 / 0	0 / 0	0 / 0	0 / 0	506 / 0	0 / 0
K	1215	707 / 0	0 / 0	0 / 0	0 / 0	509 / 0	0 / 0

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

BRACING
FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 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.

2 LATERAL BRACE(S) AT 1/3 LENGTH OF C-S.

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. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 16	-78.0	-78.0 0.07 (1)	10.00	R-C	-11 / 74	0.03 (4)
B-T	-3603 / 0	-78.0	-78.0 0.17 (1)	4.42	C-Q	0 / 72	0.02 (4)
T-C	-2326 / 0	-78.0	-78.0 0.19 (1)	5.26	Q-E	0 / 3858	0.87 (1)
C-D	-6169 / 0	-78.0	-78.0 0.77 (1)	3.27	E-P	0 / 309	0.07 (1)
D-E	-6169 / 0	-78.0	-78.0 0.77 (1)	3.27	P-F	-815 / 0	0.21 (1)
E-F	-3700 / 0	-85.5	-85.5 0.61 (1)	2.00	P-G	0 / 1860	0.42 (1)
F-G	-3700 / 0	-85.5	-85.5 0.61 (1)	2.00	N-G	0 / 519	0.12 (1)
G-H	-2637 / 0	-78.0	-78.0 0.09 (1)	4.76	N-H	-660 / 0	0.13 (1)
H-I	-3379 / 0	-78.0	-78.0 0.10 (1)	4.30	M-H	0 / 719	0.16 (1)
I-J	-1581 / 0	-78.0	-78.0 0.02 (1)	5.85	M-I	0 / 1776	0.40 (1)
K-J	-1677 / 0	0.0	0.0 0.17 (1)	6.41	L-I	-959 / 0	0.14 (1)
					L-J	0 / 916	0.21 (1)
					S-T	0 / 1313	0.00 (1)
					S-C	-4109 / 0	0.49 (1)
B-S	0 / 2275	-18.5	-18.5 0.39 (1)	10.00			
S-R	0 / 5513	-18.5	-18.5 0.83 (1)	10.00			
R-Q	0 / 5582	-18.5	-18.5 0.84 (1)	10.00			
Q-P	0 / 3423	-18.5	-18.5 0.51 (1)	10.00			
P-O	0 / 2031	-18.5	-18.5 0.31 (1)	10.00			
O-N	0 / 2031	-18.5	-18.5 0.31 (1)	10.00			
N-M	0 / 2535	-18.5	-18.5 0.37 (1)	10.00			
M-L	0 / 1034	-18.5	-18.5 0.13 (1)	10.00			
L-K	-6 / 0	-18.5	-18.5 0.00 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	=	21.0 PSF
	DL	=	6.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.4 PSF
TOTAL LOAD = 34.4 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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.12")
CALCULATED VERT. DEFL.(LL) = L/999 (0.38")
ALLOWABLE DEFL.(TL)= L/360 (1.12")
CALCULATED VERT. DEFL.(TL) = L/519 (0.78")

CSI: TC=0.77/1.00 (C-E:1), BC=0.84/1.00 (Q-R:1), WB=0.87/1.00 (E-Q:1), SSI=0.33/1.00 (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 .

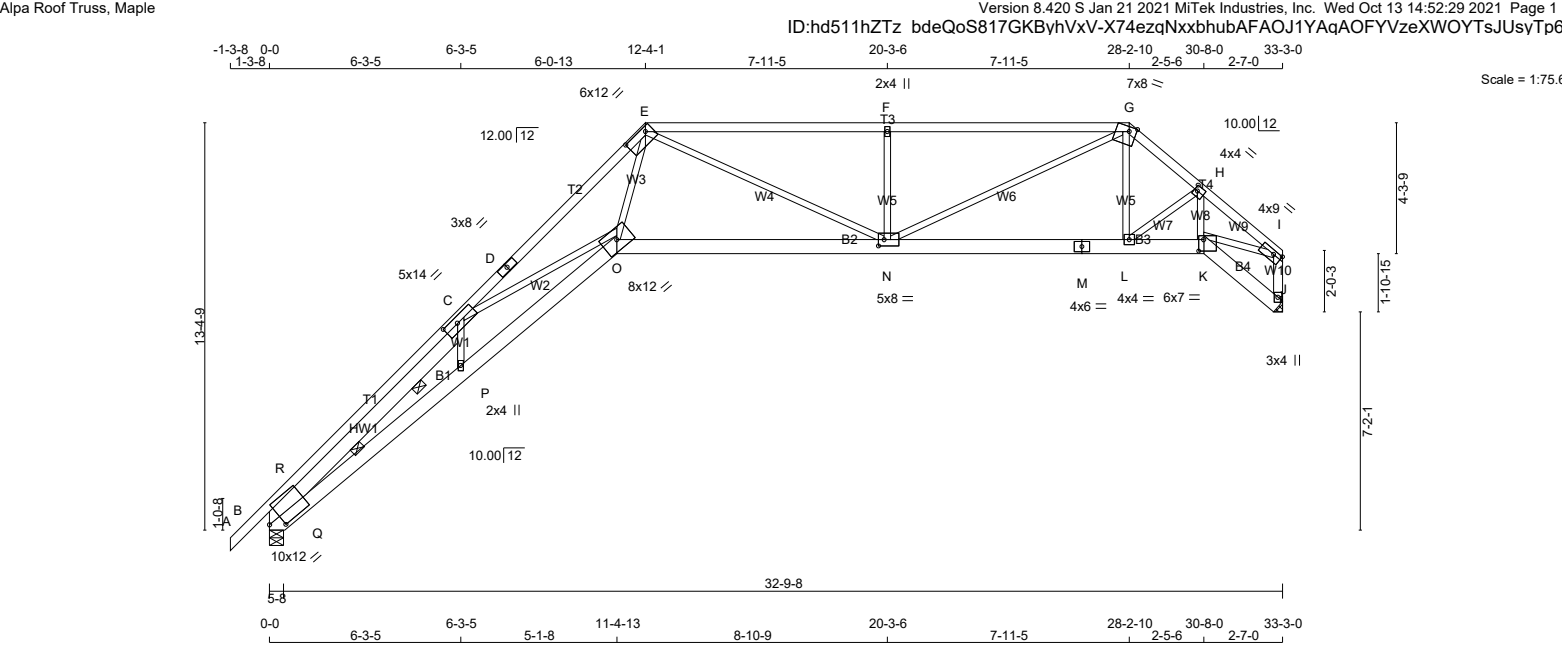
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)		
	MAX	MIN	MAX	MIN	MAX
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.74 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H106S		1	TRUSS DESC. JT 45147	E21104106



TOTAL WEIGHT = 5 X 168 = 840 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY 1650F 1.5E	SPF
D - E	2x4	DRY 1650F 1.5E	SPF
E - G	2x4	DRY 1650F 1.5E	SPF
G - I	2x4	DRY No.2	SPF
J - I	2x4	DRY No.2	SPF
B - O	2x6	DRY No.2	SPF
O - M	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
K - J	2x6	DRY No.2	SPF
REINFORCING MEMBERS			
HW1	2x6	DRY No.2	SPF
ALL WEBS 2x3 DRY: SEASONED LUMBER.			
	2x3	DRY No.2	SPF

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMBMW1-I	MT20	10.0	12.0 4.00 5.00
C	TMWW-t	MT20	5.0	14.0 2.25 5.75
D	TS-t	MT20	3.0	8.0
E	TTWW-h	MT20	6.0	12.0 1.75 9.25
F	TMW+w	MT20	2.0	4.0
G	TTWW-m	MT20	7.0	8.0 Edge 2.75
H	TMWW-t	MT20	4.0	4.0 2.00 1.25
I	TMVW-t	MT20	4.0	9.0 1.50 3.25
J	BMV1+p	MT20	3.0	4.0
K	BBWW-I	MT20	6.0	7.0 4.50 2.00
L	BMWW-t	MT20	4.0	4.0
M	BS-t	MT20	4.0	6.0
N	BMWW-t	MT20	5.0	8.0 2.50 2.25
O	BBWW-h	MT20	8.0	12.0
P	BMW+w	MT20	2.0	4.0

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
J	1676	0		1676	0	0	MECHANICAL		
B	1759	0		1759	0	0	5-8	1-11	

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

ALLOW FOR 1.0" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
J	1202	698 / 0	0 / 0	0 / 0	504 / 0
B	1256	756 / 0	0 / 0	0 / 0	499 / 0

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

BRACING
FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.96 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2 LATERAL BRACE(S) AT 1/3 LENGTH OF C-Q.

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		MAX. FACTORED	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 16	P-C	0 / 79
B-R	-3452 / 0	C-O	0 / 58
R-C	-2217 / 0	O-E	0 / 3801
C-D	-6056 / 0	E-N	0 / 261
D-E	-6056 / 0	N-F	-817 / 0
E-F	-3590 / 0	F-G	0 / 1905
F-G	-3590 / 0	G-H	0 / 382
G-H	-2449 / 0	H-I	-426 / 0
H-I	-2890 / 0	I-J	0 / 334
J-I	-1653 / 0	K-I	0 / 2243
		Q-R	0 / 1262
		Q-C	-4144 / 0
B-Q	0 / 2147		
Q-P	0 / 5453		
P-O	0 / 5515		
O-N	0 / 3355		
N-M	0 / 1880		
M-L	0 / 1880		
L-K	0 / 2204		
K-J	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.11")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.40")
ALLOWABLE DEFL.(TL)= L/360 (1.11")
CALCULATED VERT. DEFL.(TL) = L/ 487 (0.82")

CSI: TC=0.97/1.00 (C-E:1) , BC=0.83/1.00 (O-P:1) , WB=0.86/1.00 (E-O:1) , SSI=0.33/1.00 (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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

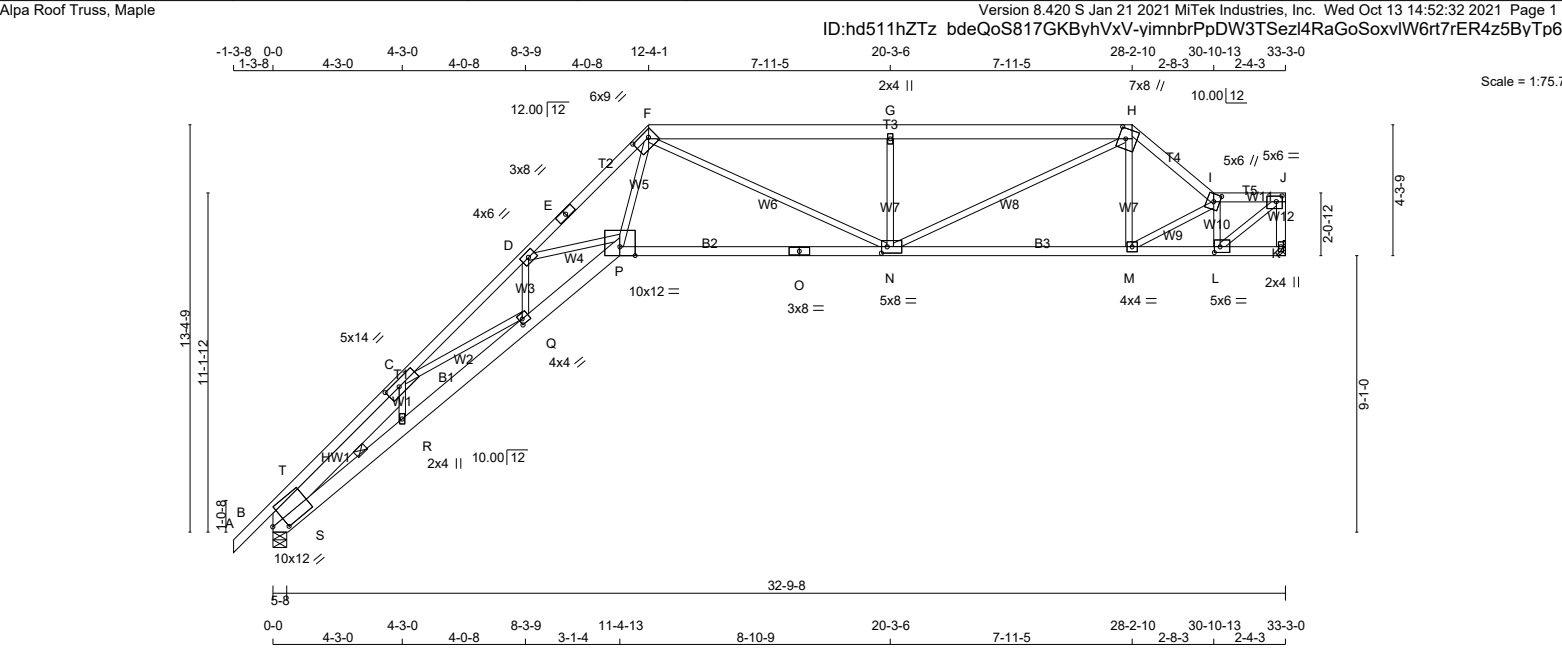
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (E) (INPUT = 0.90)
JSI METAL= 0.71 (E) (INPUT = 1.00)

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H107		1	TRUSS DESC. JT 45147	E21104107



LUMBER N. L. G. A. RULES CHORDS SIZE A - E 2x4 DRY No.2 SPF E - F 2x4 DRY No.2 SPF F - H 2x6 DRY No.2 SPF H - I 2x4 DRY No.2 SPF I - J 2x4 DRY No.2 SPF K - J 2x4 DRY No.2 SPF B - P 2x6 DRY No.2 SPF P - O 2x4 DRY No.2 SPF O - K 2x4 DRY No.2 SPF			REINFORCING MEMBERS HW1 2x6 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 TMBMW1-I MT20 10.0 12.0 4.00 5.00 C TMWW-t MT20 5.0 14.0 2.25 5.50 D TMWW-t MT20 4.0 6.0 E TS-t MT20 3.0 8.0 F TTWW-h MT20 6.0 9.0 2.50 6.25 G TMW+w MT20 2.0 4.0 H TTWW+m MT20 7.0 8.0 4.00 2.75 I TTWW+m MT20 5.0 6.0 3.00 2.25 J TMVW-t MT20 5.0 6.0 2.25 2.25 K BMV1+p MT20 2.0 4.0 L BMWW-t MT20 5.0 6.0 2.25 2.25 M BMWW-t MT20 4.0 4.0 N BMWW-t MT20 5.0 8.0 2.50 2.25 O BS-t MT20 3.0 8.0 P BBWW-I MT20 10.0 12.0 Edge Q BMWW-t MT20 4.0 4.0 2.00 1.25 R BMW+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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
<u>BEARINGS</u>									
	FACTORED			MAXIMUM FACTORED			INPUT	REQRD	
	GROSS REACTION			GROSS REACTION			BRG	BRG	
	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
JT									
K	1676	0		1676	0	0	MECHANICAL		
B	1759	0		1759	0	0	5-8	1-11	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 1-15.

ALLOW FOR 0.9" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	1202	698 / 0	0 / 0	0 / 0	0 / 0	504 / 0	0 / 0
B	1256	756 / 0	0 / 0	0 / 0	0 / 0	499 / 0	0 / 0

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

BRACING
FOR SECTION F-H, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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. FACTORED VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO			FROM TO	CS1 (LC)	FR-TO		
A-B		0 / 16	-78.0	-78.0 0.11 (1)	R-C		10.00
B-T		-3089 / 0	-78.0	-78.0 0.20 (1)	C-Q		0.820
T-C		-1957 / 0	-78.0	-78.0 0.16 (1)	Q-D		-187 / 0
C-D		-6220 / 0	-78.0	-78.0 0.86 (1)	D-P		-129 / 0
D-E		-6027 / 0	-78.0	-78.0 0.88 (1)	P-F		0 / 3838
E-F		-6027 / 0	-78.0	-78.0 0.88 (1)	F-N		0 / 259
F-G		-3585 / 0	-85.5	-85.5 0.52 (1)	N-G		-839 / 0
G-H		-3585 / 0	-85.5	-85.5 0.52 (1)	H-N		0 / 1934
H-I		-2384 / 0	-78.0	-78.0 0.16 (1)	M-H		0 / 287
I-J		-1969 / 0	-78.0	-78.0 0.11 (1)	M-I		-257 / 0
K-J		-1627 / 0	0.0	0.0 0.18 (1)	L-I		-1590 / 0
B-S		0 / 1800	-18.5	-18.5 0.22 (1)	S-T		0 / 1204
S-R		0 / 4709	-18.5	-18.5 0.69 (1)	S-C		-3749 / 0
R-Q		0 / 4747	-18.5	-18.5 0.71 (1)			
Q-P		0 / 5681	-18.5	-18.5 0.80 (1)			
P-O		0 / 3353	-18.5	-18.5 0.66 (1)			
O-N		0 / 3353	-18.5	-18.5 0.66 (1)			
N-M		0 / 1853	-18.5	-18.5 0.49 (1)			
M-L		0 / 2063	-18.5	-18.5 0.45 (1)			
L-K		0 / 0	-18.5	-18.5 0.09 (1)			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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 3.0 P.S.F.

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.11")
CALCULATED VERT. DEFL.(LL)= L/971 (0.41")
ALLOWABLE DEFL.(TL)= L/360 (1.11")
CALCULATED VERT. DEFL.(TL)= L/459 (0.87")

CSI: TC=0.88/1.00 (D-F:1) , BC=0.80/1.00 (P-Q:1) , WB=0.86/1.00 (F-P: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 .

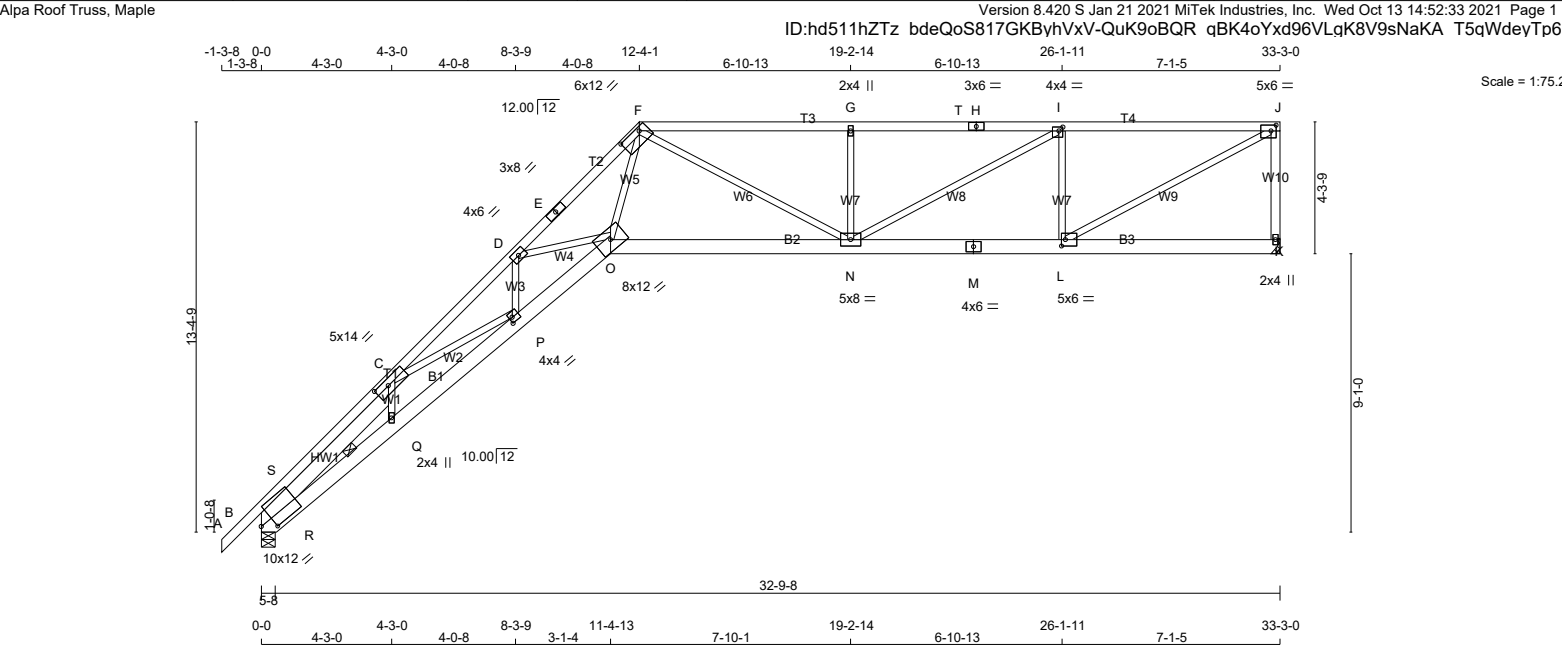
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.99 (O) (INPUT = 1.00)

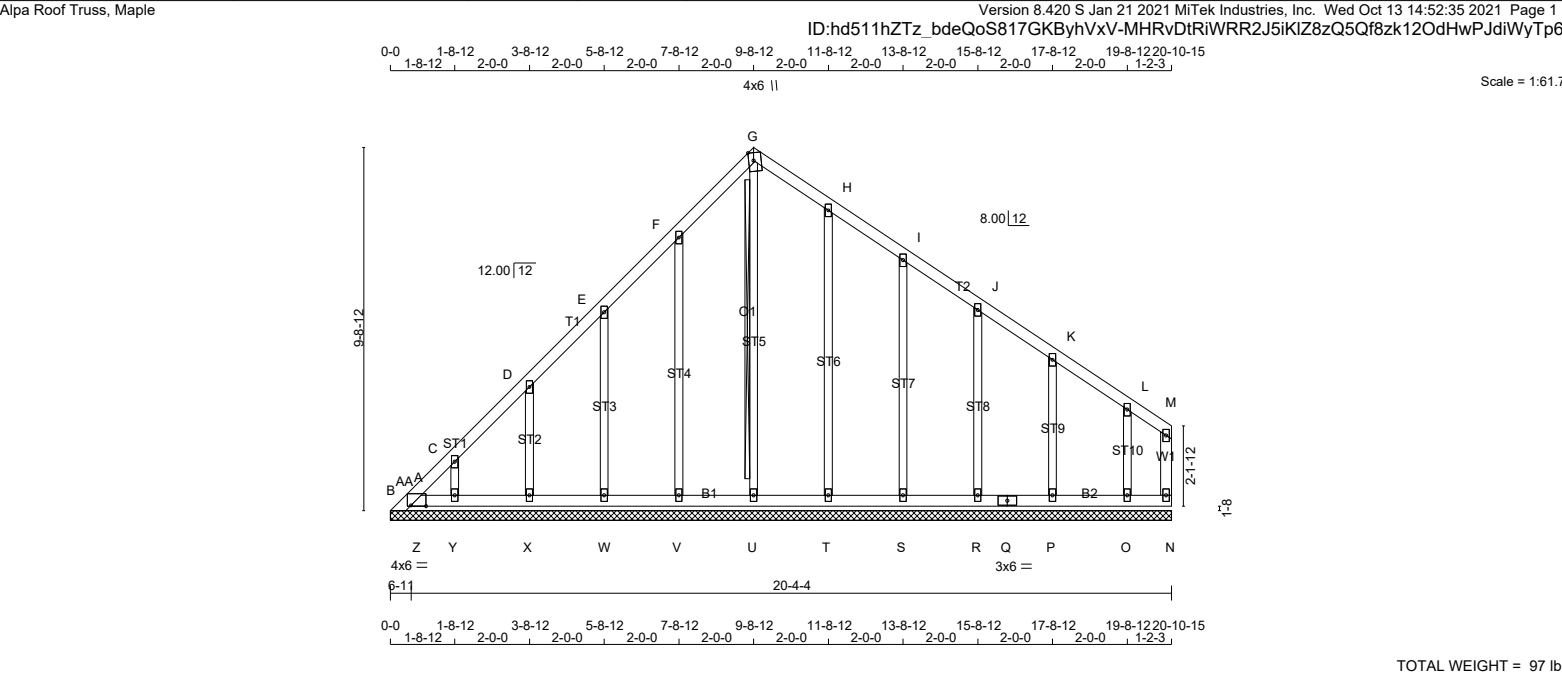
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H108		1	TRUSS DESC. JT 45147	E21104108



TOTAL WEIGHT = 2 X 163 = 327 lb [M]

LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - E 2x4 DRY 1650F 1.5E SPF E - F 2x4 DRY 1650F 1.5E SPF F - H 2x4 DRY 1650F 1.5E SPF H - J 2x4 DRY 1650F 1.5E SPF K - J 2x4 DRY No.2 SPF B - O 2x6 DRY No.2 SPF O - M 2x6 DRY No.2 SPF M - K 2x6 DRY No.2 SPF REINFORCING MEMBERS HW1 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th colspan="2"></th><th colspan="2">FACTORED</th><th colspan="2">MAXIMUM FACTORED</th><th colspan="2">INPUT</th><th colspan="2">REQRD</th></tr><tr><th colspan="2"></th><th colspan="2">GROSS REACTION</th><th colspan="2">GROSS REACTION</th><th colspan="2">BRG</th><th colspan="2">BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>K</td><td>1711</td><td>0</td><td>1711</td><td>0</td><td>0</td><td>MECHANICAL</td><td></td><td></td><td></td></tr><tr><td>B</td><td>1762</td><td>0</td><td>1762</td><td>0</td><td>0</td><td>5-8</td><td>1-11</td><td></td><td></td></tr></table> A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 2-1. ALLOW FOR 0.8" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD UNFACTORED REACTIONS <table><tr><th colspan="2">1ST LCASE</th><th colspan="7">MAX./MIN. COMPONENT REACTIONS</th></tr><tr><th>JT</th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th><th></th></tr><tr><td>K</td><td>1229</td><td>698 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>532 / 0</td><td>0 / 0</td><td></td></tr><tr><td>B</td><td>1258</td><td>756 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>502 / 0</td><td>0 / 0</td><td></td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B BRACING FOR SECTION F-J, MAX. PURLIN SPACING = 2.00 FT. FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.09 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-R. 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) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. CSI (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. CSI (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>A - B</td><td>0 / 16</td><td>-78.0</td><td>-78.0 0.09 (1)</td><td>10.00</td><td>Q - C</td><td>-1 / 51</td><td>0.02 (4)</td></tr><tr><td>B - S</td><td>-3142 / 0</td><td>-78.0</td><td>-78.0 0.14 (1)</td><td>4.38</td><td>C - P</td><td>0 / 853</td><td>0.19 (1)</td></tr><tr><td>S - C</td><td>-1999 / 0</td><td>-78.0</td><td>-78.0 0.12 (1)</td><td>5.26</td><td>P - D</td><td>-248 / 0</td><td>0.04 (1)</td></tr><tr><td>C - D</td><td>-6252 / 0</td><td>-78.0</td><td>-78.0 0.44 (1)</td><td>3.11</td><td>D - O</td><td>-124 / 0</td><td>0.03 (1)</td></tr><tr><td>D - E</td><td>-6100 / 0</td><td>-78.0</td><td>-78.0 0.52 (1)</td><td>3.09</td><td>O - F</td><td>0 / 3896</td><td>0.88 (1)</td></tr><tr><td>E - F</td><td>-6100 / 0</td><td>-78.0</td><td>-78.0 0.52 (1)</td><td>3.09</td><td>F - N</td><td>0 / 287</td><td>0.06 (1)</td></tr><tr><td>F - G</td><td>-3616 / 0</td><td>-85.5</td><td>-85.5 0.71 (1)</td><td>2.00</td><td>N - G</td><td>-624 / 0</td><td>0.16 (1)</td></tr><tr><td>G - T</td><td>-3616 / 0</td><td>-85.5</td><td>-85.5 0.76 (1)</td><td>2.00</td><td>N - I</td><td>0 / 1233</td><td>0.28 (1)</td></tr><tr><td>T - H</td><td>-3616 / 0</td><td>-85.5</td><td>-85.5 0.76 (1)</td><td>2.00</td><td>L - I</td><td>-1270 / 0</td><td>0.33 (1)</td></tr><tr><td>H - I</td><td>-3616 / 0</td><td>-85.5</td><td>-85.5 0.76 (1)</td><td>2.00</td><td>L - J</td><td>0 / 2906</td><td>0.65 (1)</td></tr><tr><td>I - J</td><td>-2545 / 0</td><td>-85.5</td><td>-85.5 0.65 (1)</td><td>2.00</td><td>R - S</td><td>0 / 1218</td><td>0.00 (1)</td></tr><tr><td>K - J</td><td>-1650 / 0</td><td>0.0</td><td>0.0 0.44 (1)</td><td>6.45</td><td>R - C</td><td>-3701 / 0</td><td>0.44 (1)</td></tr><tr><td>B - R</td><td>0 / 1848</td><td>-18.5</td><td>-18.5 0.24 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>R - Q</td><td>0 / 4700</td><td>-18.5</td><td>-18.5 0.69 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>Q - P</td><td>0 / 4746</td><td>-18.5</td><td>-18.5 0.71 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>P - O</td><td>0 / 5747</td><td>-18.5</td><td>-18.5 0.80 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>O - N</td><td>0 / 3366</td><td>-18.5</td><td>-18.5 0.48 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>N - M</td><td>0 / 2545</td><td>-18.5</td><td>-18.5 0.35 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>M - L</td><td>0 / 2545</td><td>-18.5</td><td>-18.5 0.35 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>L - K</td><td>0 / 0</td><td>-18.5</td><td>-18.5 0.10 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>												FACTORED		MAXIMUM FACTORED		INPUT		REQRD				GROSS REACTION		GROSS REACTION		BRG		BRG		JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX	K	1711	0	1711	0	0	MECHANICAL				B	1762	0	1762	0	0	5-8	1-11			1ST LCASE		MAX./MIN. COMPONENT REACTIONS							JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		K	1229	698 / 0	0 / 0	0 / 0	0 / 0	532 / 0	0 / 0		B	1258	756 / 0	0 / 0	0 / 0	0 / 0	502 / 0	0 / 0		CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		FR-TO		FROM	TO	FR-TO				A - B	0 / 16	-78.0	-78.0 0.09 (1)	10.00	Q - C	-1 / 51	0.02 (4)	B - S	-3142 / 0	-78.0	-78.0 0.14 (1)	4.38	C - P	0 / 853	0.19 (1)	S - C	-1999 / 0	-78.0	-78.0 0.12 (1)	5.26	P - D	-248 / 0	0.04 (1)	C - D	-6252 / 0	-78.0	-78.0 0.44 (1)	3.11	D - O	-124 / 0	0.03 (1)	D - E	-6100 / 0	-78.0	-78.0 0.52 (1)	3.09	O - F	0 / 3896	0.88 (1)	E - F	-6100 / 0	-78.0	-78.0 0.52 (1)	3.09	F - N	0 / 287	0.06 (1)	F - G	-3616 / 0	-85.5	-85.5 0.71 (1)	2.00	N - G	-624 / 0	0.16 (1)	G - T	-3616 / 0	-85.5	-85.5 0.76 (1)	2.00	N - I	0 / 1233	0.28 (1)	T - H	-3616 / 0	-85.5	-85.5 0.76 (1)	2.00	L - I	-1270 / 0	0.33 (1)	H - I	-3616 / 0	-85.5	-85.5 0.76 (1)	2.00	L - J	0 / 2906	0.65 (1)	I - J	-2545 / 0	-85.5	-85.5 0.65 (1)	2.00	R - S	0 / 1218	0.00 (1)	K - J	-1650 / 0	0.0	0.0 0.44 (1)	6.45	R - C	-3701 / 0	0.44 (1)	B - R	0 / 1848	-18.5	-18.5 0.24 (1)	10.00				R - Q	0 / 4700	-18.5	-18.5 0.69 (1)	10.00				Q - P	0 / 4746	-18.5	-18.5 0.71 (1)	10.00				P - O	0 / 5747	-18.5	-18.5 0.80 (1)	10.00				O - N	0 / 3366	-18.5	-18.5 0.48 (1)	10.00				N - M	0 / 2545	-18.5	-18.5 0.35 (1)	10.00				M - L	0 / 2545	-18.5	-18.5 0.35 (1)	10.00				L - K	0 / 0	-18.5	-18.5 0.10 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.11") CALCULATED VERT. DEFL.(LL) = L/ 989 (0.40") ALLOWABLE DEFL.(TL)= L/360 (1.11") CALCULATED VERT. DEFL.(TL) = L/ 481 (0.83") CSI: TC=0.76/1.00 (G-I:1) , BC=0.80/1.00 (O-P:1) , WB=0.88/1.00 (F-O:1) , SSI=0.28/1.00 (I-J: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= 0.90 (J) (INPUT = 0.90) JSI METAL= 0.74 (F) (INPUT = 1.00)			
		FACTORED		MAXIMUM FACTORED		INPUT		REQRD																																																																																																																																																																																																																																																																																							
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PLATES (table is in inches) <table><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr><tr><td>B</td><td>TMBMW1-I</td><td>MT20</td><td>10.0</td><td>12.0</td><td>4.00</td><td>5.00</td></tr><tr><td>C</td><td>TMWWW-t</td><td>MT20</td><td>5.0</td><td>14.0</td><td>2.25</td><td>5.50</td></tr><tr><td>D</td><td>TMWWW-t</td><td>MT20</td><td>4.0</td><td>6.0</td><td></td><td></td></tr><tr><td>E</td><td>TS-t</td><td>MT20</td><td>3.0</td><td>8.0</td><td></td><td></td></tr><tr><td>F</td><td>TTWW-h</td><td>MT20</td><td>6.0</td><td>12.0</td><td>1.50</td><td>8.75</td></tr><tr><td>G</td><td>TMW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>H</td><td>TS-t</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td><td></td></tr><tr><td>I</td><td>TMWWW-t</td><td>MT20</td><td>4.0</td><td>4.0</td><td>1.50</td><td>1.50</td></tr><tr><td>J</td><td>TMVW-t</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.25</td><td>2.00</td></tr><tr><td>K</td><td>BMV1+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>L</td><td>BMWWW-t</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.50</td><td>1.50</td></tr><tr><td>M</td><td>BS-t</td><td>MT20</td><td>4.0</td><td>6.0</td><td></td><td></td></tr><tr><td>N</td><td>BMWWW-t</td><td>MT20</td><td>5.0</td><td>8.0</td><td></td><td></td></tr><tr><td>O</td><td>BBWW-h</td><td>MT20</td><td>8.0</td><td>12.0</td><td></td><td></td></tr><tr><td>P</td><td>BMWWW-t</td><td>MT20</td><td>4.0</td><td>4.0</td><td>2.00</td><td>1.25</td></tr><tr><td>Q</td><td>BMW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr></table>				JT	TYPE	PLATES	W	LEN	Y	X	B	TMBMW1-I	MT20	10.0	12.0	4.00	5.00	C	TMWWW-t	MT20	5.0	14.0	2.25	5.50	D	TMWWW-t	MT20	4.0	6.0			E	TS-t	MT20	3.0	8.0			F	TTWW-h	MT20	6.0	12.0	1.50	8.75	G	TMW+w	MT20	2.0	4.0			H	TS-t	MT20	3.0	6.0			I	TMWWW-t	MT20	4.0	4.0	1.50	1.50	J	TMVW-t	MT20	5.0	6.0	2.25	2.00	K	BMV1+p	MT20	2.0	4.0			L	BMWWW-t	MT20	5.0	6.0	2.50	1.50	M	BS-t	MT20	4.0	6.0			N	BMWWW-t	MT20	5.0	8.0			O	BBWW-h	MT20	8.0	12.0			P	BMWWW-t	MT20	4.0	4.0	2.00	1.25	Q	BMW+w	MT20	2.0	4.0			LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2																																																																																																																																																																				
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G	TMW+w	MT20	2.0	4.0																																																																																																																																																																																																																																																																																											
H	TS-t	MT20	3.0	6.0																																																																																																																																																																																																																																																																																											
I	TMWWW-t	MT20	4.0	4.0	1.50	1.50																																																																																																																																																																																																																																																																																									
J	TMVW-t	MT20	5.0	6.0	2.25	2.00																																																																																																																																																																																																																																																																																									
K	BMV1+p	MT20	2.0	4.0																																																																																																																																																																																																																																																																																											
L	BMWWW-t	MT20	5.0	6.0	2.50	1.50																																																																																																																																																																																																																																																																																									
M	BS-t	MT20	4.0	6.0																																																																																																																																																																																																																																																																																											
N	BMWWW-t	MT20	5.0	8.0																																																																																																																																																																																																																																																																																											
O	BBWW-h	MT20	8.0	12.0																																																																																																																																																																																																																																																																																											
P	BMWWW-t	MT20	4.0	4.0	2.00	1.25																																																																																																																																																																																																																																																																																									
Q	BMW+w	MT20	2.0	4.0																																																																																																																																																																																																																																																																																											

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H109G		1	TRUSS DESC. JT 45147	E21104109

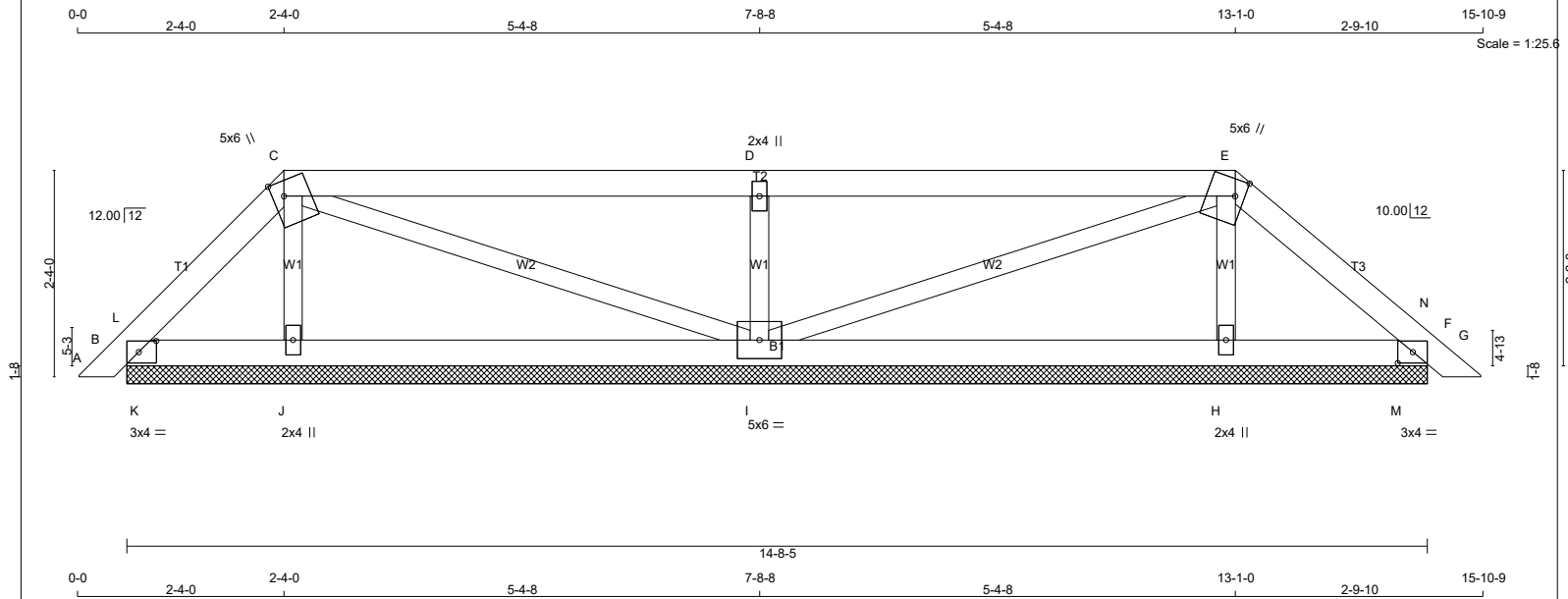


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER A - G 2x4 DRY No.2 G - M 2x4 DRY No.2 N - M 2x4 DRY No.2 B - Q 2x4 DRY No.2 Q - N 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 ALL GABLE WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2'-0" OC.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): N, U, V, W, X, Y, T, S, R, P, O BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 2x4 DRY SPF No.2 T-BRACE AT G-U FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4)				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 PSF SPACING = 24.0 IN./C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014 (55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.05/1.00 (E-F:1) , BC=0.02/1.00 (W-X:4) , WB=0.24/1.00 (H-T:1) , SSI=0.06/1.00 (G-H:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.38 (C) (INPUT = 0.90) JSI METAL= 0.09 (F) (INPUT = 1.00)																																																																																																																																																																																																												
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMB1-I MT20 4.0 6.0 Edge 4.75 C, D, E, F, H, I, J, K, L C TMW+w MT20 2.0 4.0 G TTW+m MT20 4.0 6.0 Edge 1.50 M TMV+p MT20 2.0 4.0 N BMV1+p MT20 2.0 4.0 O, P, R, S, T, U, V, W, X, Y O BMW1+w MT20 2.0 4.0 Q BS-t MT20 3.0 6.0 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				<table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED CSI (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED CSI (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>A-B</td><td>0 / 3</td><td>-96.5 -96.5</td><td>0.00 (1)</td><td>10.00</td><td>U-G</td><td>-153 / 0</td><td>0.10 (1)</td></tr><tr><td>B-AA</td><td>-23 / 0</td><td>-78.0 -78.0</td><td>0.00 (1)</td><td>6.25</td><td>V-F</td><td>-179 / 0</td><td>0.19 (1)</td></tr><tr><td>AA-C</td><td>0 / 5</td><td>-78.0 -78.0</td><td>0.03 (1)</td><td>10.00</td><td>W-E</td><td>-146 / 0</td><td>0.07 (1)</td></tr><tr><td>C-D</td><td>0 / 7</td><td>-78.0 -78.0</td><td>0.04 (1)</td><td>10.00</td><td>X-D</td><td>-156 / 0</td><td>0.03 (1)</td></tr><tr><td>D-E</td><td>0 / 10</td><td>-78.0 -78.0</td><td>0.04 (1)</td><td>10.00</td><td>Y-C</td><td>-121 / 0</td><td>0.02 (1)</td></tr><tr><td>E-F</td><td>0 / 19</td><td>-78.0 -78.0</td><td>0.05 (1)</td><td>10.00</td><td>T-H</td><td>-178 / 0</td><td>0.24 (1)</td></tr><tr><td>F-G</td><td>0 / 8</td><td>-78.0 -78.0</td><td>0.05 (1)</td><td>10.00</td><td>S-I</td><td>-150 / 0</td><td>0.12 (1)</td></tr><tr><td>G-H</td><td>0 / 7</td><td>-78.0 -78.0</td><td>0.05 (1)</td><td>10.00</td><td>R-J</td><td>-154 / 0</td><td>0.07 (1)</td></tr><tr><td>H-I</td><td>0 / 16</td><td>-78.0 -78.0</td><td>0.05 (1)</td><td>10.00</td><td>P-K</td><td>-159 / 0</td><td>0.04 (1)</td></tr><tr><td>I-J</td><td>0 / 12</td><td>-78.0 -78.0</td><td>0.04 (1)</td><td>10.00</td><td>O-L</td><td>-131 / 0</td><td>0.02 (1)</td></tr><tr><td>J-K</td><td>0 / 8</td><td>-78.0 -78.0</td><td>0.04 (1)</td><td>10.00</td><td>Z-AA</td><td>-4 / 2</td><td>0.00 (1)</td></tr><tr><td>K-L</td><td>0 / 7</td><td>-78.0 -78.0</td><td>0.04 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>L-M</td><td>0 / 9</td><td>-78.0 -78.0</td><td>0.03 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>N-M</td><td>-26 / 0</td><td>0.0 0.0</td><td>0.00 (1)</td><td>7.81</td><td></td><td></td><td></td></tr></table> <table><tr><td>B-Z</td><td>0 / 8</td><td>-18.5 -18.5</td><td>0.00 (1)</td><td>10.00</td></tr><tr><td>Z-Y</td><td>0 / 8</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>10.00</td></tr><tr><td>Y-X</td><td>-3 / 0</td><td>-18.5 -18.5</td><td>0.02 (4)</td><td>10.00</td></tr><tr><td>X-W</td><td>-8 / 0</td><td>-18.5 -18.5</td><td>0.02 (4)</td><td>10.00</td></tr><tr><td>W-V</td><td>-11 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>6.25</td></tr><tr><td>V-U</td><td>-13 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>6.25</td></tr><tr><td>U-T</td><td>-13 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>6.25</td></tr><tr><td>T-S</td><td>-12 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>6.25</td></tr><tr><td>S-R</td><td>-10 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>10.00</td></tr><tr><td>R-Q</td><td>-7 / 0</td><td>-18.5 -18.5</td><td>0.02 (4)</td><td>10.00</td></tr><tr><td>Q-P</td><td>-7 / 0</td><td>-18.5 -18.5</td><td>0.02 (4)</td><td>10.00</td></tr><tr><td>P-O</td><td>-4 / 0</td><td>-18.5 -18.5</td><td>0.02 (4)</td><td>10.00</td></tr><tr><td>O-N</td><td>0 / 0</td><td>-18.5 -18.5</td><td>0.01 (4)</td><td>10.00</td></tr></table>				CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		FR-TO		FROM TO		FR-TO				A-B	0 / 3	-96.5 -96.5	0.00 (1)	10.00	U-G	-153 / 0	0.10 (1)	B-AA	-23 / 0	-78.0 -78.0	0.00 (1)	6.25	V-F	-179 / 0	0.19 (1)	AA-C	0 / 5	-78.0 -78.0	0.03 (1)	10.00	W-E	-146 / 0	0.07 (1)	C-D	0 / 7	-78.0 -78.0	0.04 (1)	10.00	X-D	-156 / 0	0.03 (1)	D-E	0 / 10	-78.0 -78.0	0.04 (1)	10.00	Y-C	-121 / 0	0.02 (1)	E-F	0 / 19	-78.0 -78.0	0.05 (1)	10.00	T-H	-178 / 0	0.24 (1)	F-G	0 / 8	-78.0 -78.0	0.05 (1)	10.00	S-I	-150 / 0	0.12 (1)	G-H	0 / 7	-78.0 -78.0	0.05 (1)	10.00	R-J	-154 / 0	0.07 (1)	H-I	0 / 16	-78.0 -78.0	0.05 (1)	10.00	P-K	-159 / 0	0.04 (1)	I-J	0 / 12	-78.0 -78.0	0.04 (1)	10.00	O-L	-131 / 0	0.02 (1)	J-K	0 / 8	-78.0 -78.0	0.04 (1)	10.00	Z-AA	-4 / 2	0.00 (1)	K-L	0 / 7	-78.0 -78.0	0.04 (1)	10.00				L-M	0 / 9	-78.0 -78.0	0.03 (1)	10.00				N-M	-26 / 0	0.0 0.0	0.00 (1)	7.81				B-Z	0 / 8	-18.5 -18.5	0.00 (1)	10.00	Z-Y	0 / 8	-18.5 -18.5	0.01 (4)	10.00	Y-X	-3 / 0	-18.5 -18.5	0.02 (4)	10.00	X-W	-8 / 0	-18.5 -18.5	0.02 (4)	10.00	W-V	-11 / 0	-18.5 -18.5	0.01 (4)	6.25	V-U	-13 / 0	-18.5 -18.5	0.01 (4)	6.25	U-T	-13 / 0	-18.5 -18.5	0.01 (4)	6.25	T-S	-12 / 0	-18.5 -18.5	0.01 (4)	6.25	S-R	-10 / 0	-18.5 -18.5	0.01 (4)	10.00	R-Q	-7 / 0	-18.5 -18.5	0.02 (4)	10.00	Q-P	-7 / 0	-18.5 -18.5	0.02 (4)	10.00	P-O	-4 / 0	-18.5 -18.5	0.02 (4)	10.00	O-N	0 / 0	-18.5 -18.5	0.01 (4)	10.00	LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2			
CHORDS				WEBS																																																																																																																																																																																																																
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)																																																																																																																																																																																																														
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Y-X	-3 / 0	-18.5 -18.5	0.02 (4)	10.00																																																																																																																																																																																																																
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Scale = 1:38.9



JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)



TOTAL WEIGHT = 50 lb

LUMBER

N. L. G. A. RULES

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

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	1.50	2.50
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.25
F	TMB1-I	MT20	3.0	4.0	1.50	2.00
H	BMW1+w	MT20	2.0	4.0		
I	BMWVVV1-t	MT20	5.0	6.0		
J	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED		MAXIMUM FACTORED		INPUT	REQRD
	GROSS REACTION		GROSS REACTION		BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
F	146	0	146	0	0	14-8.5
J	169	0	169	0	0	14-8.5
B	258	0	258	0	0	14-8.5
I	640	0	640	0	0	14-8.5
H	280	0	280	0	0	14-8.5

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	101	79 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
F	117	87 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0
J	188	95 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
I	454	289 / 0	0 / 0	0 / 0	0 / 0	165 / 0	0 / 0
H	202	107 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, J, I, 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 11	-78.0	-78.0 0.01 (1)	10.00	J-C	-162 / 0	0.02 (1)
B-L	-19 / 11	-78.0	-78.0 0.02 (1)	6.25	C-D	-23 / 0	0.01 (1)
L-C	-64 / 0	-78.0	-78.0 0.02 (1)	6.25	I-D	-523 / 0	0.08 (1)
C-D	-10 / 0	-78.0	-78.0 0.38 (1)	10.00	I-E	-25 / 0	0.01 (1)
D-E	-10 / 0	-78.0	-78.0 0.38 (1)	10.00	H-E	-180 / 0	0.03 (1)
E-N	-62 / 0	-78.0	-78.0 0.04 (1)	6.25	K-L	-124 / 0	0.00 (1)
N-F	-22 / 2	-78.0	-78.0 0.02 (1)	6.25	M-N	-139 / 0	0.00 (1)
F-G	0 / 12	-78.0	-78.0 0.02 (1)	10.00			
B-K	0 / 41	-18.5	-18.5 0.04 (1)	10.00			
K-J	0 / 41	-18.5	-18.5 0.08 (4)	10.00			
J-I	0 / 32	-18.5	-18.5 0.11 (4)	10.00			
I-H	0 / 34	-18.5	-18.5 0.11 (4)	10.00			
H-M	0 / 43	-18.5	-18.5 0.08 (4)	10.00			
M-F	0 / 43	-18.5	-18.5 0.05 (1)	10.00			

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.38/1.00 (D-E:1), BC=0.11/1.00 (H-I:4),
WB=0.08/1.00 (D-I:1), SSI=0.20/1.00 (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

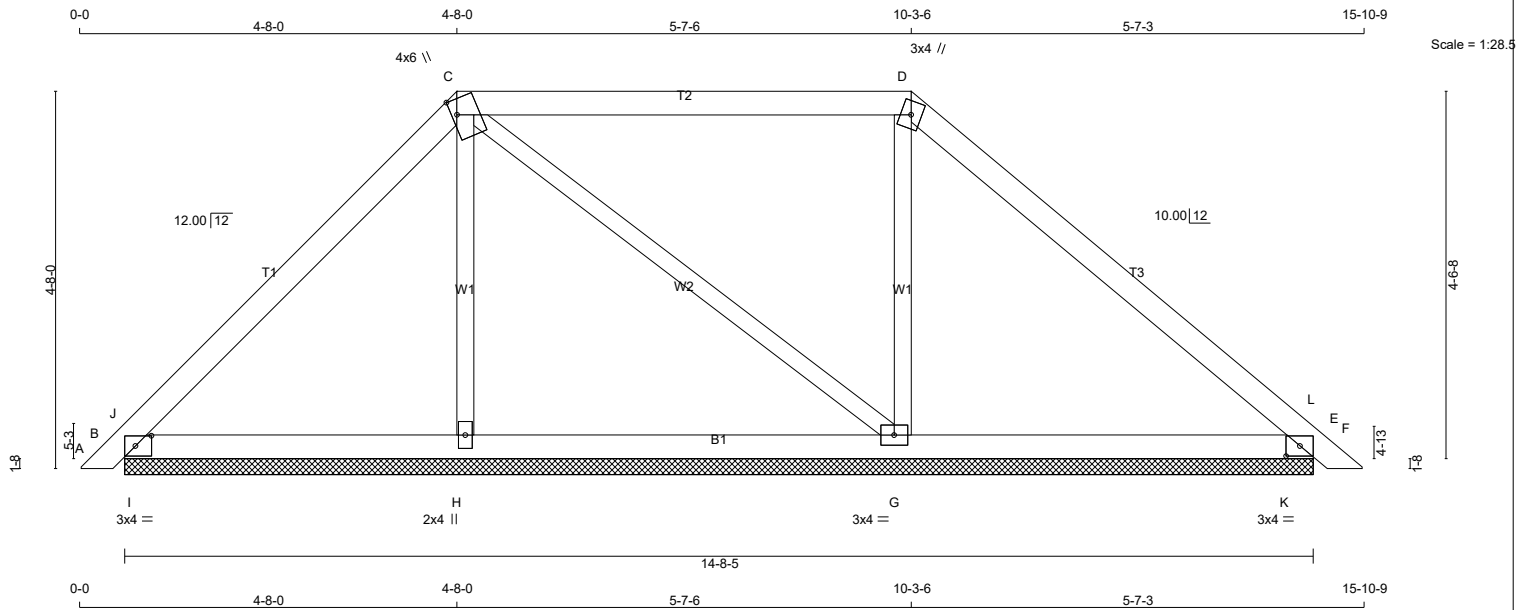
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES					
	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= 0.26 (D) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)



TOTAL WEIGHT = 51 lb

LUMBER

N. L. G. A. RULES

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.50
C	TTWW+m	MT20	4.0	6.0	2.25	0.75
D	TTW+m	MT20	3.0	4.0		
E	TMB1-I	MT20	3.0	4.0	1.50	2.00
G	BMWV1-t	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

	FACTORED		MAXIMUM FACTORED		INPUT	REQD
	GROSS REACTION		GROSS REACTION		BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
JT	378	0	378	0	0	14-8-5
E	381	0	381	0	0	14-8-5
H	304	0	304	0	0	14-8-5
G	429	0	429	0	0	14-8-5

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	266	183 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0
E	269	181 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
H	220	115 / 0	0 / 0	0 / 0	0 / 0	105 / 0	0 / 0
G	307	178 / 0	0 / 0	0 / 0	0 / 0	129 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 11	-78.0	-78.0 0.01 (1)	10.00	H-C	-187 / 0	0.06 (1)
B-J	-43 / 1	-78.0	-78.0 0.09 (1)	6.25	C-G	-23 / 0	0.02 (1)
J-C	-228 / 0	-78.0	-78.0 0.16 (1)	6.25	G-D	-270 / 0	0.08 (1)
C-D	-129 / 0	-78.0	-78.0 0.42 (1)	6.25	I-J	-441 / 0	0.00 (1)
D-L	-190 / 0	-78.0	-78.0 0.24 (1)	6.25	K-L	-547 / 0	0.00 (1)
L-E	-41 / 72	-78.0	-78.0 0.13 (1)	6.25			
E-F	0 / 12	-78.0	-78.0 0.02 (1)	10.00			
B-I	0 / 152	-18.5	-18.5 0.15 (1)	10.00			
I-H	0 / 152	-18.5	-18.5 0.15 (1)	10.00			
H-G	0 / 148	-18.5	-18.5 0.14 (4)	10.00			
G-K	0 / 136	-18.5	-18.5 0.20 (1)	10.00			
K-E	0 / 136	-18.5	-18.5 0.20 (1)	10.00			

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL		LOAD	=	34.4	PSF

TOTAL LOAD = 34.4 FSI

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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.42/1.00 (C-D:1), BC=0.20/1.00 (E-K:1),
WB=0.08/1.00 (D-G:1), SSI=0.43/1.00 (E-K: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.

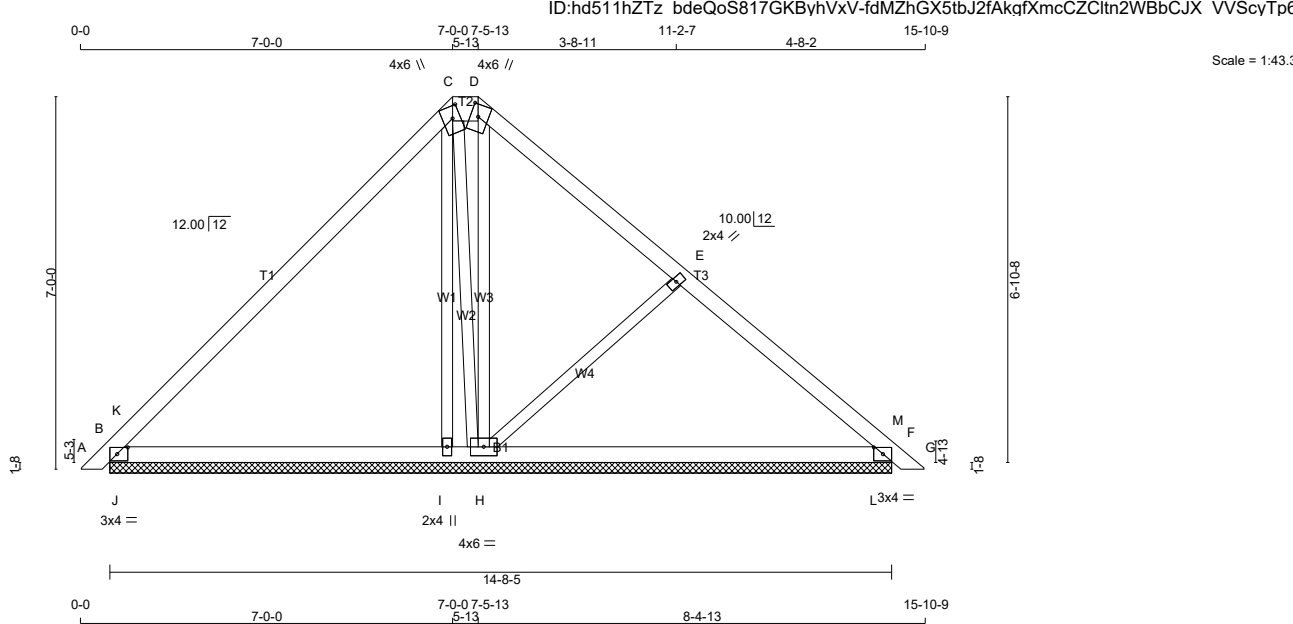
JSI GRIP= 0.45 (D) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H114P		1	TRUSS DESC. JT 45147	E21104113

Alpa Roof Truss, Maple

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ID:hd511hZTz bdeQoS817GKByhVxV-fdMZhGX5tbJ2fAkqfXmcCZCltN2WBbCJX VVScyTp63



TOTAL WEIGHT = 60 lb [M]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	1.50 2.50
C	TTWW+m	MT20	4.0	6.0	2.75 1.75
D	TTW+m	MT20	4.0	6.0	2.75 1.75
E	TMW+w	MT20	2.0	4.0	
F	TMB1-I	MT20	3.0	4.0	1.50 2.00
H	BMW1+I	MT20	4.0	6.0	
I	BMW1+w	MT20	2.0	4.0	

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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
B		408	0	408	0	0	14-8-5	1-8	
F		469	0	469	0	0	14-8-5	1-8	
I		302	0	302	0	0	14-8-5	1-8	
H		314	0	314	0	0	14-8-5	1-8	

UNFACTORED REACTIONS

		1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS					
JT				SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B		290	183 / 0	0 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
F		333	212 / 0	0 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0
I		211	150 / 0	0 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
H		229	113 / 0	0 / 0	0 / 0	0 / 0	0 / 0	116 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 11	-78.0 -78.0	0.01 (1)	10.00	I-C	-47 / 0	0.04 (1)
B-K	0 / 624	-78.0 -78.0	0.37 (1)	10.00	H-D	-58 / 7	0.04 (1)
K-C	-154 / 0	-78.0 -78.0	0.40 (1)	6.25	C-H	-93 / 0	0.07 (1)
C-D	-85 / 0	-78.0 -78.0	0.00 (1)	6.25	H-E	-294 / 0	0.12 (1)
D-E	-134 / 0	-78.0 -78.0	0.20 (1)	6.25	J-K	-1209 / 0	0.00 (1)
E-M	-363 / 0	-78.0 -78.0	0.20 (1)	6.25	L-M	0 / 248	0.00 (1)
M-F	-543 / 0	-78.0 -78.0	0.12 (4)	6.25			
F-G	0 / 12	-78.0 -78.0	0.02 (1)	10.00			
B-J	0 / 93	-18.5 -18.5	0.35 (1)	10.00			
J-I	0 / 93	-18.5 -18.5	0.35 (1)	10.00			
I-H	0 / 94	-18.5 -18.5	0.27 (1)	10.00			
H-L	0 / 302	-18.5 -18.5	0.25 (4)	10.00			
L-F	0 / 302	-18.5 -18.5	0.11 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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, NBC2015

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.40/1.00 (C-K:1) , BC=0.35/1.00 (B-J:1) , WB=0.12/1.00 (E-H:1) , SSI=0.94/1.00 (B-J: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

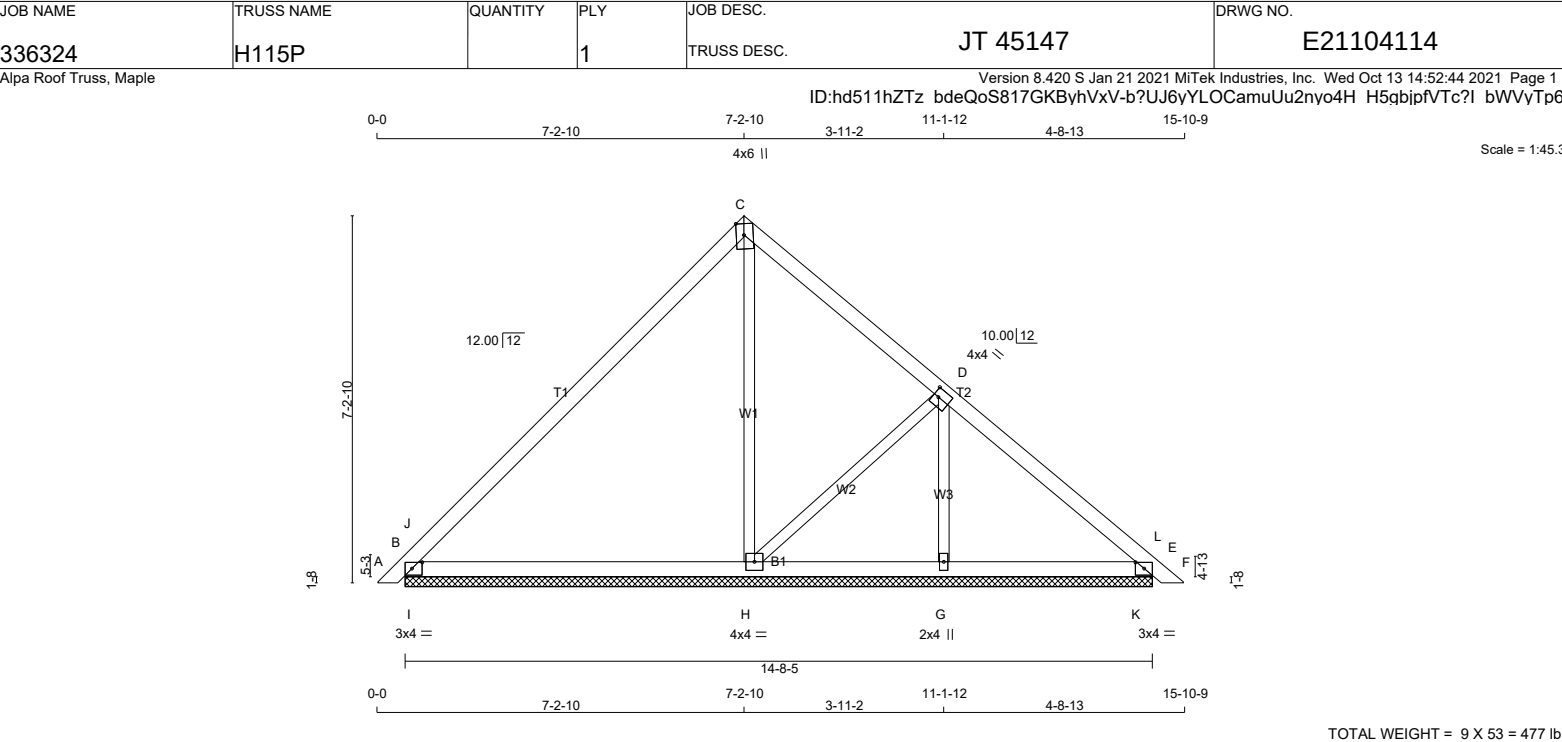
PLATE PLACEMENT TOL. = 0.250 inches

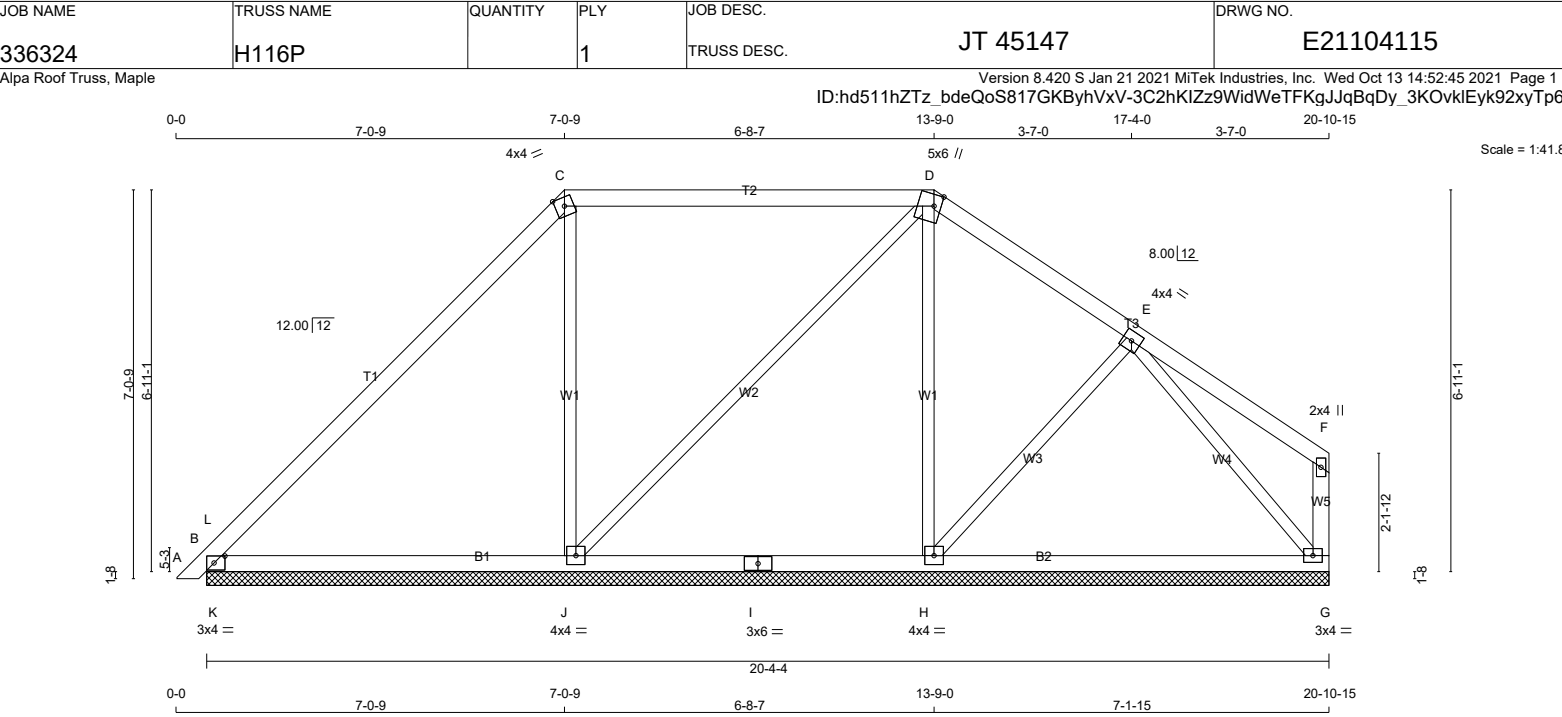
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.12 (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	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-l	MT20	3.0	4.0	1.50 2.50
C	TTW-m	MT20	4.0	4.0	Edge
D	TTWW+m	MT20	5.0	6.0	2.50 1.50
E	TMWW-t	MT20	4.0	4.0	
F	TMV+p	MT20	2.0	4.0	
G	BMVW1-t	MT20	3.0	4.0	
H	BMWW1-t	MT20	4.0	4.0	
I	BS-t	MT20	3.0	6.0	
J	BMWW1-t	MT20	4.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
G	452	0	452	0	0	20-4-4 (10-4-4)	8		
B	494	0	494	0	0	20-4-4 (10-4-4)	8		
J	461	0	461	0	0	20-4-4 (10-4-4)	8		
H	592	0	592	0	0	20-4-4 (10-4-4)	8		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
G	320	210 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0		
B	349	229 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0		
J	330	193 / 0	0 / 0	0 / 0	0 / 0	137 / 0	0 / 0		
H	425	241 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, B, 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A - B	0 / 11	-78.0	-78.0 0.01 (1)	10.00	J - C	-314 / 0	0.26 (1)
B - L	-27 / 459	-78.0	-78.0 0.32 (1)	6.25	J - D	0 / 55	0.01 (1)
L - C	-251 / 0	-78.0	-78.0 0.42 (1)	6.25	H - D	-323 / 0	0.26 (1)
C - D	-158 / 0	-78.0	-78.0 0.60 (1)	6.25	H - E	-186 / 0	0.10 (1)
D - E	-168 / 0	-78.0	-78.0 0.17 (1)	6.25	E - G	-380 / 0	0.19 (1)
E - F	0 / 19	-78.0	-78.0 0.17 (1)	10.00	K - L	-1126 / 0	0.00 (1)
G - F	-106 / 0	0.0	0.0 0.01 (1)	7.81			
B - K	0 / 162	-18.5	-18.5 0.34 (1)	10.00			
K - J	0 / 162	-18.5	-18.5 0.34 (1)	10.00			
J - I	0 / 119	-18.5	-18.5 0.22 (4)	10.00			
I - H	0 / 119	-18.5	-18.5 0.22 (4)	10.00			
H - G	0 / 246	-18.5	-18.5 0.23 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.60/1.00 (C-D:1) , BC=0.34/1.00 (J-K:1) , WB=0.26/1.00 (D-H:1) , SSI=0.88/1.00 (B-K: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

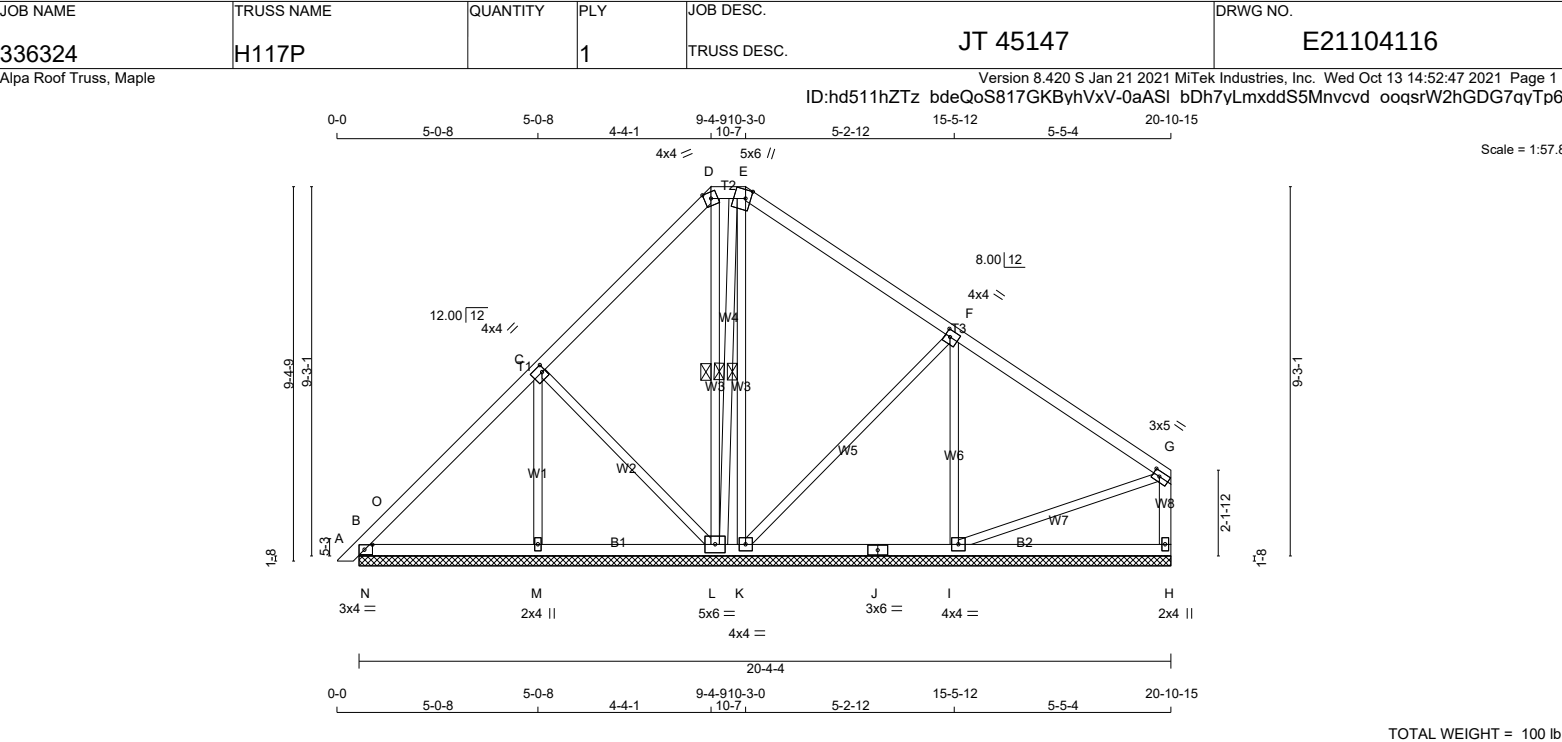
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (G) (INPUT = 0.90)
JSI METAL= 0.12 (E) (INPUT = 1.00)

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



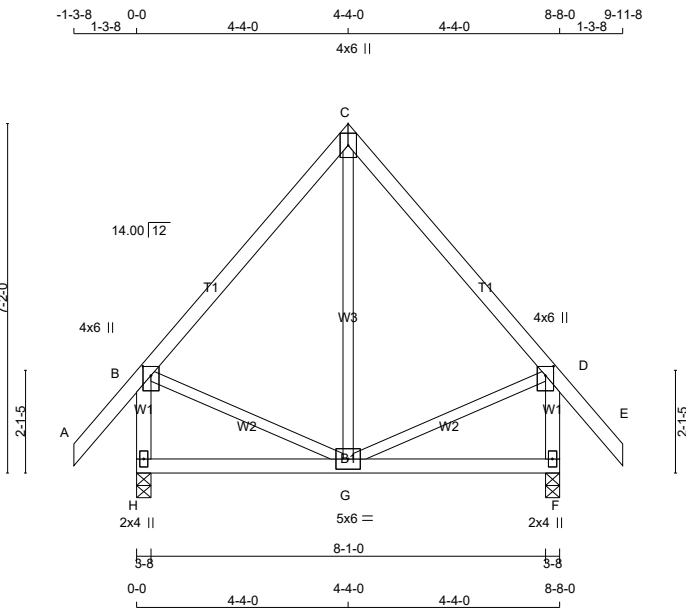


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H118		1	TRUSS DESC. JT 45147	E21104117

Alpa Roof Truss, Maple

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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	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 is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.25 2.00
C	TTW+p	MT20	4.0	6.0	
D	TMVW+p	MT20	4.0	6.0	2.25 2.00
F	BMV1+p	MT20	2.0	4.0	
G	BMVWW-t	MT20	5.0	6.0	
H	BMV1+p	MT20	2.0	4.0	

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	527	0	527	0	3-8	1-8
H	527	0	527	0	3-8	1-8
F	527	0	527	0	3-8	1-8

UNFACTORED REACTIONS						
1ST LCASE	MAX.	MIN.	COMPONENT	REACTIONS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
H	374	241 / 0	0 / 0	0 / 0	0 / 0	133 / 0
F	374	241 / 0	0 / 0	0 / 0	0 / 0	133 / 0

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

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	0 / 42	-78.0	-78.0	0.11 (1)	G-C	-13 / 64	0.02 (4)		
B-C	-214 / 0	-78.0	-78.0	0.19 (1)	B-G	0 / 150	0.03 (1)		
C-D	-214 / 0	-78.0	-78.0	0.19 (1)	G-D	0 / 150	0.03 (1)		
D-E	0 / 42	-78.0	-78.0	0.11 (1)					
H-B	-497 / 0	0.0	0.0	0.06 (1)					
F-D	-497 / 0	0.0	0.0	0.06 (1)					
H-G	0 / 0	-18.5	-18.5	0.10 (4)					
G-F	0 / 0	-18.5	-18.5	0.10 (4)					

DESIGN CRITERIA

SPECIFIED LOADS:		
TOP CH.	LL	= 21.0 PSF
	DL	= 6.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.4 PSF
TOTAL LOAD = 34.4 PSF		

SPACING = 24.0 IN./C
THIS DESIGN 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.19/1.00 (B-C:1) , BC=0.10/1.00 (G-H:4) , WB=0.03/1.00 (D-G:1) , SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.14 (D) (INPUT = 1.00)

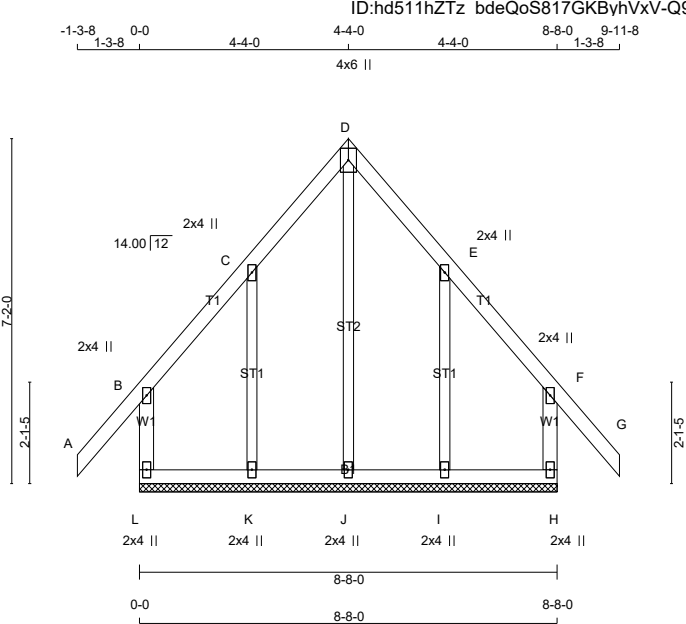
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H118G		1	TRUSS DESC. JT 45147	E21104118

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 46 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
L - B	2x4	DRY	No.2
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
H - F	2x4	DRY	No.2
L - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			
GABLE STUDS SPACED AT 2'-0" OC.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMW+w	MT20	2.0	4.0	
D	TTW+p	MT20	4.0	6.0	
E	TMW+w	MT20	2.0	4.0	
F	TMV+p	MT20	2.0	4.0	
H	BMV1+p	MT20	2.0	4.0	
I, J, K					
I	BMW1+w	MT20	2.0	4.0	
L	BMV1+p	MT20	2.0	4.0	

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO		FROM TO	
L-B	-213 / 0	0.0 0.0	0.02 (1)
A-B	0 / 42	-78.0 -78.0	0.11 (1)
B-C	-21 / 0	-78.0 -78.0	0.05 (1)
C-D	-14 / 0	-78.0 -78.0	0.04 (1)
D-E	-14 / 0	-78.0 -78.0	0.04 (1)
E-F	-21 / 0	-78.0 -78.0	0.05 (1)
F-G	0 / 42	-78.0 -78.0	0.11 (1)
H-F	-213 / 0	0.0 0.0	0.02 (1)
L-K	0 / 13	-18.5 -18.5	0.02 (4)
K-J	0 / 9	-18.5 -18.5	0.02 (4)
J-I	0 / 9	-18.5 -18.5	0.02 (4)
I-H	0 / 13	-18.5 -18.5	0.02 (4)
WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH	FR-TO
J-D	-142 / 0	0.12 (1)	
K-C	-163 / 0	0.06 (1)	
I-E	-163 / 0	0.06 (1)	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (F-G:1), BC=0.02/1.00 (K-L:4), WB=0.12/1.00 (D-J:1), SSI=0.06/1.00 (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
MIN	MAX	MIN	MAX

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.11 (B) (INPUT = 1.00)

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

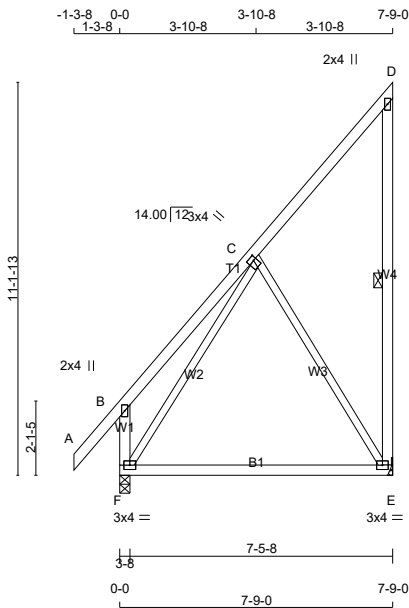


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H119		1	TRUSS DESC. JT 45147	E21104119

Alpa Roof Truss, Maple

ID:hd511hZTz bdeQoS817GKByhVxV-MYzLohfMWfaesjVbFexycqdWTpS3X45nrYw1n1yTp\$V

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TOTAL WEIGHT = 3 X 50 = 150 lb

[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMWW+t	MT20	3.0	4.0	1.50 1.00
D	TMV+p	MT20	2.0	4.0	
E	BMVW1-t	MT20	3.0	4.0	
F	BMVW1-t	MT20	3.0	4.0	

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
JT	374	0	374	0	MECHANICAL	
E	483	0	483	0	3-8	1-8
F						

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

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	267	163 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
E	342	222 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0
F							

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 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)		MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)	
		VERT.	LC1			UNBRAC LENGTH	FR-TO
FR-TO		FROM	TO				
A-B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C-E	-217 / 0 0.22 (1)
B-C	0 / 30	-78.0	-78.0	0.20 (1)	10.00	F-C	-230 / 0 0.22 (1)
C-D	-27 / 0	-78.0	-78.0	0.15 (1)	6.25		
E-D	-121 / 0	0.0	0.0	0.08 (1)	6.25		
F-B	-215 / 0	0.0	0.0	0.03 (1)	7.81		
F-E	0 / 120	-18.5	-18.5	0.33 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	=	21.0 PSF
	DL	=	6.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.4 PSF
TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/572 (0.16")

CSI: TC=0.20/1.00 (B-C:1) , BC=0.33/1.00 (E-F:4) ,
WB=0.22/1.00 (C-F:1) , SSI=0.10/1.00 (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
MT20	650	371	1747	788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (C) (INPUT = 0.90)
JSI METAL= 0.17 (C) (INPUT = 1.00)

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

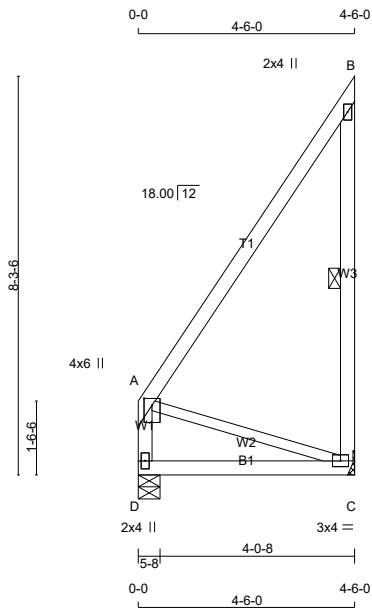


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H120		1	TRUSS DESC. JT 45147	E21104120

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 5 X 28 = 140 lb

[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
C - B	2x4	DRY	No.2
D - A	2x4	DRY	No.2
D - C	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
A	TMVW+p	MT20	4.0	6.0	1.75	2.00
B	TMV+p	MT20	2.0	4.0		
C	BMVW1-t	MT20	3.0	4.0		
D	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	VERT	HORZ	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
			DOWN	HORZ	DOWN	HORZ	IN-SX	IN-SX
C	217	0	217	0	0	0	MECHANICAL	
D	217	0	217	0	0	0	5-8	1-8

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

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS						
		1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	155	94 / 0	0 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
D	155	94 / 0	0 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-C.

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)		MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)	
		VERT.	LC1			UNBRAC LENGTH	FR-TO
FR-TO		FROM	TO				
A-B	0 / 0	-78.0	-78.0	0.27 (1)	10.00	A-C	0 / 0
C-B	-175 / 0	0.0	0.0	0.05 (1)	6.25		
D-A	-175 / 0	0.0	0.0	0.02 (1)	7.81		
D-C	0 / 0	-18.5	-18.5	0.11 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD =					34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.27/1.00 (A-B:1) , BC=0.11/1.00 (C-D:4) ,
WB=0.00/1.00 (A-C:1) , SSI=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)		
	MAX	MIN	MAX	MIN	MAX
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

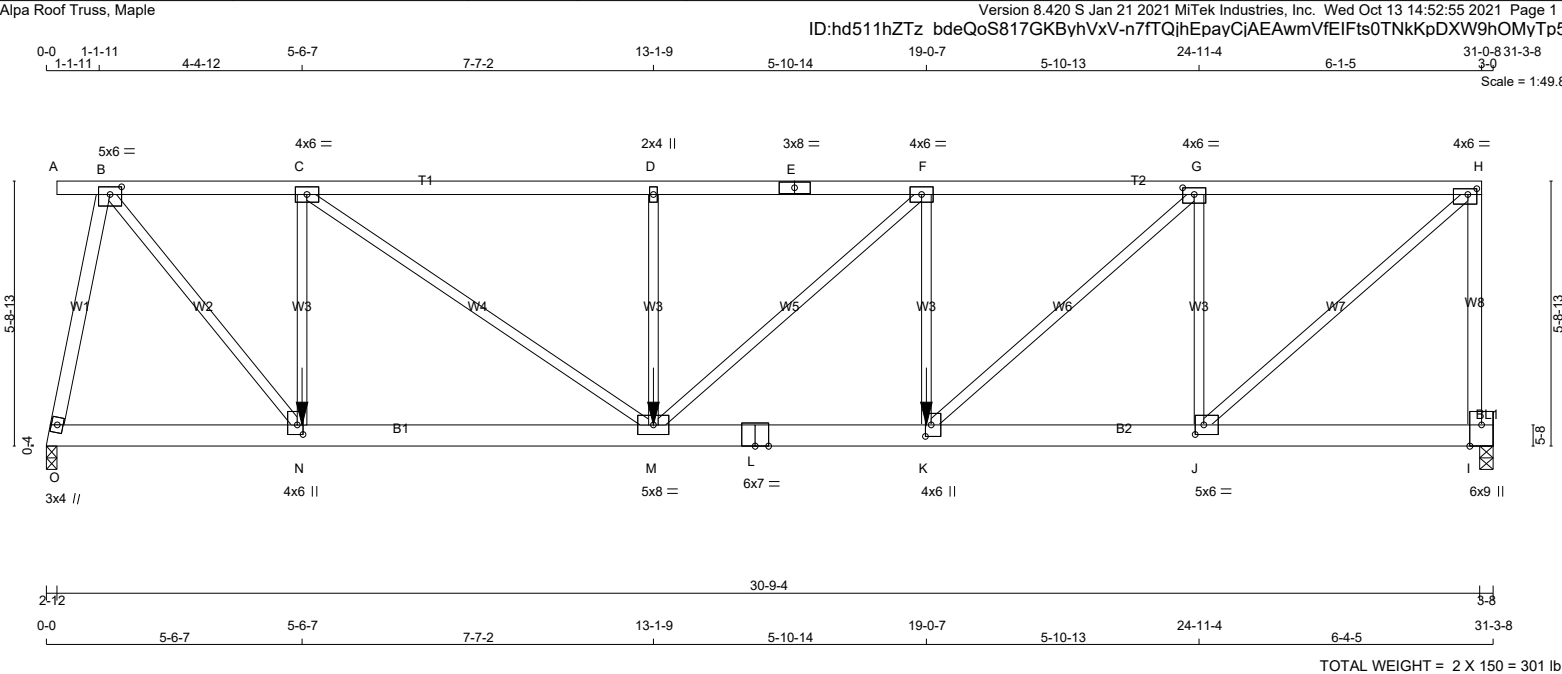
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (C) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H130A		2	TRUSS DESC.	E21104121



TOTAL WEIGHT = 2 X 150 = 301 lb					
[M]					
LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER	DESCR.		
A - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
I - H	2x4	DRY	No.2	SPF	
O - L	2x6	DRY	No.2	SPF	
L - I	2x6	DRY	No.2	SPF	

BEARING BLOCKS					
BL1	2x4	DRY	No.2	SPF	
ALL WEBS					
EXCEPT	2x3	DRY	No.2	SPF	
O - B	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- E	12	SIDE(44.7)
E- H	12	SIDE(44.7)
H- I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
O- L	12	SIDE(172.7)
L- I	12	SIDE(172.5)
WEBS : (0.122"x3") SPIRAL NAILS		
C- N	6	SIDE(18.3)
D- M	6	SIDE(18.5)
F- K	6	SIDE(114.0)
2x3	1	
2x4	1	

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.

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



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
O	3686	0	3686	0	2-12
I	2986	0	2986	0	3-8

UNFACTORED REACTIONS					
	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
O	2630	1594 / 0	0 / 0	0 / 0	1036 / 0
I	2129	1300 / 0	0 / 0	0 / 0	829 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.66 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING					
TOTAL LOAD CASES: (4)					
CHORDS					
	MAX. FACTORED	FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	
	(LBS)	(PLF)	CSI (LC)		
WEBS					
	MAX. FACTORED	FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	
	(LBS)	(PLF)	CSI (LC)		
FR-TO					
	FROM	TO			
A- B	0 / 0	-78.0	-78.0	0.03 (1)	10.00
B- C	-3275 / 0	-165.7	-165.7	0.31 (1)	4.80
C- D	-5523 / 0	-78.0	-78.0	0.72 (1)	3.66
D- E	-5523 / 0	-167.5	-167.5	0.57 (1)	3.66
E- F	-5523 / 0	-167.5	-167.5	0.57 (1)	3.66
F- G	-5375 / 0	-78.0	-78.0	0.47 (1)	3.83
G- H	-3041 / 0	-78.0	-78.0	0.27 (1)	5.05
I- H	-2937 / 0	0.0	0.0	0.83 (1)	6.71
O- N	0 / 689	-39.3	-39.3	0.09 (4)	10.00
N- M	0 / 3275	-18.5	-18.5	0.25 (1)	10.00
M- L	0 / 5375	-39.8	-39.8	0.42 (1)	10.00
L- K	0 / 5375	-39.8	-39.8	0.42 (1)	10.00
K- J	0 / 3041	-18.5	-18.5	0.22 (1)	10.00
J- I	-80 / 0	-18.5	-18.5	0.04 (4)	6.25

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	
K	19-0-7	-1098	-1098	---	FRONT
M	13-1-9	-732	-732	---	FRONT
N	5-6-7	-732	-732	---	FRONT

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	=	21.0 PSF
	DL	=	6.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.4 PSF
TOTAL LOAD = 34.4 PSF			

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 6-6-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 5-6-7 OF SPAN
MEASURED FROM THE LEFT.

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.02")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.26")

CSI: TC=0.83/1.00 (H-I:1) , BC=0.42/1.00 (K-M:1) , WB=0.67/1.00 (B-O:1) , SS=0.22/1.00 (D-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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H130A		2	JT 45147	E21104121(2)

Alpa Roof Truss, Maple

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ID:hd511hZTz_bdeQoS817GKByhVxV-n7fTQjhEpayCjAEAwmVfEIFts0TNkKpDXW9hOMyTp5s

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	5.0	6.0	2.00	3.00
C	TMWW-t	MT20	4.0	6.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
F	TMWW-t	MT20	4.0	6.0		
G	TMWW-t	MT20	4.0	6.0	1.75	3.00
H	TMVW-t	MT20	4.0	6.0	1.50	2.25
I	BMVK1+p	MT20	6.0	9.0	Edge	3.00
J	BMWW-t	MT20	5.0	6.0	2.50	2.25
K	BMWW+t	MT20	4.0	6.0	3.00	1.50
L	BS-t	MT20	6.0	7.0		
M	BMWWW-t	MT20	5.0	8.0		
N	BMWW+t	MT20	4.0	6.0	2.50	1.50
O	BMW1+w	MT20	3.0	4.0		

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

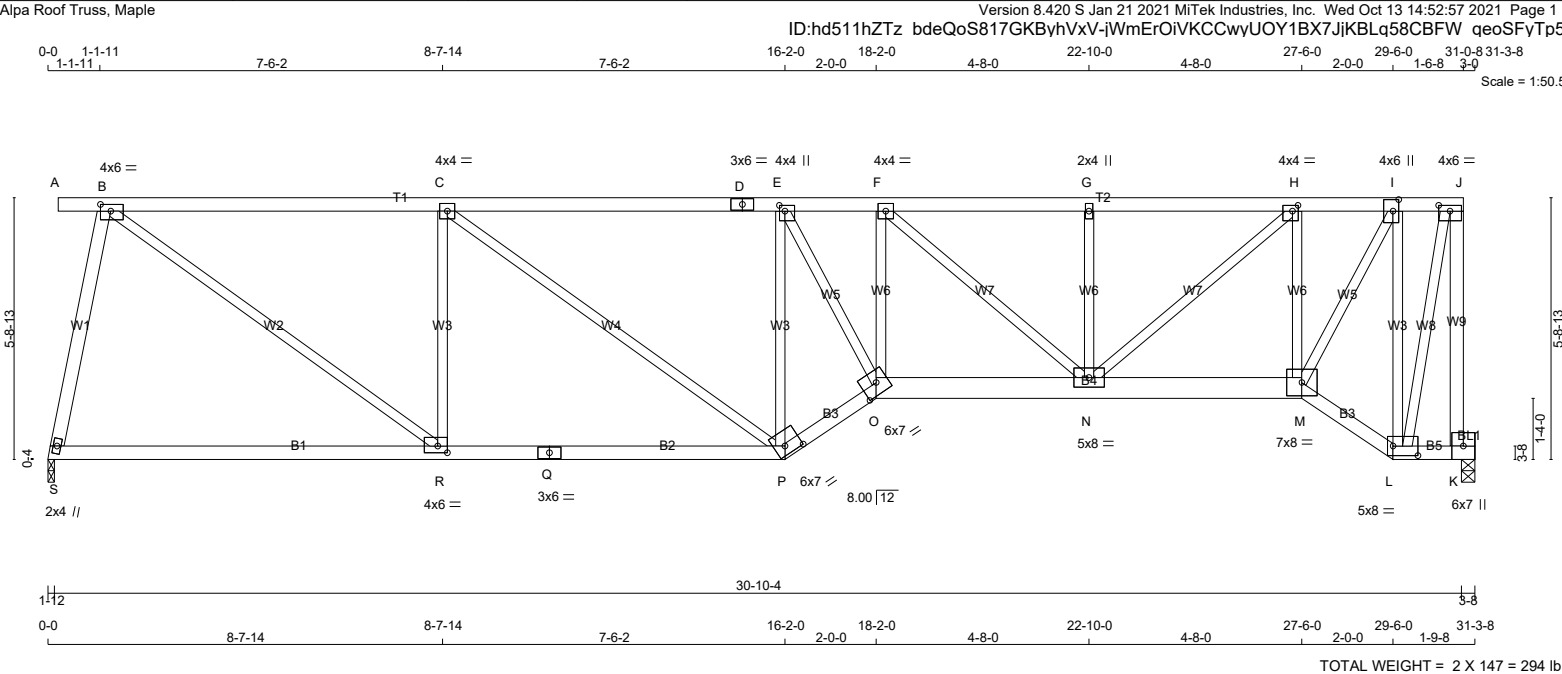
JSI GRIP= 0.84 (N) (INPUT = 0.90)

JSI METAL= 0.58 (N) (INPUT = 1.00)

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H130T		2	TRUSS DESC. JT 45147	E21104122



LUMBER N. L. G. A. RULES CHORDS SIZE A - D 2x4 DRY 1650F 1.5E SPF D - J 2x4 DRY 1650F 1.5E SPF K - J 2x4 DRY No.2 SPF S - Q 2x4 DRY No.2 SPF Q - P 2x4 DRY No.2 SPF P - O 2x4 DRY No.2 SPF O - M 2x6 DRY No.2 SPF M - L 2x4 DRY No.2 SPF L - K 2x4 DRY No.2 SPF				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td>FACTORED</td><td>MAXIMUM FACTORED</td><td>INPUT</td><td>REQRD</td></tr><tr><td></td><td>GROSS REACTION</td><td>GROSS REACTION</td><td>BRG</td><td>BRG</td></tr><tr><td>JT</td><td>VERT</td><td>HORZ</td><td>DOWN</td><td>HORZ</td></tr><tr><td>S</td><td>3046</td><td>0</td><td>3046</td><td>0</td></tr><tr><td>K</td><td>3156</td><td>0</td><td>3156</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><td></td><td>1ST LCASE</td><td colspan="5">MAX./MIN. COMPONENT REACTIONS</td></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM.LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>S</td><td>2174</td><td>1315 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>859 / 0</td><td>0 / 0</td></tr><tr><td>K</td><td>2250</td><td>1375 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>876 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.02 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.					FACTORED	MAXIMUM FACTORED	INPUT	REQRD		GROSS REACTION	GROSS REACTION	BRG	BRG	JT	VERT	HORZ	DOWN	HORZ	S	3046	0	3046	0	K	3156	0	3156	0		1ST LCASE	MAX./MIN. COMPONENT REACTIONS					JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	S	2174	1315 / 0	0 / 0	0 / 0	0 / 0	859 / 0	0 / 0	K	2250	1375 / 0	0 / 0	0 / 0	0 / 0	876 / 0	0 / 0	DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 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 = 0-0 END SETBACK = 6-6-0 END WALL WIDTH = 0-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 16-2-0 OF SPAN MEASURED FROM THE LEFT. GIRDER TYPE: CStdGirder START DISTANCE = 16-2-0 START SPAN CARRIED = 6-6-0 END DISTANCE = 29-6-0 END SPAN CARRIED = 6-6-0 END WALL WIDTH = 0-0 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CPrimeHip SIDE SETBACK = 0-0 END SETBACK = 6-6-0 END WALL WIDTH = 0-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 1-9-8 OF SPAN MEASURED FROM THE RIGHT. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
	FACTORED	MAXIMUM FACTORED	INPUT	REQRD																																																															
	GROSS REACTION	GROSS REACTION	BRG	BRG																																																															
JT	VERT	HORZ	DOWN	HORZ																																																															
S	3046	0	3046	0																																																															
K	3156	0	3156	0																																																															
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS																																																																	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																												
S	2174	1315 / 0	0 / 0	0 / 0	0 / 0	859 / 0	0 / 0																																																												
K	2250	1375 / 0	0 / 0	0 / 0	0 / 0	876 / 0	0 / 0																																																												
BEARING BLOCKS BL1 2x4 DRY No.2 SPF																																																																			
ALL WEBS 2x3 DRY No.2 SPF																																																																			
EXCEPT S - B 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	SIDE(43.9)																																																																
D-J	1	12	SIDE(43.9)																																																																
J-K	1	12	TOP																																																																
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS																																																																			
S-Q	1	12	SIDE(11.7)																																																																
Q-P	1	12	SIDE(11.7)																																																																
P-O	1	12	SIDE(44.7)																																																																
M-L	1	12	SIDE(44.7)																																																																
L-K	1	12	SIDE(11.7)																																																																
O-M	2	12	SIDE(54.3)																																																																
WEBS : (0.122"x3") SPIRAL NAILS																																																																			
2x3	1	6																																																																	
2x4	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.																																																																			
				C H O R D S				W E B S																																																											
				MAX. FACTORED		FACTORED		MAX. FACTORED																																																											
				MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX																																																								
				(LBS)	(PLF)	CSI (LC)	UNBRAC	(LBS)	(LBS)	CSI (LC)																																																									
				FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO																																																									
				A-B	0 / 0	-78.0	-78.0 0.03 (1)	10.00	S-B	-2969 / 0	0.58 (1)																																																								
				B-C	-3766 / 0	-165.7	-165.7 0.78 (1)	4.37	B-R	0 / 3972	0.49 (1)																																																								
				C-D	-4524 / 0	-165.7	-165.7 0.83 (1)	4.02	R-C	-1976 / 0	0.51 (1)																																																								
				D-E	-4524 / 0	-165.7	-165.7 0.83 (1)	4.02	C-P	0 / 935	0.12 (1)																																																								
				E-F	-5760 / 0	-78.0	-78.0 0.36 (1)	4.22	P-E	-3370 / 0	0.87 (1)																																																								
				F-G	-4720 / 0	-78.0	-78.0 0.15 (1)	4.88	E-O	0 / 2825	0.35 (1)																																																								
				G-H	-4720 / 0	-78.0	-78.0 0.15 (1)	4.89	O-F	0 / 906	0.11 (1)																																																								
				H-I	-2353 / 0	-78.0	-78.0 0.09 (1)	6.25	F-N	-1357 / 0	0.43 (1)																																																								
				I-J	-745 / 0	-165.7	-165.7 0.08 (1)	6.25	N-G	-412 / 0	0.06 (1)																																																								
				K-J	-3129 / 0	0.0	0.0 0.96 (1)	6.55	M-H	0 / 3075	0.38 (1)																																																								
									M-H	-2380 / 0	0.34 (1)																																																								
				S-R	0 / 567	-39.3	-39.3 0.42 (4)	10.00	M-I	0 / 3623	0.45 (1)																																																								
				R-Q	0 / 3766	-39.3	-39.3 0.59 (4)	10.00	L-I	-3237 / 0	0.83 (1)																																																								
				Q-P	0 / 3766	-39.3	-39.3 0.59 (4)	10.00	L-J	0 / 3035	0.38 (1)																																																								
				P-O	0 / 5411	-127.0	-127.0 0.53 (1)	10.00																																																											
				O-N	0 / 5737	-127.0	-127.0 0.47 (1)	10.00																																																											
				N-M	0 / 2414	-127.0	-127.0 0.25 (1)	10.00																																																											
				M-L	0 / 829	-127.0	-127.0 0.12 (1)	10.00																																																											
				L-K	-84 / 0	-39.3	-39.3 0.01 (4)	6.25																																																											

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

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
10/13/2021
PROVINCE OF ONTARIO

CONTINUED ON PAGE 2

Alpa Roof Truss, Maple

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ID:hd511hZTz bdeQoS817GKByhVxV-laSyNJel397PPyfetiYUIAhAfM5dbNBZi7J7NLyTp7

Scale = 1:62.5

0'-0 2-1-8 2-1-8 7-2-6 9-3-15 7-2-6 16-6-5 7-2-6 23-8-12 7-4-14 31-1-10

4x6 = 4x4 = 3x6 = 2x4 || 4x4 = 4x6 =

A B C D O E F G

10'-7 1/2

W1 W2 W3 W4 W5

T1 T2

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10

N M L K J I H

2x4 || 4x4 = 3x6 = 5x8 = 4x6 = 2x4 ||

0'-0 9-3-15 9-3-15 7-2-6 16-6-5 7-2-6 23-8-12 7-4-14 31-1-10

30'-10-0

TOTAL WEIGHT = 10 X 185 = 1853 lb

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMWV-t	MT20	4.0	6.0	1.75	3.00
H	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	6.0	1.75	3.00
K	BMWWW-t	MT20	5.0	8.0		
L	BS-t	MT20	3.0	6.0		
M	BMWW-t	MT20	4.0	4.0	1.50	1.75
N	BMW1+w	MT20	2.0	4.0		

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOA1 CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 0	-85.5	-85.5	0.24 (1)	10.00	N-B	-1561 / 0	0.95 (1)	
B-C	-1069 / 0	-85.5	-85.5	0.73 (1)	2.00	B-M	0 / 1359	0.22 (1)	
C-D	-1239 / 0	-85.5	-85.5	0.75 (1)	2.00	M-C	-941 / 0	0.54 (1)	
D-O	-1239 / 0	-85.5	-85.5	0.75 (1)	2.00	C-K	0 / 298	0.05 (1)	
O-E	-1239 / 0	-85.5	-85.5	0.75 (1)	2.00	K-E	-570 / 0	0.33 (1)	
E-F	-1239 / 0	-85.5	-85.5	0.80 (1)	2.00	K-F	0 / 531	0.09 (1)	
F-G	-936 / 0	-85.5	-85.5	0.76 (1)	2.00	J-F	-1151 / 0	0.66 (1)	
H-G	-1559 / 0	0.0	0.0	0.89 (1)	5.28	J-G	0 / 1609	0.26 (1)	
N-M	0 / 302	-18.5	-18.5	0.37 (4)	10.00				
M-L	0 / 1069	-18.5	-18.5	0.46 (4)	10.00				
L-K	0 / 1069	-18.5	-18.5	0.46 (4)	10.00				
K-J	0 / 936	-18.5	-18.5	0.36 (4)	10.00				
J-I	0 / 0	-18.5	-18.5	0.25 (4)	10.00				
I-H	0 / 0	-18.5	-18.5	0.25 (4)	10.00				

JSI GRIP= 0.86 (G) (INPUT = 0.90)
JSI METAL= 0.33 (J) (INPUT = 1.00)

Alpa Roof Truss, Maple

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ID:hd511hZTz_bdeQoS817GKByhVxV-74SMTQINd7bVpx67jJ5qxMynL1DCPk_zgnsS3ZyTp

0-0 6-6 7-0-13 7-7-3 7-0-13 14-8-0 7-0-13 21-8-13 7-3-5 29-0-2

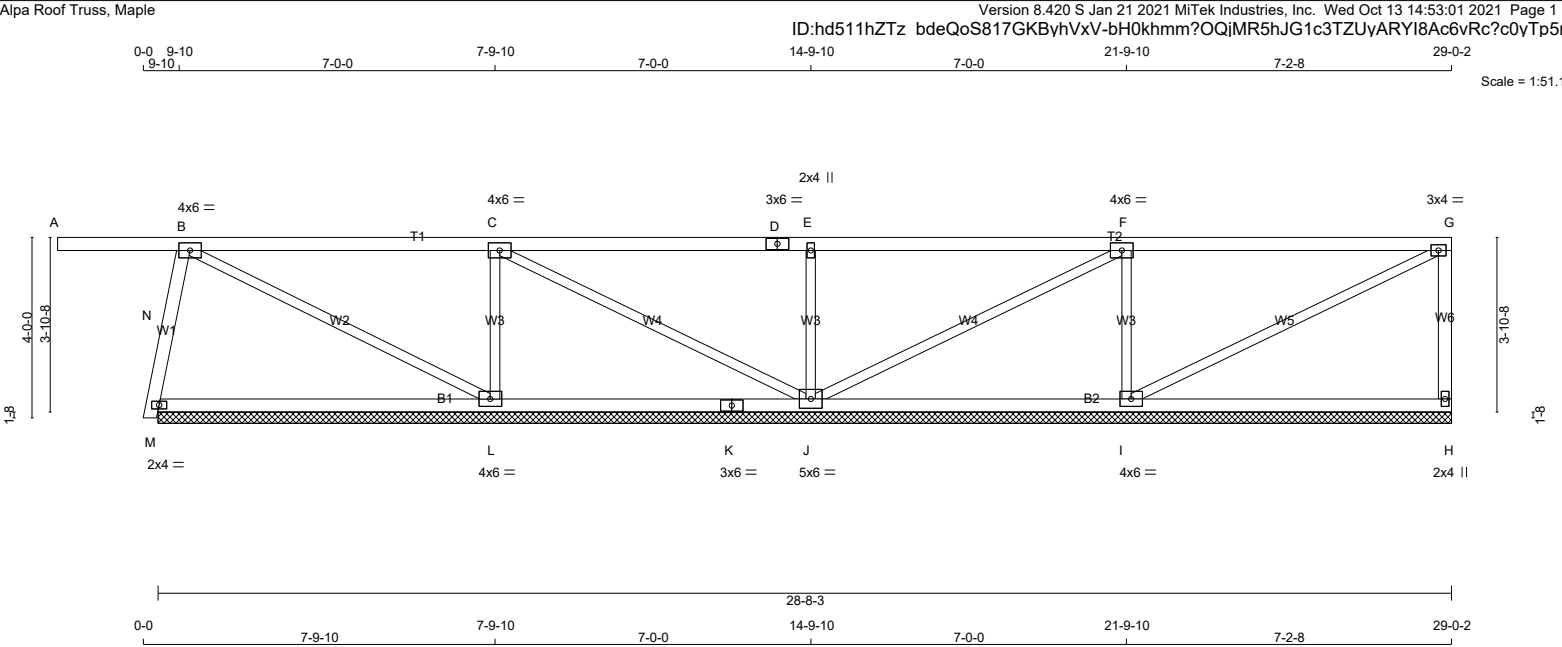
Scale = 1:51.

The diagram illustrates a roof truss system with the following components and dimensions:

- Top Chord:** Labeled with joints A, B, C, D, E, F, G. Members include T1 (B-C), T2 (F-G), and a long top chord from A to G.
- Bottom Chord:** Labeled with joints M, L, K, J, I, H. Members include 2x4 (M-L), 4x6 (L-K), 3x6 (K-J), 5x8 (J-I), and 2x4 (I-H).
- Vertical Members:** W1 (B-M), W3 (C-L), W3 (E-J), W3 (F-I), W6 (G-H).
- Diagonal Members:** W2 (B-C), W4 (C-D), W4 (E-F), W5 (F-G).
- Dimensions:**
 - Overall height: 26'-8"
 - Overall width: 28'-8-3"
 - Segment widths: 0-0 to 6-6, 6-6 to 7-0-13, 7-0-13 to 7-7-3, 7-7-3 to 7-0-13, 7-0-13 to 14-8-0, 14-8-0 to 7-0-13, 7-0-13 to 21-8-13, 21-8-13 to 7-3-5, 7-3-5 to 29-0-2.
- Labels:** Various member labels like W1, W2, W3, W4, W5, W6 and joint labels like B1, B2, B3, B4, B5, B6.

TOTAL WEIGHT = 3 X 101 = 303 lb

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H137P		1	TRUSS DESC. JT 45147	E21104126



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B, C, F				
B TMWW-t	MT20	4.0	6.0	
D TS-t	MT20	3.0	6.0	
E TMW+w	MT20	2.0	4.0	
G TMVW-t	MT20	3.0	4.0	
H BMV1+p	MT20	2.0	4.0	
I BMWW1-t	MT20	4.0	6.0	
J BMWWW1-t	MT20	5.0	6.0	
K BS-t	MT20	3.0	6.0	
L BMWW1-t	MT20	4.0	6.0	
M BWM1-t	MT20	2.0	4.0	

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
H	278	0	278	0	0	28-8-3 (15-11-88)	28-8-3 (15-11-88)
M	455	0	455	0	0	28-8-3 (15-11-88)	28-8-3 (15-11-88)
L	762	0	762	0	0	28-8-3 (15-11-88)	28-8-3 (15-11-88)
J	700	0	700	0	0	28-8-3 (15-11-88)	28-8-3 (15-11-88)
I	748	0	748	0	0	28-8-3 (15-11-88)	28-8-3 (15-11-88)

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
H	198	121 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
M	321	215 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
L	545	326 / 0	0 / 0	0 / 0	0 / 0	218 / 0	0 / 0
J	497	314 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0
I	534	321 / 0	0 / 0	0 / 0	0 / 0	213 / 0	0 / 0

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

BRACING

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.81 FT

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)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 0	-78.0 -78.0	0.42 (1)	10.00	N-M	0 / 0	0.00 (1)
B-C	-20 / 0	-78.0 -78.0	0.55 (1)	6.25	M-B	-407 / 0	0.08 (1)
C-D	0 / 63	-78.0 -78.0	0.56 (1)	10.00	B-L	-67 / 0	0.08 (1)
D-E	0 / 63	-78.0 -78.0	0.56 (1)	10.00	L-C	-575 / 0	0.13 (1)
E-F	0 / 63	-78.0 -78.0	0.59 (1)	10.00	C-J	-94 / 0	0.12 (1)
F-G	-6 / 0	-78.0 -78.0	0.58 (1)	10.00	J-E	-505 / 0	0.12 (1)
H-G	-225 / 0	0.0 0.0	0.05 (1)	7.81	J-F	-78 / 0	0.10 (1)
					I-F	-599 / 0	0.14 (1)
					I-G	0 / 7	0.00 (1)
M-L	0 / 80	-18.5 -18.5	0.26 (4)	10.00			
L-K	0 / 20	-18.5 -18.5	0.26 (4)	10.00			
K-J	0 / 20	-18.5 -18.5	0.26 (4)	10.00			
J-I	0 / 6	-18.5 -18.5	0.24 (4)	10.00			
I-H	0 / 0	-18.5 -18.5	0.24 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.59/1.00 (E-F:1) , BC=0.26/1.00 (L-M:4) , WB=0.14/1.00 (F-I:1) , SSI=0.27/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

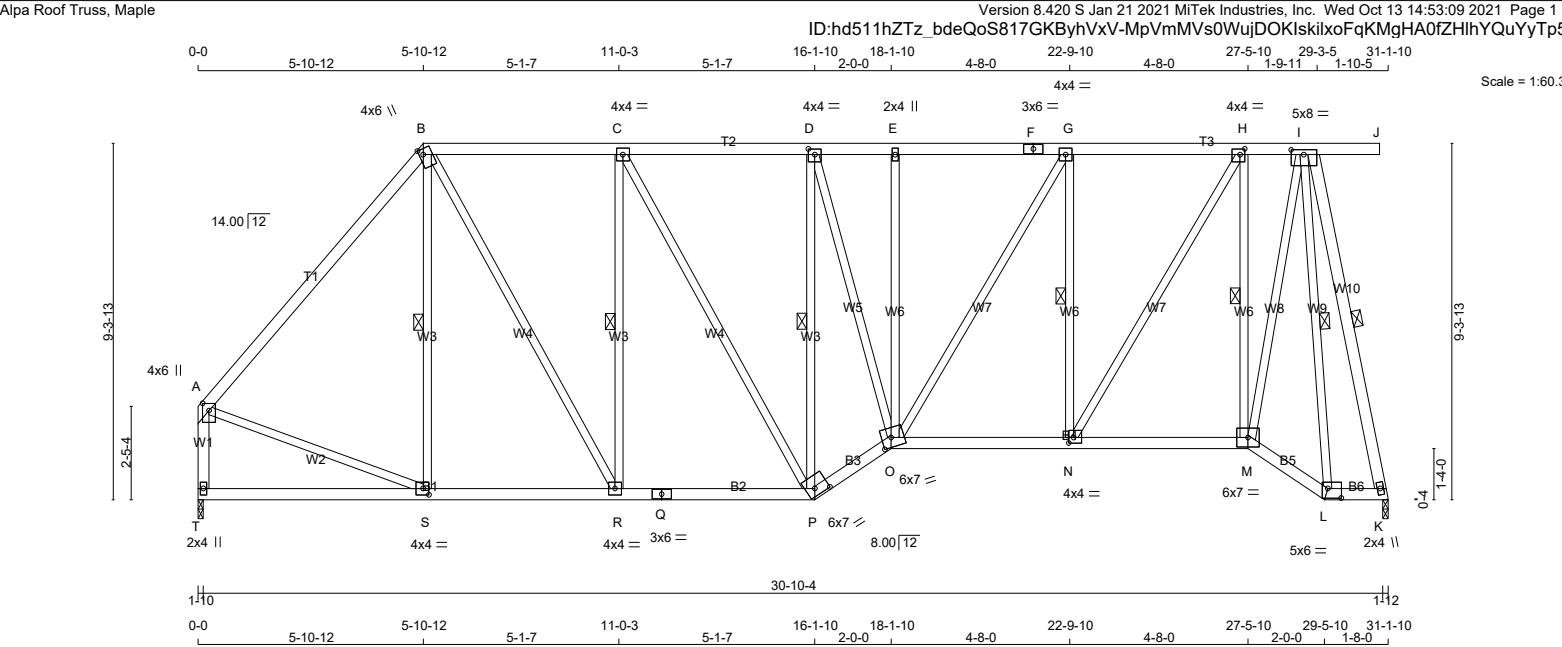
JSI GRIP= 0.78 (G) (INPUT = 0.90)
JSI METAL= 0.30 (M) (INPUT = 1.00)

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



JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.46 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H144T		1	TRUSS DESC. JT 45147	E21104130



LUMBER				DESCR.			
N. L. G. A. RULES							
CHORDS	SIZE	LUMBER		SPF			
A - B	2x4	DRY	No.2	SPF			
B - F	2x4	DRY	No.2	SPF			
F - J	2x4	DRY	No.2	SPF			
T - A	2x4	DRY	No.2	SPF			
T - Q	2x4	DRY	No.2	SPF			
Q - P	2x4	DRY	No.2	SPF			
P - O	2x4	DRY	No.2	SPF			
O - M	2x4	DRY	No.2	SPF			
M - L	2x4	DRY	No.2	SPF			
L - K	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			
I - K	2x4	DRY	No.2	SPF			
DRY: SEASONED LUMBER.							

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	4.0	6.0	1.75	1.25
C	TMWW-t	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0	1.75	2.00
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMWW-t	MT20	4.0	4.0	1.75	1.50
I	TMWW-t	MT20	5.0	8.0	1.50	4.00
K	BMW1+w	MT20	2.0	4.0		
L	BBW-t	MT20	5.0	6.0	3.00	4.25
M	BBWW-t	MT20	6.0	7.0		
N	BMWW-t	MT20	4.0	4.0	1.75	1.50
O	BBWW-m	MT20	6.0	7.0	3.00	3.00
P	BBWW-h	MT20	6.0	7.0	2.25	4.25
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	4.0	4.0		
S	BMWW-t	MT20	4.0	4.0	2.00	1.75
T	BMV1+p	MT20	2.0	4.0		

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



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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
JT	K	1490	0	1490	0	0	1-12	1-10	
T		1492	0	1492	0	0	1-10	1-10	

		UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
		COMBINED		SNOW	LIVE	PERM.LIVE	WIND
JT	K	1062	648 / 0	0 / 0	0 / 0	0 / 0	0 / 0
T		1064	649 / 0	0 / 0	0 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.04 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 I-K, B-S, C-R, D-P, G-N, H-M, I-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		WEBS	
		MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	-1236 / 0	-78.0	-78.0 0.64 (1)	I-K	-1513 / 0
B-C	-1201 / 0	-78.0	-78.0 0.34 (1)	S-B	-159 / 21
C-D	-1291 / 0	-78.0	-78.0 0.35 (1)	B-R	0 / 811
D-E	-1464 / 0	-78.0	-78.0 0.16 (1)	R-C	-612 / 0
E-F	-1467 / 0	-78.0	-78.0 0.28 (1)	C-P	0 / 182
F-G	-1467 / 0	-78.0	-78.0 0.28 (1)	P-D	-949 / 0
G-H	-1190 / 0	-78.0	-78.0 0.26 (1)	D-O	0 / 697
H-I	-602 / 0	-78.0	-78.0 0.21 (1)	O-E	-218 / 0
I-J	0 / 0	-78.0	-78.0 0.21 (1)	O-G	0 / 533
T-A	-1447 / 0	0.0	0.0 0.19 (1)	N-G	-868 / 0
				N-H	0 / 1124
T-S	0 / 0	-18.5	-18.5 0.14 (4)	M-H	-1096 / 0
S-R	0 / 800	-18.5	-18.5 0.22 (4)	A-S	0 / 848
R-Q	0 / 1201	-18.5	-18.5 0.25 (1)	I-L	-194 / 0
Q-P	0 / 1201	-18.5	-18.5 0.25 (1)	M-I	0 / 1400
P-O	0 / 1538	-18.5	-18.5 0.26 (1)		
O-N	0 / 1190	-18.5	-18.5 0.25 (1)		
N-M	0 / 617	-18.5	-18.5 0.17 (4)		
M-L	0 / 409	-18.5	-18.5 0.08 (1)		
L-K	0 / 329	-18.5	-18.5 0.06 (1)		

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	= 21.0	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD = 34.4 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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.64/1.00 (A-B:1) , BC=0.26/1.00 (O-P:1) , WB=0.65/1.00 (I-K:1) , SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

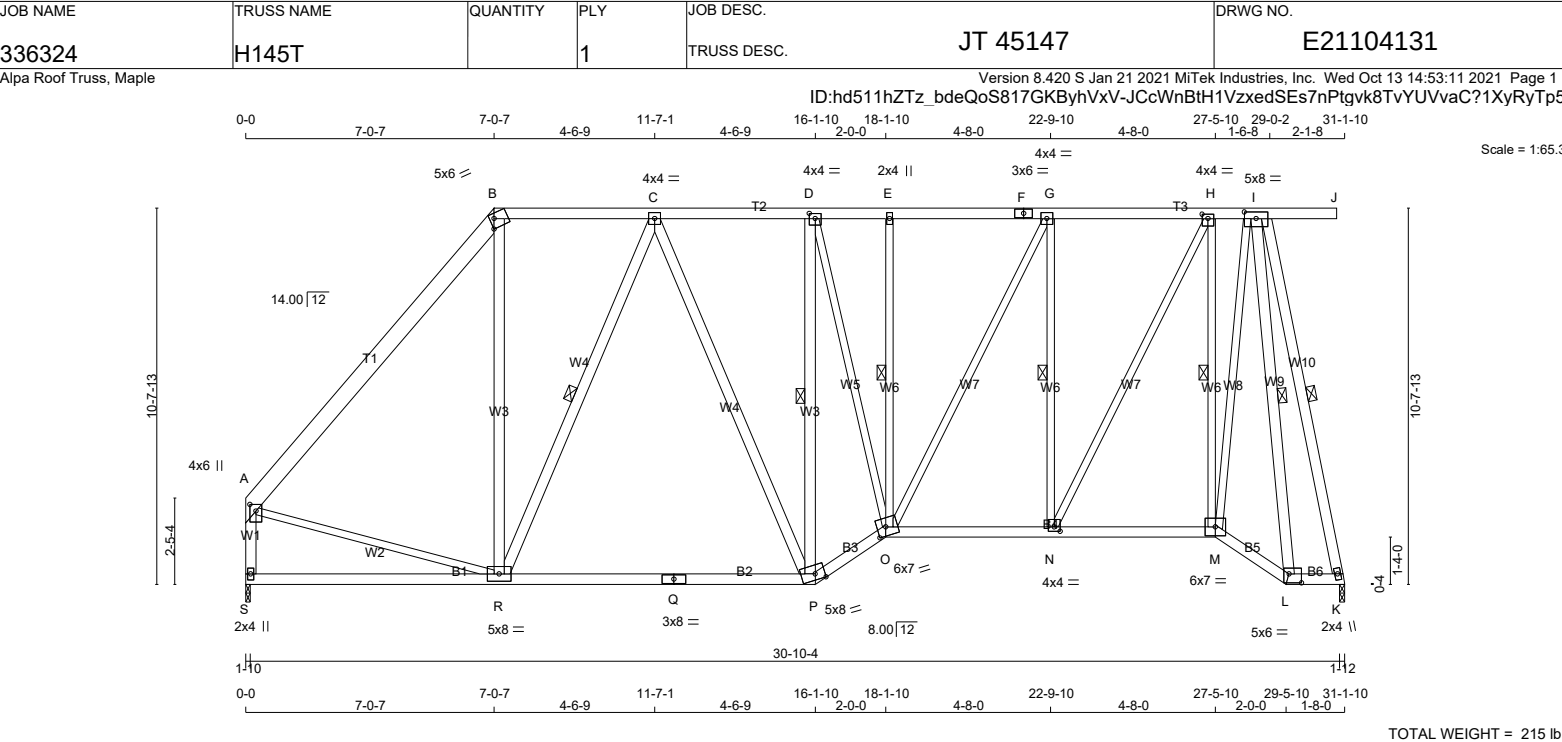
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (H) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x6	DRY	No.2
B - F	2x4	DRY	No.2
F - J	2x4	DRY	No.2
S - A	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - L	2x4	DRY	No.2
L - K	2x4	DRY	No.2
ALL WEBS EXCEPT	2x4	DRY	No.2
D - O	2x3	DRY	No.2
O - E	2x3	DRY	No.2
O - G	2x3	DRY	No.2
N - G	2x3	DRY	No.2
N - H	2x3	DRY	No.2
M - H	2x3	DRY	No.2
A - R	2x3	DRY	No.2
M - I	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+p	MT20	4.0	6.0	2.25 2.00
B	TTW-m	MT20	5.0	6.0	3.25 Edge
C	TMWW-t	MT20	4.0	4.0	
D	TMWW-t	MT20	4.0	4.0	1.75 2.00
E	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	3.0	6.0	
G	TMWW-t	MT20	4.0	4.0	
H	TMWW-t	MT20	4.0	4.0	1.50 2.00
I	TMWWW-t	MT20	5.0	8.0	2.25 4.00
K	BMW1+w	MT20	2.0	4.0	
L	BBW-I	MT20	5.0	6.0	3.00 4.25
M	BBWW-I	MT20	6.0	7.0	
N	BMWW-t	MT20	4.0	4.0	1.50 2.00
O	BBWWW-m	MT20	6.0	7.0	3.00 3.00
P	BBWW-m	MT20	5.0	8.0	2.00 3.25
Q	BS-t	MT20	3.0	8.0	
R	BMWWW-t	MT20	5.0	8.0	
S	BMV1+p	MT20	2.0	4.0	

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 IN-SX		REQRD BRG IN-SX	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
K	1490	0	1490	0	0	1-12	1-10		
S	1492	0	1492	0	0	1-10	1-10		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	DEAD	SOIL	DEAD	SOIL
K	1062	648 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0				
S	1064	649 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0				

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.42 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 I-K, D-P, E-O, G-N, H-M, I-L, C-R.

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 CSI (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-1250 / 0	-78.0	-78.0 0.36 (1)	I-K	-1512 / 0	0.92 (1)	
B-C	-814 / 0	-78.0	-78.0 0.25 (1)	R-B	0 / 522	0.08 (1)	
C-D	-1123 / 0	-78.0	-78.0 0.26 (1)	P-D	-819 / 0	0.47 (1)	
D-E	-1248 / 0	-78.0	-78.0 0.12 (1)	D-O	0 / 588	0.13 (1)	
E-F	-1250 / 0	-78.0	-78.0 0.27 (1)	O-E	-230 / 0	0.13 (1)	
F-G	-1250 / 0	-78.0	-78.0 0.27 (1)	O-G	0 / 512	0.12 (1)	
G-H	-1015 / 0	-78.0	-78.0 0.26 (1)	N-G	-873 / 0	0.50 (1)	
H-I	-511 / 0	-78.0	-78.0 0.27 (1)	N-H	0 / 1090	0.25 (1)	
I-J	0 / 0	-78.0	-78.0 0.27 (1)	M-H	-1023 / 0	0.58 (1)	
S-A	-1446 / 0	0.0	0.0 0.17 (1)	I-L	-192 / 0	0.11 (1)	
S-R	0 / 0	-18.5	-18.5 0.36 (4)	A-R	0 / 836	0.19 (1)	
R-Q	0 / 1051	-18.5	-18.5 0.46 (4)	R-C	-603 / 0	0.42 (1)	
Q-P	0 / 1051	-18.5	-18.5 0.46 (4)	C-P	0 / 179	0.03 (1)	
P-O	0 / 1336	-18.5	-18.5 0.23 (1)	M-I	0 / 1312	0.30 (1)	
O-N	0 / 1015	-18.5	-18.5 0.22 (1)				
N-M	0 / 523	-18.5	-18.5 0.16 (4)				
M-L	0 / 405	-18.5	-18.5 0.08 (1)				
L-K	0 / 323	-18.5	-18.5 0.06 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.36/1.00 (A-B:1) , BC=0.46/1.00 (P-R:4) , WB=0.92/1.00 (I-K:1) , SSI=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

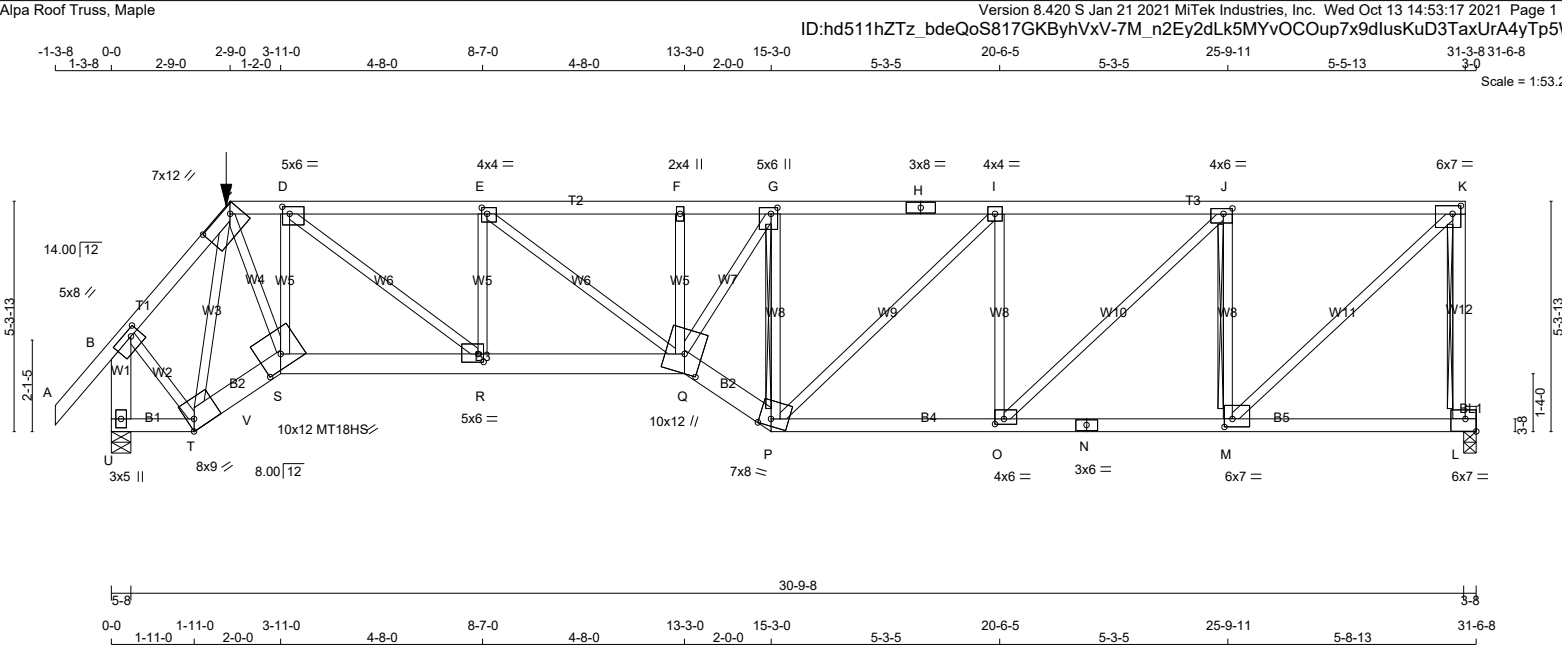
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (R) (INPUT = 0.90)
JSI METAL= 0.68 (Q) (INPUT = 1.00)

Structural drawing of a roof truss system. The drawing shows a truss with various members labeled T1 through T7, W1 through W7, and W8. The truss is supported by columns labeled O, N, M, L, K, J, I, and H. The roof is supported by a ridge beam labeled G. The drawing includes dimensions for the truss members and the overall structure. A scale of 1:62.2 is indicated.

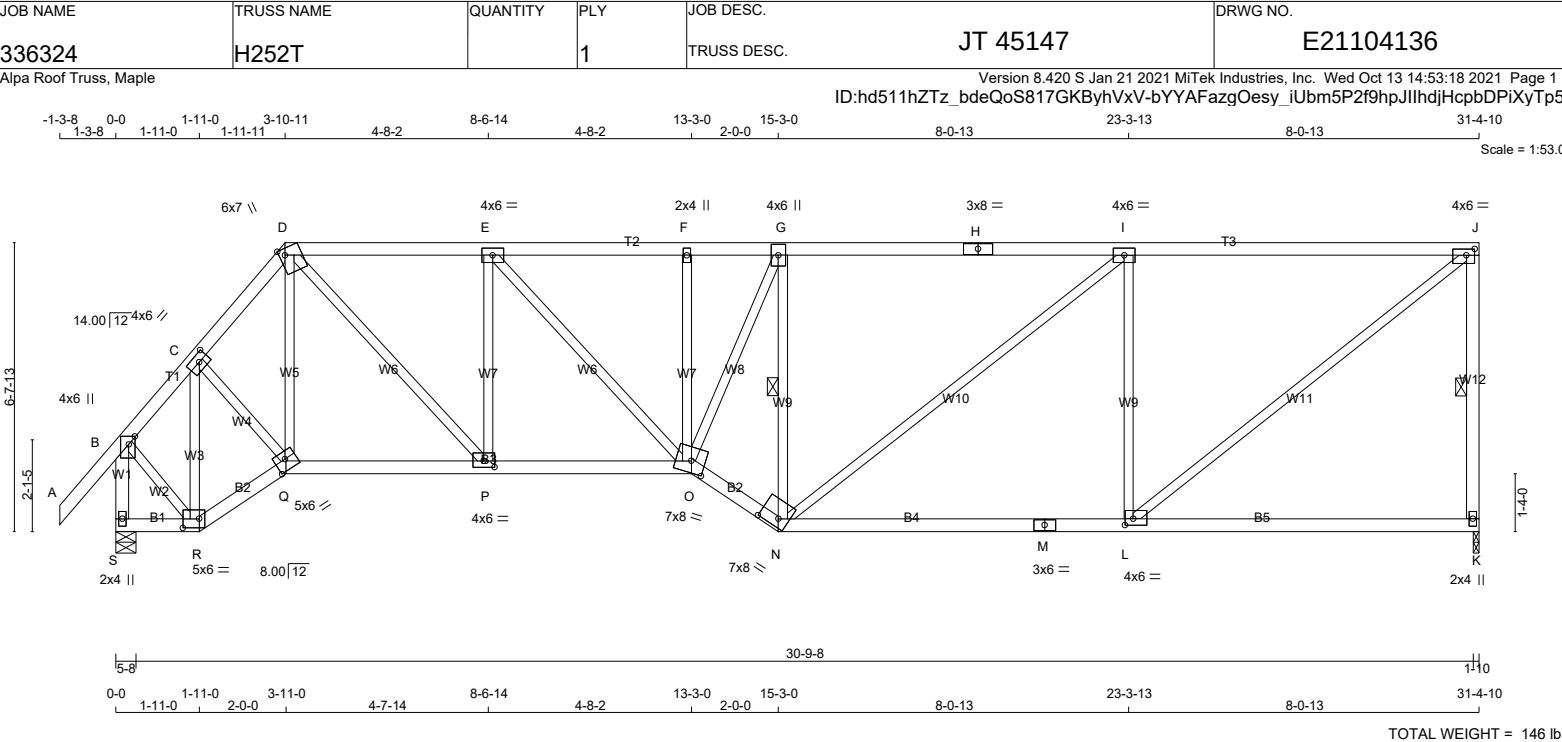
JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.51 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	H251T		1	TRUSS DESC. JT 45147	E21104135



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - C 2x4 DRY No.2 SPF C - H 2x4 DRY 1650F 1.5E SPF H - K 2x4 DRY 1650F 1.5E SPF L - K 2x4 DRY No.2 SPF U - B 2x6 DRY No.2 SPF U - T 2x4 DRY No.2 SPF T - S 2x6 DRY No.2 SPF S - Q 2x6 DRY No.2 SPF Q - P 2x6 DRY No.2 SPF P - N 2x4 DRY No.2 SPF N - L 2x4 DRY No.2 SPF BEARING BLOCKS BL1 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX L 2987 0 2987 0 0 3-8 3-8 U 3079 0 3079 0 0 5-8 4-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL L 2129 1302 / 0 0 / 0 0 / 0 827 / 0 0 / 0 U 2194 1345 / 0 0 / 0 0 / 0 849 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, U BEARING SIZE FACTOR = 1.15 AT JNT(S) L (BASED ON SUPPORT DEPTH = 1-8) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.78 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. 2x3 DRY SPF No.2 T-BRACE AT K-L, J-M 2x4 DRY SPF No.2 T-BRACE AT G-P FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. CS1 (LC) FR-TO FROM TO A-B 0 / 42 -78.0 -78.0 0.12 (1) 10.00 T-C -2284 / 0 0.86 (1) B-C -2129 / 0 -78.0 -78.0 0.19 (1) 4.47 C-S 0 / 3684 0.91 (1) C-D -2909 / 0 -78.0 -78.0 0.09 (1) 4.54 S-D -1938 / 0 0.47 (1) D-E -5242 / 0 -78.0 -78.0 0.45 (1) 3.26 D-R 0 / 2904 0.72 (1) E-F -6313 / 0 -78.0 -78.0 0.55 (1) 2.91 R-E -1248 / 0 0.30 (1) F-G -6310 / 0 -78.0 -78.0 0.55 (1) 2.78 E-Q 0 / 1350 0.33 (1) G-H -4716 / 0 -153.5 -153.5 0.70 (1) 3.12 Q-F -106 / 0 0.03 (1) H-I -4716 / 0 -153.5 -153.5 0.70 (1) 3.12 Q-G 0 / 3291 0.81 (1) I-J -4213 / 0 -153.5 -153.5 0.83 (1) 3.02 P-G -3421 / 0 0.80 (1) J-K -2718 / 0 -153.5 -153.5 0.71 (1) 3.83 P-I 0 / 690 0.17 (1) L-K -2907 / 0 0.0 0.0 0.82 (1) 6.58 O-I -1272 / 0 0.55 (1) U-B -3044 / 0 0.0 0.0 0.26 (1) 6.00 O-J 0 / 2066 0.51 (1) U-T 0 / 0 -36.4 -36.4 0.04 (4) 10.00 M-J -2355 / 0 0.86 (1) T-V 0 / 2130 -129.9 -129.9 0.32 (1) 10.00 M-K 0 / 3800 0.94 (1) V-S 0 / 2130 -112.0 -112.0 0.32 (1) 10.00 B-T 0 / 1828 0.45 (1) S-R 0 / 2965 -112.0 -112.0 0.55 (1) 10.00 R-Q 0 / 5242 -112.0 -112.0 0.85 (1) 10.00 Q-P 0 / 5636 -112.0 -112.0 0.77 (1) 10.00 P-O 0 / 4214 -36.4 -36.4 0.88 (1) 10.00 O-N 0 / 2718 -36.4 -36.4 0.61 (1) 10.00 N-M 0 / 2718 -36.4 -36.4 0.61 (1) 10.00 M-L -84 / 0 -36.4 -36.4 0.25 (4) 6.25 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE HEEL CONN. C 2-9-0 -156 -156 --- FRONT VERT TOTAL --- C1 CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM GIRDER TYPE: CPrimeHip LEFT SETBACK = 2-9-0 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 - ADDT'L LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 2-9-0 OF SPAN MEASURED FROM THE LEFT. GIRDER TYPE: CSldGirder LEFT SETBACK = 2-9-0 START SPAN CARRIED = 5-10-8 END DISTANCE = 15-3-0 END SPAN CARRIED = 5-10-8 END WALL WIDTH = 0-0 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDT'L LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CPrimeHip LEFT SETBACK = 2-9-0 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 - ADDT'L LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 16-3-8 OF SPAN MEASURED FROM THE RIGHT. 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.04") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.32") ALLOWABLE DEFL.(TL)= L/360 (1.04") CALCULATED VERT. DEFL.(TL)= L/ 603 (0.62") CSI: TC=0.83/1.00 (I-J:1) , BC=0.88/1.00 (O-P:1) , WB=0.94/1.00 (K-M:1) , SSI=0.43/1.00 (J-K: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 TOTAL WEIGHT = 153 lb [M] CONTINUED ON PAGE 2		
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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

SPF

A - D

2x4

DRY

No.2

SPF

D - H

2x4

DRY

1650F 1.5E

SPF

H - J

2x4

DRY

1650F 1.5E

SPF

K - J

2x4

DRY

No.2

SPF

S - B

2x4

DRY

No.2

SPF

S - R

2x4

DRY

No.2

SPF

R - Q

2x4

DRY

No.2

SPF

Q - O

2x4

DRY

No.2

SPF

O - N

2x4

DRY

No.2

SPF

N - M

2x4

DRY

No.2

SPF

M - K

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

GROSS REACTION

MAXIMUM FACTORED

GROSS REACTION

INPUT

BRG

REQRD

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

K

1511

0

1511

0

0

1-10

1-10

S

1626

0

1626

0

0

5-8

1-13

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

K

1078

657 / 0

0 / 0

0 / 0

0 / 0

420 / 0

0 / 0

S

1157

719 / 0

0 / 0

0 / 0

0 / 0

438 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.36 FT.

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

FACTORED

MEMB.

FORCE

(LBS)

(PLF)

(LC)

(LC)

(LC)

(LC)

(LC)

FR-TO

FROM

TO

LENGTH

FR-TO

A - B

0 / 42

-78.0

-78.0

0.11 (1)

10.00

R - C

-998 / 0

0.26 (1)

B - C

-1062 / 0

-78.0

-78.0

0.12 (1)

5.98

C - Q

0 / 592

0.13 (1)

C - D

-1590 / 0

-78.0

-78.0

0.09 (1)

5.17

Q - D

0 / 52

0.02 (4)

D - E

-1911 / 0

-78.0

-78.0

0.25 (1)

5.18

D - P

0 / 1296

0.29 (1)

E - F

-2310 / 0

-78.0

-78.0

0.27 (1)

4.80

P - E

-850 / 0

0.36 (1)

F - G

-2308 / 0

-78.0

-78.0

0.34 (1)

4.67

E - O

0 / 584

0.13 (1)

G - H

-1911 / 0

-78.0

-78.0

0.82 (1)

4.36

O - F

-111 / 0

0.05 (1)

H - I

-1911 / 0

-78.0

-78.0

0.82 (1)

4.36

O - G

0 / 1086

0.24 (1)

I - J

-1532 / 0

-78.0

-78.0

0.77 (1)

4.77

N - G

-1478 / 0

0.42 (1)

K - J

-1454 / 0

0.0

0.0

0.30 (1)

5.43

N - I

0 / 483

0.11 (1)

S - B

-1608 / 0

0.0

0.0

0.19 (1)

6.52

L - I

-1027 / 0

0.75 (1)

S - R

0 / 0

-18.5

-18.5

0.02 (4)

10.00

B - R

0 / 903

0.20 (1)

R - Q

0 / 774

-18.5

-18.5

0.14 (1)

10.00

Q - P

0 / 1025

-18.5

-18.5

0.22 (1)

10.00

P - O

0 / 1911

-18.5

-18.5

0.36 (1)

10.00

O - N

0 / 2268

-18.5

-18.5

0.38 (1)

10.00

N - M

0 / 1532

-18.5

-18.5

0.49 (4)

10.00

M - L

0 / 1532

-18.5

-18.5

0.49 (4)

10.00

L - K

0 / 0

-18.5

-18.5

0.34 (4)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

21.0

PSF

DL

=

6.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.4

PSF

TOTAL LOAD

=

34.4

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.05")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")

ALLOWABLE DEFL.(TL)= L/360 (1.05")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.82/1.00 (G-I:1) , BC=0.49/1.00 (L-N:4) , WB=0.75/1.00 (I-L:1) , SSI=0.30/1.00 (I-J:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

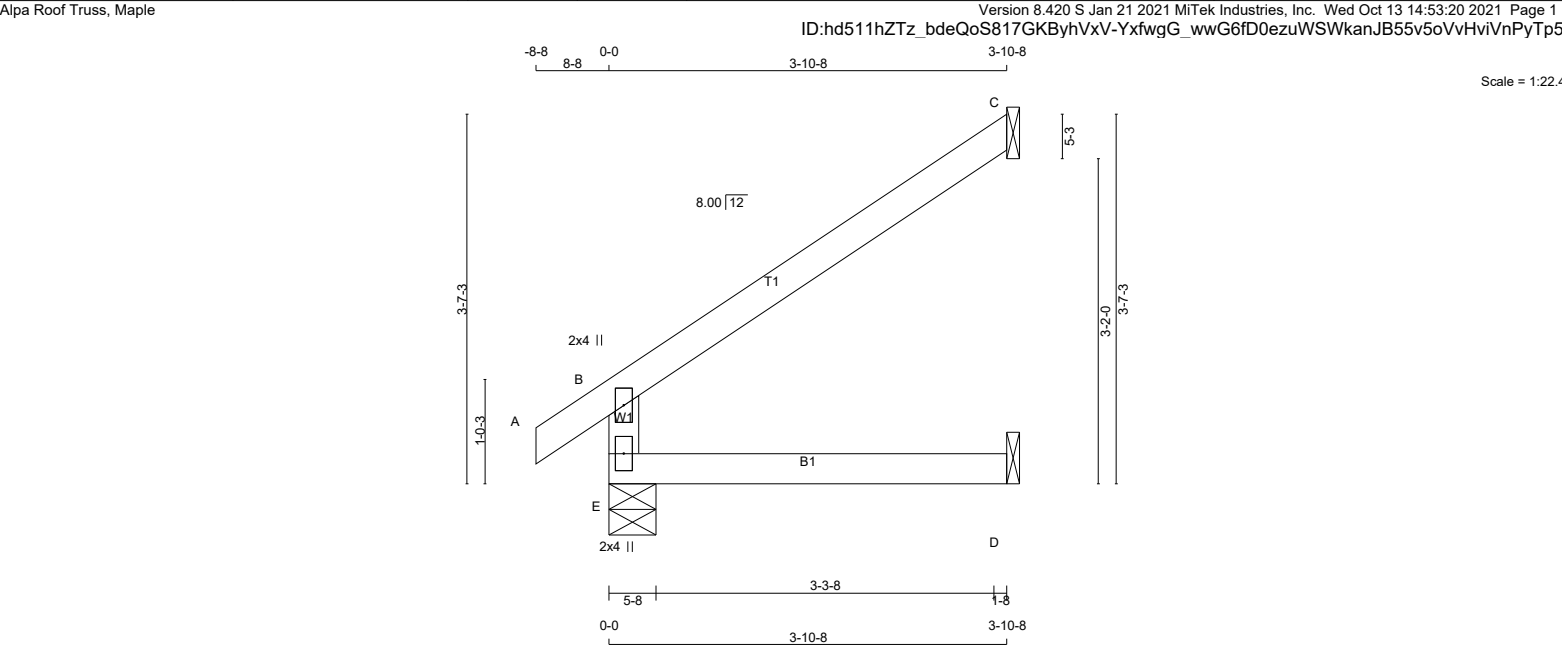
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (J) (INPUT = 0.90)

JSI METAL= 0.43 (M) (INPUT = 1.00)

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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	J08		1	TRUSS DESC. JT 45147	E21104137



TOTAL WEIGHT = 2 X 12 = 23 lb

[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
E	BMV1+p	MT20	2.0	4.0	

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	292	0	292	0	5-8	1-8
E	113	0	113	0	1-8	1-8
C	30	0	34	0	1-8	1-8
D						

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	207	135 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
C	78	61 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX LC1 MAX CSI (LC)	WEBS MAX. FACTORED FORCE (LBS)	
	FR-TO		FROM	TO		FR-TO	MAX CSI (LC)
E-B	-250 / 0		0.0	0.0	0.04 (4)	7.81	
A-B	0 / 17		-78.0	-78.0	0.04 (1)	10.00	
B-C	-21 / 0		-78.0	-78.0	0.15 (1)	6.25	
E-D	0 / 0		-18.5	-18.5	0.06 (4)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL =	21.0	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 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=0.15/1.00 (B-C:1) , BC=0.06/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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
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 = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

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

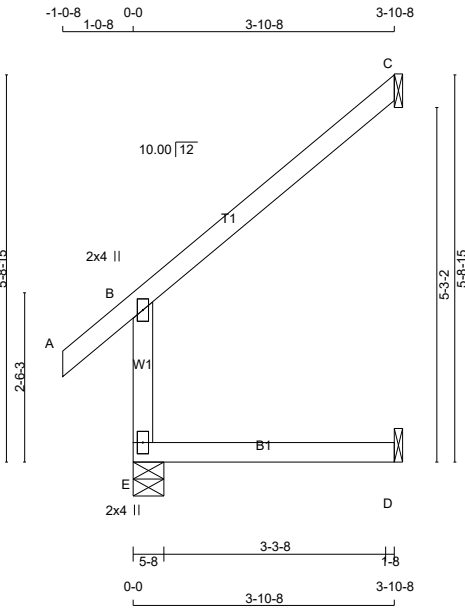


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336324	J10		1	TRUSS DESC. JT 45147	E21104138

Alpa Roof Truss, Maple

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Scale = 1:34.2

TOTAL WEIGHT = 4 X 14 = 57 lb [M]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
E	BMV1+p	MT20	2.0	4.0	

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

JT	VERT	HORZ	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
			DOWN	HORZ	DOWN	HORZ		
E	316	0	316	0	0	0	5-8	1-8
C	113	0	113	0	0	0	1-8	1-8
D	33	0	36	0	0	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	223	149 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0
C	79	61 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	26	0 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
E- B	-277 / 0	0.0	0.0 0.03 (4)	7.81			
A- B	0 / 28	-78.0	-78.0 0.07 (1)	10.00			
B- C	-24 / 0	-78.0	-78.0 0.20 (1)	6.25			
E- D	0 / 0	-18.5	-18.5 0.07 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD = 34.4					PSF

SPACING = 24.0 IN.C/C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 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=0.20/1.00 (B-C:1) , BC=0.07/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

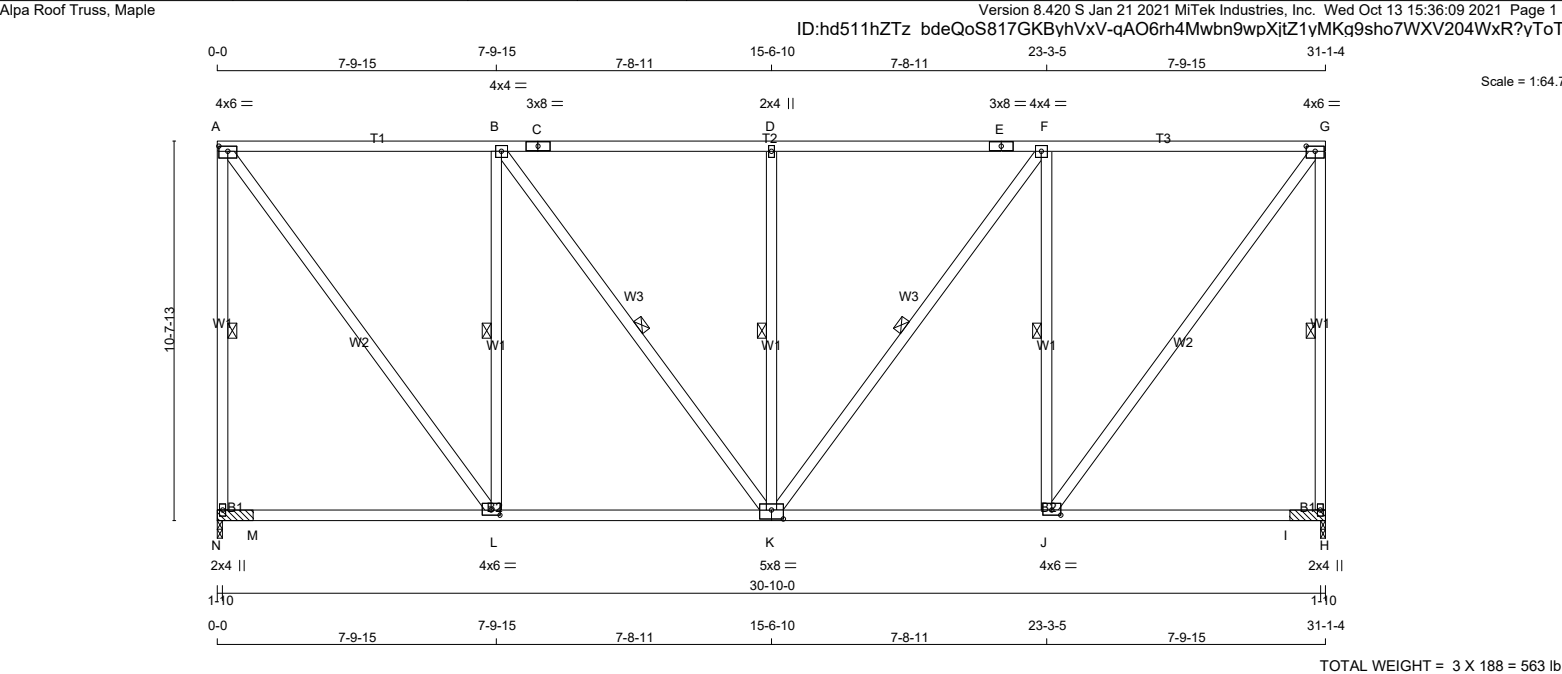
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.15 (B) (INPUT = 1.00)

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H25		1	TRUSS DESC. JT 45147	E21104139



LUMBER N. L. G. A. RULES CHORDS SIZE N - A 2x4 DRY No.2 SPF A - C 2x4 DRY No.2 SPF C - E 2x4 DRY No.2 SPF E - G 2x4 DRY No.2 SPF H - G 2x4 DRY No.2 SPF N - K 2x4 DRY No.2 SPF K - H 2x4 DRY No.2 SPF ALL WEBS 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ N 1617 0 H 1617 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT N 1617 0 0 H 1617 0 0 INPUT BRG IN-SX N 1-10 H 1-10 & BLOCK REQRD IN-SX N 1-10 & BLOCK H 1-10 & BLOCK UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL N 1163 653 / 0 0 / 0 0 / 0 0 / 0 510 / 0 0 / 0 H 1163 653 / 0 0 / 0 0 / 0 0 / 0 510 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, H 2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. N ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"x3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL. 2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. H ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"x3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL. BRACING FOR SECTION A-G, MAX. PURLIN SPACING = 2.00 FT. FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 0.00 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. 1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF A-N, G-H, B-L, B-K, D-K, F-K, F-J. 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) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX LC1 CSI (LC)</th><th>MAX. UNBRAC LENGTH</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX LC1 CSI (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>N-A</td><td>-1562 / 0</td><td>0.0 0.0</td><td>0.89 (1)</td><td>5.27</td><td>A-L</td><td>0 / 1626</td><td>0.26 (1)</td></tr><tr><td>A-B</td><td>-981 / 0</td><td>-85.5 -85.5</td><td>0.88 (1)</td><td>2.00</td><td>L-B</td><td>-1119 / 0</td><td>0.64 (1)</td></tr><tr><td>B-C</td><td>-1248 / 0</td><td>-85.5 -85.5</td><td>0.92 (1)</td><td>2.00</td><td>B-K</td><td>0 / 447</td><td>0.07 (1)</td></tr><tr><td>C-D</td><td>-1248 / 0</td><td>-85.5 -85.5</td><td>0.92 (1)</td><td>2.00</td><td>K-D</td><td>-609 / 0</td><td>0.35 (1)</td></tr><tr><td>D-E</td><td>-1248 / 0</td><td>-85.5 -85.5</td><td>0.92 (1)</td><td>2.00</td><td>K-F</td><td>0 / 447</td><td>0.07 (1)</td></tr><tr><td>E-F</td><td>-1248 / 0</td><td>-85.5 -85.5</td><td>0.92 (1)</td><td>2.00</td><td>J-F</td><td>-1119 / 0</td><td>0.64 (1)</td></tr><tr><td>F-G</td><td>-981 / 0</td><td>-85.5 -85.5</td><td>0.88 (1)</td><td>2.00</td><td>J-G</td><td>0 / 1626</td><td>0.26 (1)</td></tr><tr><td>H-G</td><td>-1562 / 0</td><td>0.0 0.0</td><td>0.89 (1)</td><td>5.27</td><td></td><td></td><td></td></tr><tr><td>N-M</td><td>0 / 0</td><td>-18.5 -18.5</td><td>0.32 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>M-L</td><td>0 / 0</td><td>-18.5 -18.5</td><td>0.32 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>L-K</td><td>0 / 981</td><td>-18.5 -18.5</td><td>0.43 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>K-J</td><td>0 / 981</td><td>-18.5 -18.5</td><td>0.43 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>J-I</td><td>0 / 0</td><td>-18.5 -18.5</td><td>0.32 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>I-H</td><td>0 / 0</td><td>-18.5 -18.5</td><td>0.32 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>				CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)	FR-TO		FROM TO			FR-TO			N-A	-1562 / 0	0.0 0.0	0.89 (1)	5.27	A-L	0 / 1626	0.26 (1)	A-B	-981 / 0	-85.5 -85.5	0.88 (1)	2.00	L-B	-1119 / 0	0.64 (1)	B-C	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	B-K	0 / 447	0.07 (1)	C-D	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	K-D	-609 / 0	0.35 (1)	D-E	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	K-F	0 / 447	0.07 (1)	E-F	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	J-F	-1119 / 0	0.64 (1)	F-G	-981 / 0	-85.5 -85.5	0.88 (1)	2.00	J-G	0 / 1626	0.26 (1)	H-G	-1562 / 0	0.0 0.0	0.89 (1)	5.27				N-M	0 / 0	-18.5 -18.5	0.32 (4)	10.00				M-L	0 / 0	-18.5 -18.5	0.32 (4)	10.00				L-K	0 / 981	-18.5 -18.5	0.43 (4)	10.00				K-J	0 / 981	-18.5 -18.5	0.43 (4)	10.00				J-I	0 / 0	-18.5 -18.5	0.32 (4)	10.00				I-H	0 / 0	-18.5 -18.5	0.32 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 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, 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.04") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (1.04") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18") CSI: TC=0.92/1.00 (B-D:1) , BC=0.43/1.00 (J-K:4) , WB=0.64/1.00 (B-L:1) , SSI=0.32/1.00 (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= 0.86 (L) (INPUT = 0.90) JSI METAL= 0.34 (A) (INPUT = 1.00)			
CHORDS				WEBS																																																																																																																																															
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)																																																																																																																																												
FR-TO		FROM TO			FR-TO																																																																																																																																														
N-A	-1562 / 0	0.0 0.0	0.89 (1)	5.27	A-L	0 / 1626	0.26 (1)																																																																																																																																												
A-B	-981 / 0	-85.5 -85.5	0.88 (1)	2.00	L-B	-1119 / 0	0.64 (1)																																																																																																																																												
B-C	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	B-K	0 / 447	0.07 (1)																																																																																																																																												
C-D	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	K-D	-609 / 0	0.35 (1)																																																																																																																																												
D-E	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	K-F	0 / 447	0.07 (1)																																																																																																																																												
E-F	-1248 / 0	-85.5 -85.5	0.92 (1)	2.00	J-F	-1119 / 0	0.64 (1)																																																																																																																																												
F-G	-981 / 0	-85.5 -85.5	0.88 (1)	2.00	J-G	0 / 1626	0.26 (1)																																																																																																																																												
H-G	-1562 / 0	0.0 0.0	0.89 (1)	5.27																																																																																																																																															
N-M	0 / 0	-18.5 -18.5	0.32 (4)	10.00																																																																																																																																															
M-L	0 / 0	-18.5 -18.5	0.32 (4)	10.00																																																																																																																																															
L-K	0 / 981	-18.5 -18.5	0.43 (4)	10.00																																																																																																																																															
K-J	0 / 981	-18.5 -18.5	0.43 (4)	10.00																																																																																																																																															
J-I	0 / 0	-18.5 -18.5	0.32 (4)	10.00																																																																																																																																															
I-H	0 / 0	-18.5 -18.5	0.32 (4)	10.00																																																																																																																																															

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



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

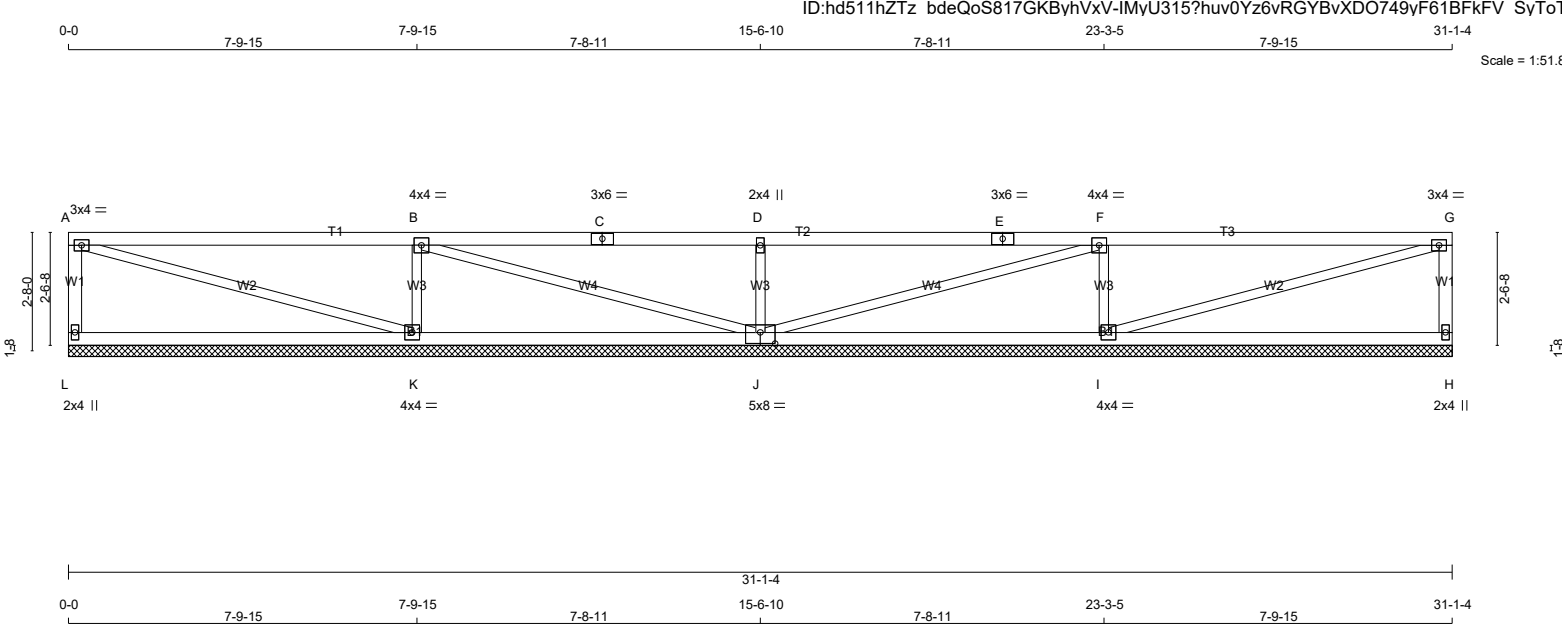


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H26P		1	TRUSS DESC. JT 45147	E21104140

Alpa Roof Truss, Maple

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LUMBER N. L. G. A. RULES

CHORDS SIZE LUMBER DESCR. SPF

L - A 2x4 DRY No.2

A - C 2x4 DRY No.2

C - E 2x4 DRY No.2

E - G 2x4 DRY No.2

H - G 2x4 DRY No.2

L - J 2x4 DRY No.2

J - H 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

SPF

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 BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
L	296	0	296	0	0	31-1-4 (15-6-10)			
H	296	0	296	0	0	31-1-4 (15-6-10)			
K	864	0	864	0	0	31-1-4 (15-6-10)			
J	681	0	681	0	0	31-1-4 (15-6-10)			
I	864	0	864	0	0	31-1-4 (15-6-10)			

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS									
JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
L	211	130 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0		
H	211	130 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0		
K	618	368 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0		
J	483	309 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0		
I	618	368 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0		

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

BRACING

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

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

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

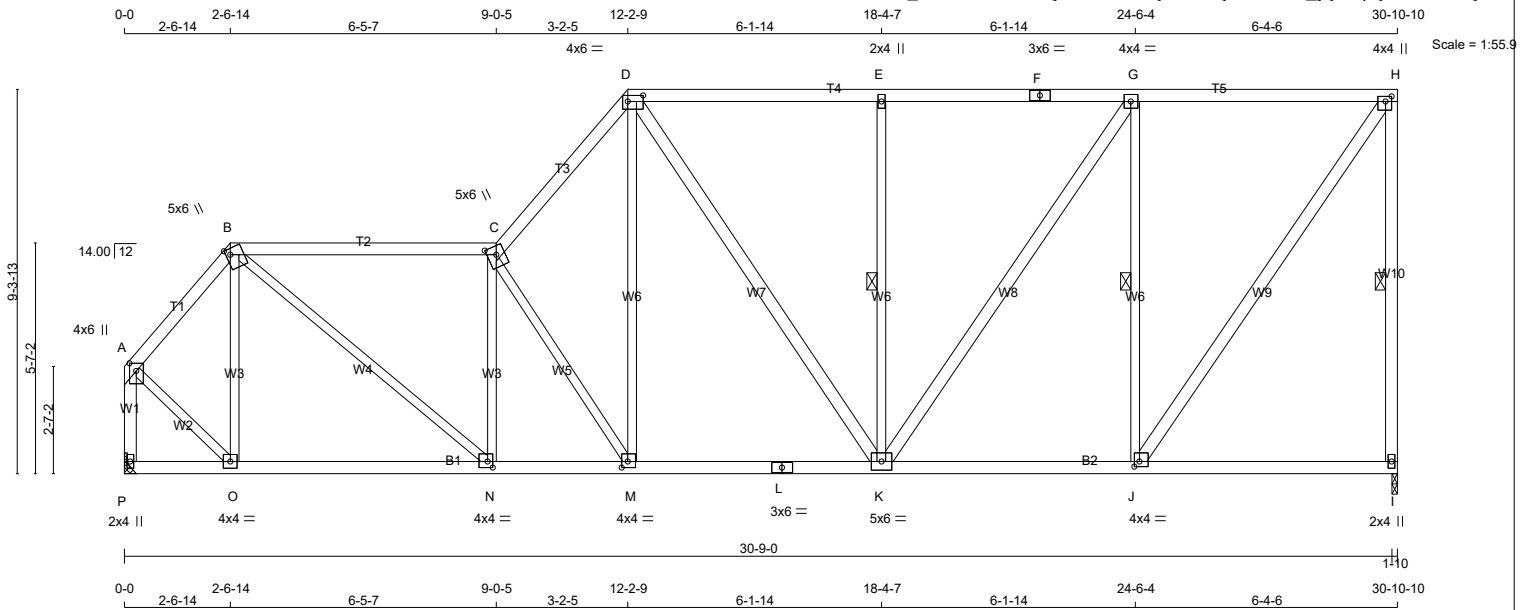
LOADING

TOTAL LOAD CASES: (4)

CHORDS									
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	WEBS		MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO			FROM TO			FR-TO			
L-A	-241 / 0	0.0	0.0	0.03 (1)	7.81	A-K	0 / 3		0.00 (1)
A-B	-3 / 0	-78.0	-78.0	0.69 (1)	10.00	K-B	-685 / 0		0.11 (1)
B-C	0 / 30	-78.0	-78.0	0.70 (1)	10.00	B-J	-34 / 0		0.05 (1)
C-D	0 / 30	-78.0	-78.0	0.70 (1)	10.00	J-D	-556 / 0		0.09 (1)
D-E	0 / 30	-78.0	-78.0	0.70 (1)	10.00	J-F	-34 / 0		0.05 (1)
E-F	0 / 30	-78.0	-78.0	0.70 (1)	10.00	I-F	-685 / 0		0.11 (1)
F-G	-3 / 0	-78.0	-78.0	0.69 (1)	10.00	I-G	0 / 3		0.00 (1)
H-G	-241 / 0	0.0	0.0	0.03 (1)	7.81				
L-K	0 / 0	-18.5	-18.5	0.33 (4)	10.00				
K-J	0 / 3	-18.5	-18.5	0.33 (4)	10.00				
J-I	0 / 3	-18.5	-18.5	0.33 (4)	10.00				
I-H	0 / 0	-18.5	-18.5	0.33 (4)	10.00				

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





TOTAL WEIGHT = 167 lb

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	T	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	5.0	6.0	1.75	1.25
C	CTWW+m	MT20	5.0	6.0	2.50	2.50
D	TTWW-l	MT20	4.0	6.0	1.75	4.50
E	TMV+w	MT20	2.0	4.0		
F	TS-l	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0		
H	TMVW+p	MT20	4.0	4.0	1.50	1.75
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-t	MT20	4.0	4.0	1.50	1.50
K	BMVWV-t	MT20	5.0	6.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	4.0	4.0	1.75	1.75
N	BMVW-t	MT20	4.0	4.0	1.75	1.50
O	BMVW-t	MT20	4.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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	IN-SX	IN-SX
I	1490	0	1490	0	0	1-10	1-10
P	1490	0	1490	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT P. MINIMUM BEARING LENGTH AT JOINT P = 1-10.

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1062	648 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
P	1062	648 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10 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 H-I, E-K, G-J.

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)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	-1067 / 0	-78.0	-78.0	0.10 (1)	5.99	O-B	-461 / 0	0.22 (1)	
B-C	-1794 / 0	-78.0	-78.0	0.70 (1)	4.70	B-N	0 / 1447	0.33 (1)	
C-D	-1868 / 0	-78.0	-78.0	0.20 (1)	4.14	N-C	-844 / 0	0.40 (1)	
D-E	-1266 / 0	-78.0	-78.0	0.45 (1)	5.14	C-M	-1122 / 0	0.75 (1)	
E-F	-1266 / 0	-78.0	-78.0	0.49 (1)	5.08	M-D	0 / 1036	0.23 (1)	
F-G	-1266 / 0	-78.0	-78.0	0.49 (1)	5.08	D-K	0 / 68	0.01 (1)	
G-H	-876 / 0	-78.0	-78.0	0.46 (1)	5.87	K-E	-514 / 0	0.29 (1)	
I-H	-1442 / 0	0.0	0.0	0.59 (1)	5.44	K-G	0 / 693	0.11 (1)	
P-A	-1489 / 0	0.0	0.0	0.21 (1)	6.72	J-G	-1112 / 0	0.63 (1)	
						H-H	0 / 1520	0.24 (1)	
P-O	0 / 0	-18.5	-18.5	0.13 (4)	10.00	A-O	0 / 897	0.20 (1)	
O-N	0 / 680	-18.5	-18.5	0.20 (4)	10.00				
N-M	0 / 1811	-18.5	-18.5	0.33 (1)	10.00				
M-L	0 / 1228	-18.5	-18.5	0.27 (1)	10.00				
L-K	0 / 1228	-18.5	-18.5	0.27 (1)	10.00				
K-J	0 / 876	-18.5	-18.5	0.26 (4)	10.00				
J-I	0 / 0	-18.5	-18.5	0.18 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.70/1.00 (B-C:1), BC=0.33/1.00 (M-N:1),
WB=0.75/1.00 (C-M:1), SSI=0.23/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

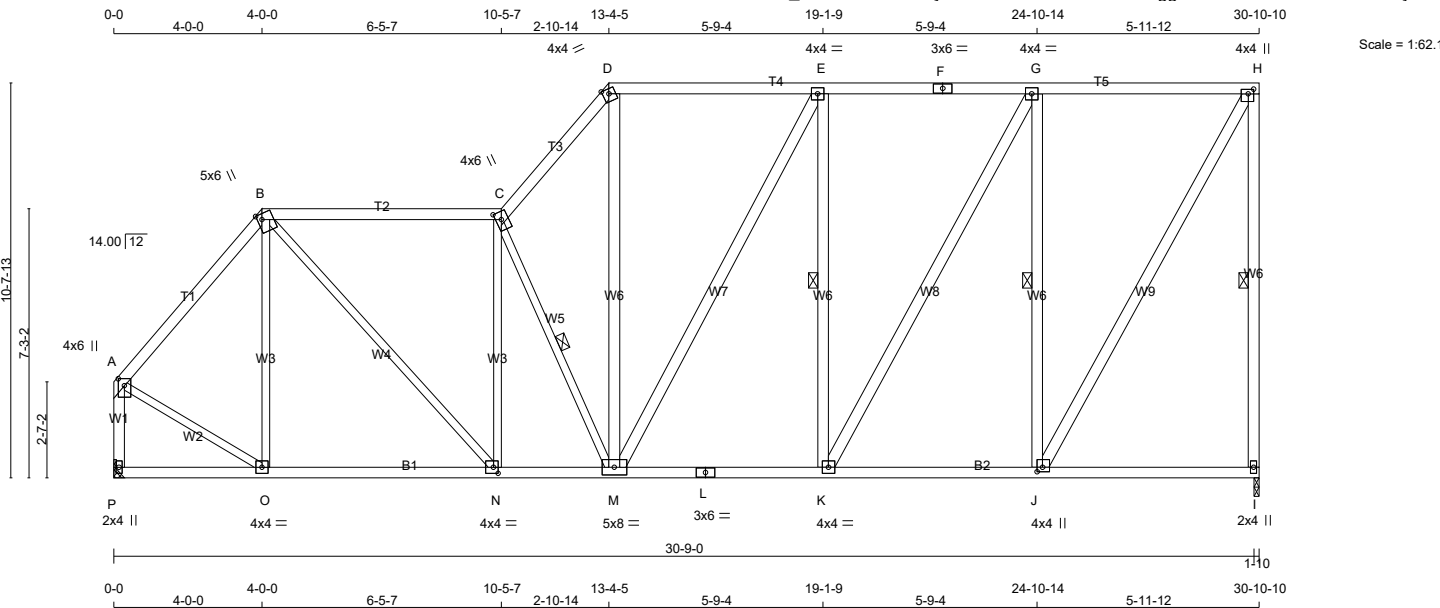
JSI GRIP= 0.90 (N) (INPUT = 0.90)
JSI METAL= 0.57 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H87S		1	TRUSS DESC. JT 45147	E21104142

Alpa Roof Truss, Maple

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ID:hd511hZTz_bdeQoS817GKByhVxV-A7B?uP8Vk7PR0aQgg6d73NO14IXhBnUnAMEi7DyToTF



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+p	MT20	4.0	6.0	2.25 2.00
B	TTWW+m	MT20	5.0	6.0	1.75 1.50
C	TTWW+m	MT20	4.0	6.0	2.50 1.75
D	TTW-m	MT20	4.0	4.0	Edge
E	TMWW-t	MT20	4.0	4.0	
F	TS-t	MT20	3.0	6.0	
G	TMWW-t	MT20	4.0	4.0	
H	TMVW+p	MT20	4.0	4.0	1.50 1.75
I	BMV1+p	MT20	2.0	4.0	
J	BMWW+t	MT20	4.0	4.0	1.50 1.75
K	BMWW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMWWW-t	MT20	5.0	8.0	
N	BMWW-t	MT20	4.0	4.0	2.00 1.50
O	BMWW-t	MT20	4.0	4.0	
P	BMV1+p	MT20	2.0	4.0	

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

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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
I	1490	0		1490	0	0	1-10		
P	1490	0		1490	0	0	MECHANICAL		

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT P. MINIMUM BEARING LENGTH AT JOINT P = 1-10.

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
I	1062	648 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0		
P	1062	648 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0		

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

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 H-I, C-M, E-K, G-J.

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		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	MEMB.	FORCE (LBS)	MAX	LC1
FR-TO		FROM TO		LENGTH		FR-TO		LENGTH	
A-B	-1178 / 0	-78.0	-78.0	0.26 (1)	5.59	O-B	-297 / 0	0.28 (1)	
B-C	-1479 / 0	-78.0	-78.0	0.67 (1)	4.47	B-N	0 / 1067	0.24 (1)	
C-D	-1665 / 0	-78.0	-78.0	0.15 (1)	5.00	N-C	-706 / 0	0.66 (1)	
D-E	-1097 / 0	-78.0	-78.0	0.38 (1)	5.54	C-M	-1008 / 0	0.38 (1)	
E-F	-1075 / 0	-78.0	-78.0	0.41 (1)	5.52	M-D	0 / 961	0.15 (1)	
F-G	-1075 / 0	-78.0	-78.0	0.41 (1)	5.52	M-E	0 / 45	0.01 (1)	
G-H	-726 / 0	-78.0	-78.0	0.40 (1)	6.25	K-E	-522 / 0	0.30 (1)	
I-H	-1445 / 0	0.0	0.0	0.83 (1)	5.44	K-G	0 / 718	0.12 (1)	
P-A	-1467 / 0	0.0	0.0	0.20 (1)	6.76	J-G	-1134 / 0	0.65 (1)	
						J-H	0 / 1451	0.23 (1)	
						A-O	0 / 868	0.20 (1)	
P-O	0 / 0	-18.5	-18.5	0.14 (4)	10.00				
O-N	0 / 758	-18.5	-18.5	0.21 (4)	10.00				
N-M	0 / 1490	-18.5	-18.5	0.28 (1)	10.00				
M-L	0 / 1075	-18.5	-18.5	0.23 (1)	10.00				
L-K	0 / 1075	-18.5	-18.5	0.23 (1)	10.00				
K-J	0 / 726	-18.5	-18.5	0.22 (4)	10.00				
J-I	0 / 0	-18.5	-18.5	0.15 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.15")

CSI: TC=0.83/1.00 (H-I:1) , BC=0.28/1.00 (M-N:1) , WB=0.66/1.00 (C-N:1) , SSI=0.22/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

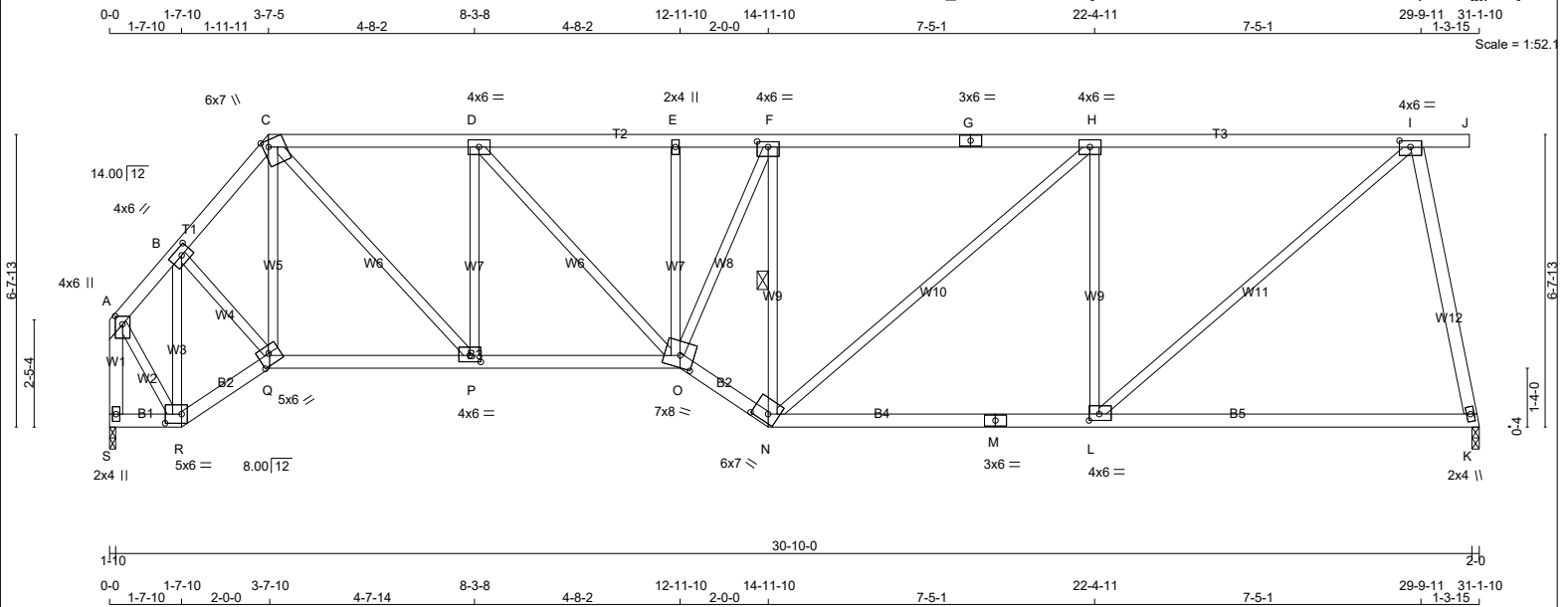
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (O) (INPUT = 0.90)
JSI METAL= 0.50 (C) (INPUT = 1.00)

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





TOTAL WEIGHT = 143 lb

LUMBER

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR
A - C	2x4	DRY	No.2	SPF
C - G	2x4	DRY	No.2	SPF
G - J	2x4	DRY	No.2	SPF
S - A	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	T	PLATES	W	L	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TMVW-t	MT20	4.0	6.0	2.00	2.75
C	TTVW+m	MT20	6.0	7.0	Edge 1.50	
D	TMVW-t	MT20	4.0	6.0		
E	TMVW+w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	6.0	1.50	3.00
G	TS-t	MT20	3.0	6.0		
H	TMVW-t	MT20	4.0	6.0		
I	TMVW-t	MT20	4.0	6.0	1.75	3.00
K	BMV1+w	MT20	2.0	4.0		
L	BMVW-t	MT20	4.0	6.0	1.75	2.75
M	BS-t	MT20	3.0	6.0		
N	BBVW-h	MT20	6.0	7.0	2.25	4.25
O	BBVWVW-m	MT20	7.0	8.0	3.25	3.75
P	BMVW-t	MT20	4.0	6.0	1.75	3.00
Q	BBVW-h	MT20	5.0	6.0	3.00	3.00
R	BBVW-l	MT20	5.0	6.0	2.50	4.50
S	BMV1-p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	1488	0	1488	0	0	2-0	1-10
S	1494	0	1494	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	1061	647 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
S	1065	650 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED (LBS)	MAX CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	-899 / 0	-78.0	-78.0 0.03 (1)	6.25	I-K	-1452 / 0	0.81 (1)		
B-C	-1492 / 0	-78.0	-78.0 0.07 (1)	5.31	R-B	-1081 / 0	0.29 (1)		
C-D	-1850 / 0	-78.0	-78.0 0.33 (1)	4.60	B-Q	0 / 620	0.14 (1)		
D-E	-2255 / 0	-78.0	-78.0 0.36 (1)	4.21	Q-C	-45 / 17	0.02 (1)		
E-F	-2252 / 0	-78.0	-78.0 0.37 (1)	4.14	C-P	0 / 1303	0.29 (1)		
F-G	-1861 / 0	-78.0	-78.0 0.85 (1)	3.85	P-D	-855 / 0	0.36 (1)		
G-H	-1861 / 0	-78.0	-78.0 0.85 (1)	3.85	D-O	0 / 593	0.13 (1)		
H-I	-1551 / 0	-78.0	-78.0 0.80 (1)	4.20	O-E	-137 / 0	0.06 (1)		
I-J	0 / 0	-78.0	-78.0 0.08 (1)	10.00	O-F	0 / 1071	0.24 (1)		
S-A	-1479 / 0	0.0	0.0 0.19 (1)	6.74	N-F	-1419 / 0	0.40 (1)		
					N-H	0 / 408	0.09 (1)		
S-R	0 / 0	-18.5	-18.5 0.01 (4)	10.00	L-H	-929 / 0	0.68 (1)		
R-Q	0 / 673	-18.5	-18.5 0.12 (1)	10.00	L-I	0 / 1687	0.38 (1)		
Q-P	0 / 959	-18.5	-18.5 0.21 (1)	10.00	A-R	0 / 946	0.21 (1)		
P-O	0 / 1850	-18.5	-18.5 0.35 (1)	10.00					
O-N	0 / 2208	-18.5	-18.5 0.37 (1)	10.00					
N-M	0 / 1551	-18.5	-18.5 0.49 (4)	10.00					
M-L	0 / 1551	-18.5	-18.5 0.49 (4)	10.00					
L-K	0 / 279	-18.5	-18.5 0.37 (4)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	34.4	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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.85/1.00 (F-H:1), BC=0.49/1.00 (L-N:4),
WB=0.81/1.00 (I-K:1), SSI=0.27/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.45 (M) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H171		2	JT 45147	E21104144(2)

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	5.0	8.0	Edge	1.00
C	TMWW-t	MT20	4.0	6.0	2.00	2.75
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	6.0		
G	TMWW-t	MT20	4.0	6.0		
H	TMWW-t	MT20	5.0	6.0	2.25	2.75
J	BMW1+w	MT20	2.0	4.0	2.00	0.50
K	BMWW-t	MT20	5.0	6.0	2.25	2.50
L	BMWW-t	MT20	4.0	6.0		
M	BS-t	MT20	6.0	7.0		
N	BMWWW-t	MT20	5.0	8.0		
O	BMWW-t	MT20	5.0	6.0		
P	BMWW-t	MT20	4.0	4.0	2.00	1.50
Q	BMVK1+p	MT20	6.0	9.0	Edge	3.00

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

PLATE PLACEMENT TOL. = 0.250 inches

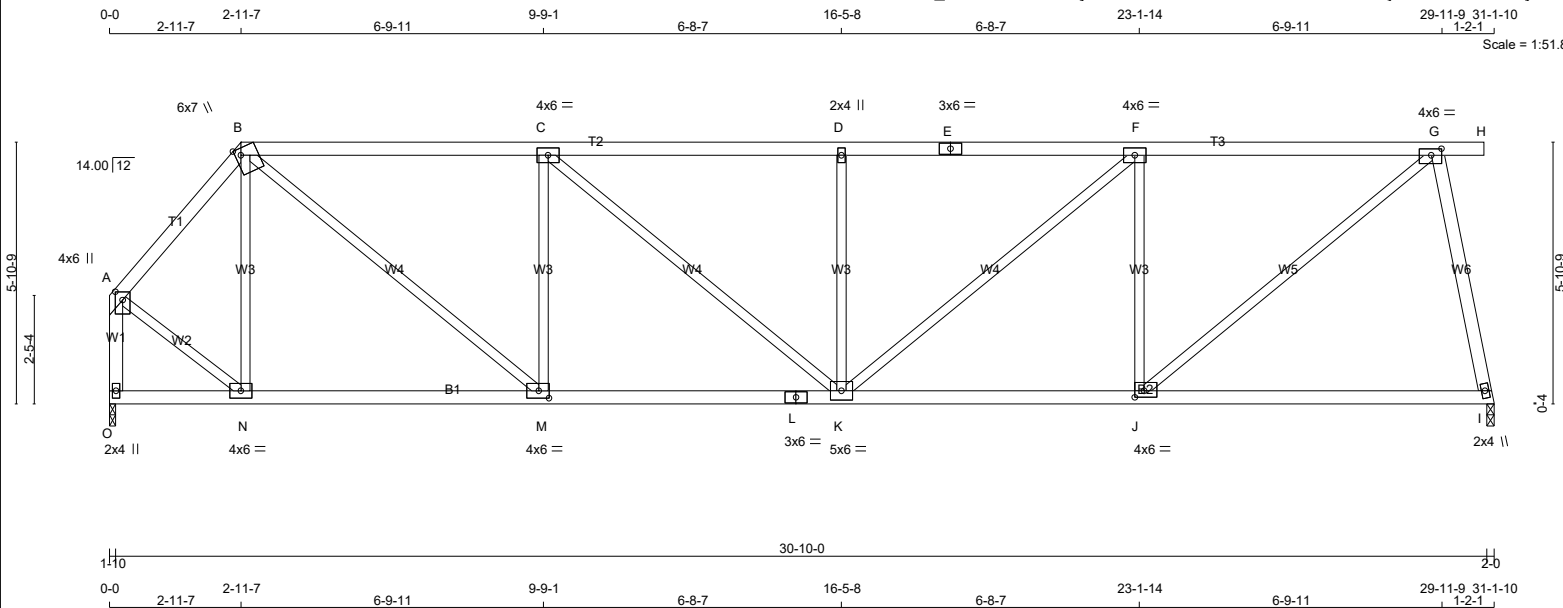
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (O) (INPUT = 0.90)

JSI METAL= 0.52 (M) (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	SPF	
B - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
O - A	2x4	DRY	No.2	SPF	
O - L	2x4	DRY	No.2	SPF	
L - I	2x4	DRY	No.2	SPF	
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
G - I	2x4	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+p	MT20	4.0	6.0	2.25 2.00
B	TTWW+m	MT20	6.0	7.0	Edge 1.50
C	TMVW-t	MT20	4.0	6.0	
D	TMW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	6.0	
F	TMVW-t	MT20	4.0	6.0	
G	TMVW-t	MT20	4.0	6.0	1.75 2.75
I	BMV1+w	MT20	2.0	4.0	
J	BMVW-t	MT20	4.0	6.0	1.75 2.50
K	BMVWWW-t	MT20	5.0	6.0	
L	BS-t	MT20	3.0	6.0	
M	BMVW-t	MT20	4.0	6.0	2.00 2.75
N	BMVW-t	MT20	4.0	6.0	
O	BMV1+p	MT20	2.0	4.0	

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	1489	0	1489	0	0	2-0	1-10
O	1493	0	1493	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1061	647 / 0	0 / 0	0 / 0	0 / 0	414 / 0	0 / 0
O	1065	650 / 0	0 / 0	0 / 0	0 / 0	415 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	-1140 / 0	-78.0	-78.0	0.14 (1)	5.80	G-I	-1457 / 0	0.59 (1)
B-C	-1864 / 0	-78.0	-78.0	0.69 (1)	4.13	N-B	-391 / 0	0.21 (1)
C-D	-2111 / 0	-78.0	-78.0	0.72 (1)	3.89	M-B	0 / 1463	0.33 (1)
D-E	-2111 / 0	-78.0	-78.0	0.71 (1)	3.91	M-C	-797 / 0	0.42 (1)
E-F	-2111 / 0	-78.0	-78.0	0.71 (1)	3.91	C-K	0 / 322	0.07 (1)
F-G	-1643 / 0	-78.0	-78.0	0.64 (1)	4.39	K-D	-484 / 0	0.26 (1)
G-H	0 / 0	-78.0	-78.0	0.06 (1)	10.00	K-F	0 / 609	0.14 (1)
O-A	-1484 / 0	0.0	0.0	0.19 (1)	6.73	J-F	-985 / 0	0.53 (1)
						J-G	0 / 1779	0.40 (1)
O-N	0 / 0	-18.5	-18.5	0.12 (4)	10.00	A-N	0 / 890	0.20 (1)
N-M	0 / 730	-18.5	-18.5	0.24 (4)	10.00			
M-L	0 / 1864	-18.5	-18.5	0.39 (1)	10.00			
L-K	0 / 1864	-18.5	-18.5	0.39 (1)	10.00			
K-J	0 / 1643	-18.5	-18.5	0.41 (4)	10.00			
J-I	0 / 279	-18.5	-18.5	0.28 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (1.03")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.10")
ALLOWABLE DEFL.(TL)= $L/360$ (1.03")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.21")

CSI: TC=0.72/1.00 (C-D:1), BC=0.41/1.00 (J-K:4), WB=0.59/1.00 (G-I:1), SSI=0.25/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (A) (INPUT = 0.90)
JSI METAL= 0.53 (L) (INPUT = 1.00)

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



The drawing illustrates a roof truss system with the following details:

- Members:**
 - Top Chords: T1, T2, T3
 - Bottom Chords: B1, B2
 - Vertical Members: W1, W2, W3, W4, W5, W6
 - Diagonal Members: W1, W2, W4, W5, W6
- Joints:** A, B, C, D, E, F, G, H, I, J, K, L, M
- Dimensions:**
 - Horizontal: 3-11-7, 8-7-9, 12-6-15, 8-6-5, 21-1-4, 8-7-9, 29-8-12, 1-4-14, 31-1-10
 - Vertical: 14.00' (12), 0.4', 7'-0.9'
 - Other: 0-0, 1-10, 30-10-0, 2-0
- Notes:**
 - Scale = 1:51.4
 - Member sizes: 5x6, 2x4, 3x8, 4x6, 4x6, 4x6, 2x4

JSI GRIP= 0.84 (A) (INPUT = 0.90)
JSI METAL= 0.55 (J) (INPUT = 1.00)

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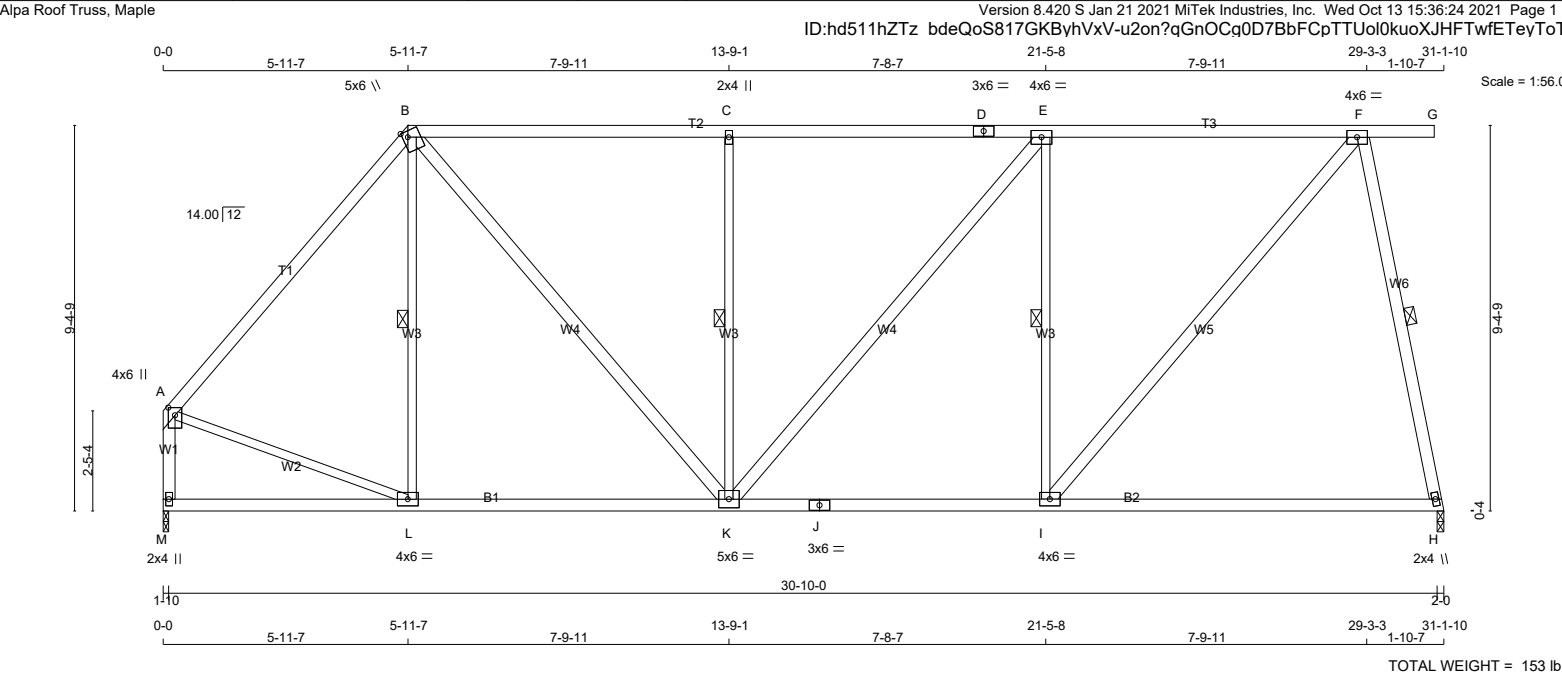
PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+p	MT20	4.0	6.0	2.25 1.50
B	TDWW+m	MT20	5.0	6.0	1.75 1.50
C	TMVW+w	MT20	2.0	4.0	
D	TS-t	MT20	3.0	6.0	
E	TMVW-t	MT20	4.0	6.0	
F	TMVW-t	MT20	4.0	6.0	
H	BMV1+w	MT20	2.0	4.0	
I	BMVW-t	MT20	4.0	6.0	
J	BS-t	MT20	3.0	6.0	
K	BMVWW-t	MT20	5.0	6.0	
L	BMVW-t	MT20	4.0	6.0	
M	BMV1+p	MT20	2.0	4.0	

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1 MAX.	MAX.	MEMB.	FORCE	MAX.
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	-1240 / 0	-78.0	-78.0 0.42 (1)	5.29	F-H	-1442 / 0	0.46 (1)
B-C	-1504 / 0	-78.0	-78.0 0.94 (1)	3.99	L-B	-188 / 25	0.25 (1)
C-D	-1504 / 0	-78.0	-78.0 0.94 (1)	3.99	B-K	0 / 974	0.16 (1)
D-E	-1504 / 0	-78.0	-78.0 0.94 (1)	3.99	K-C	-693 / 0	0.91 (1)
E-F	-1343 / 0	-78.0	-78.0 0.88 (1)	4.26	K-E	0 / 226	0.04 (1)
F-G	0 / 0	-78.0	-78.0 0.12 (1)	10.00	I-E	-851 / 0	0.36 (1)
M-A	-1466 / 0	0.0	0.0 0.19 (1)	6.76	I-F	0 / 1490	0.24 (1)
					A-L	0 / 868	0.20 (1)
M-L	0 / 0	-18.5	-18.5 0.21 (4)	10.00			
L-K	0 / 801	-18.5	-18.5 0.29 (4)	10.00			
K-J	0 / 1343	-18.5	-18.5 0.52 (4)	10.00			
J-I	0 / 1343	-18.5	-18.5 0.52 (4)	10.00			
I-H	0 / 278	-18.5	-18.5 0.41 (4)	10.00			

JSI GRIP= 0.85 (K) (INPUT = 0.90)
JSI METAL= 0.46 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H175		1	TRUSS DESC. JT 45147	E21104148



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - B 2x4 DRY 1650F 1.5E SPF B - D 2x4 DRY No.2 SPF D - G 2x4 DRY No.2 SPF M - A 2x4 DRY No.2 SPF M - J 2x4 DRY No.2 SPF J - H 2x4 DRY No.2 SPF ALL WEBS 2x4 DRY No.2 SPF EXCEPT L - B 2x3 DRY No.2 SPF K - C 2x3 DRY No.2 SPF I - E 2x3 DRY No.2 SPF A - L 2x3 DRY No.2 SPF				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 UPLIFT IN-SX IN-SX H 1486 0 1486 0 0 2-0 1-10 M 1496 0 1496 0 0 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL H 1060 646 / 0 0 / 0 0 / 0 0 / 0 414 / 0 0 / 0 M 1066 651 / 0 0 / 0 0 / 0 0 / 0 415 / 0 0 / 0				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 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 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.03") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (1.03") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.24") CSI: TC=0.80/1.00 (B-C:1) , BC=0.48/1.00 (I-K:4) , WB=0.63/1.00 (F-H:1) , SSI=0.28/1.00 (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			
--	--	--	--	--	--	--	--	---	--	--	--

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	5.0	6.0	1.75	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	6.0		
F	TMWW-t	MT20	4.0	6.0		
H	BMV1+w	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	6.0		
M	BMV1+p	MT20	2.0	4.0		

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



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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

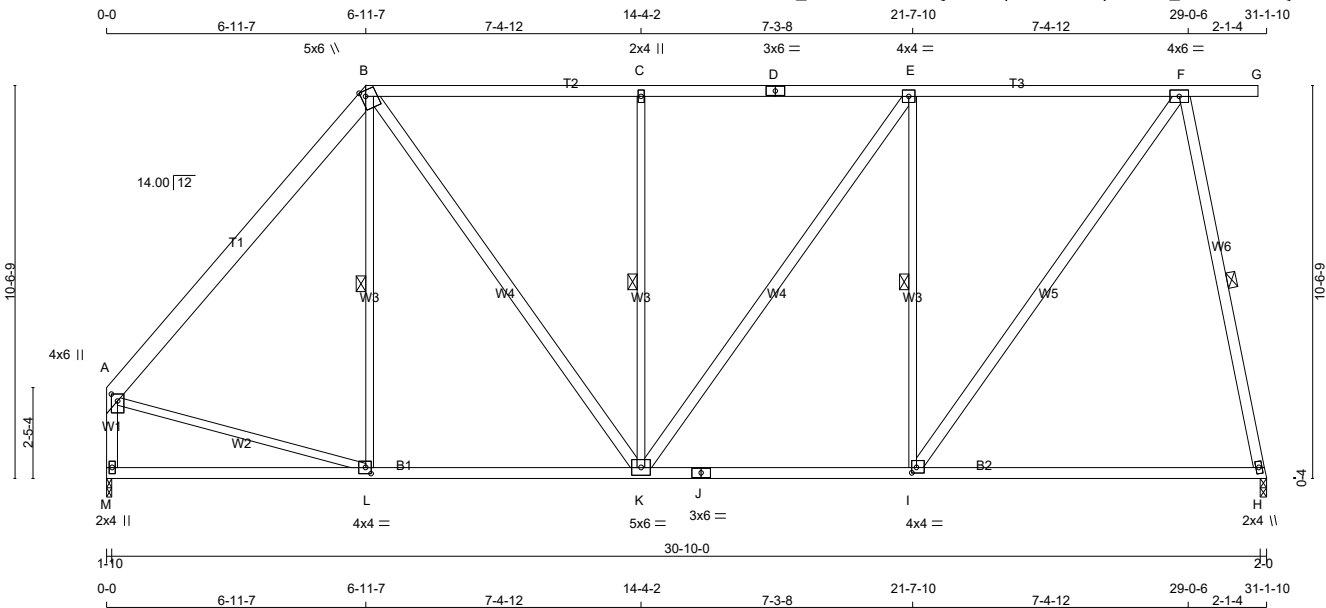
JSI GRIP= 0.82 (A) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H176		1	TRUSS DESC. JT 45147	E21104149

Alpa Roof Truss, Maple

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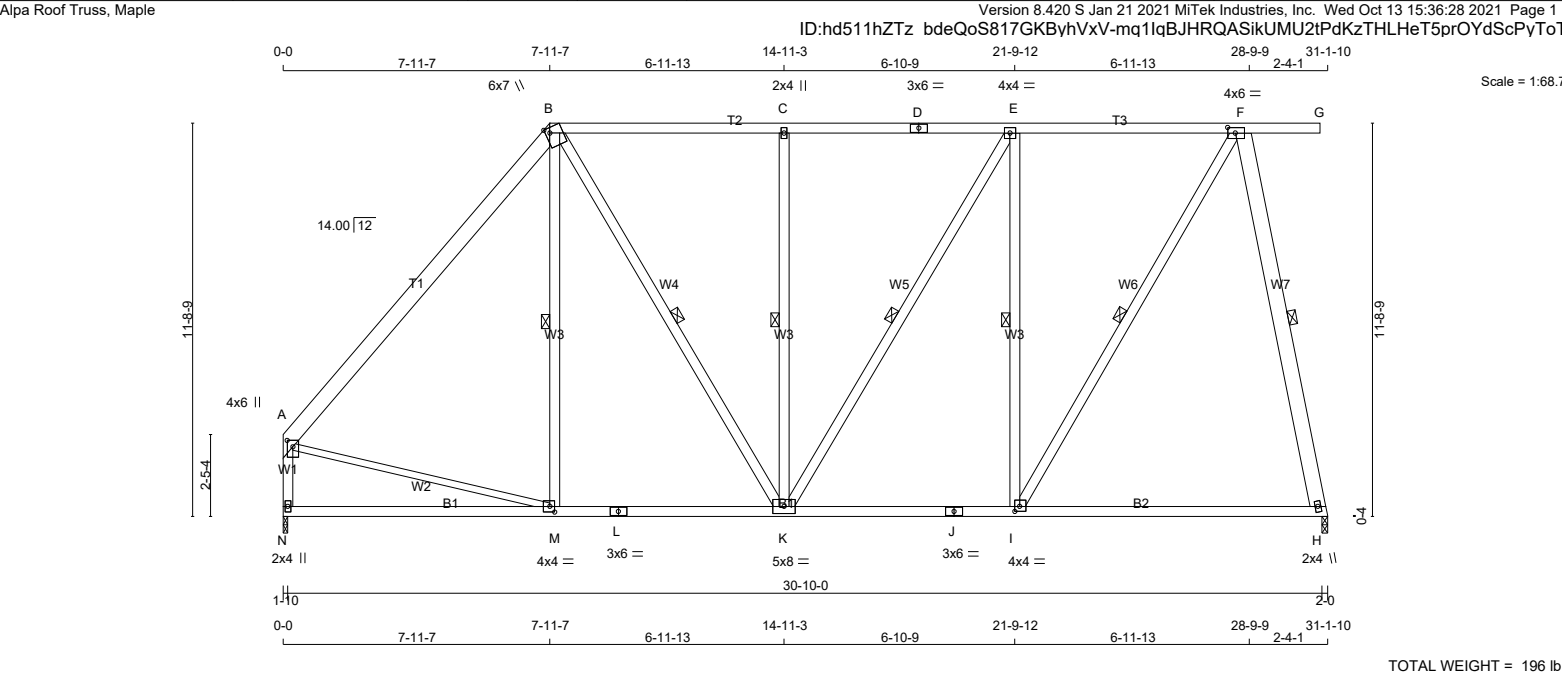
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA				
A - B	2x6	DRY	No.2	SPF	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		SPECIFIED LOADS:						
B - D	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		TOP CH. LL = 21.0 PSF						
D - G	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	DL = 6.0 PSF						
M - A	2x4	DRY	No.2	SPF	H	1485	0	1485	0	0	2-0	1-10	BOT CH. LL = 0.0 PSF						
M - J	2x4	DRY	No.2	SPF	M	1497	0	1497	0	0	1-10	1-10	DL = 7.4 PSF						
J - H	2x4	DRY	No.2	SPF											TOTAL LOAD = 34.4 PSF				
ALL WEBS 2x4 DRY No.2 SPF					UNFACTORED REACTIONS														
EXCEPT					1ST LCASE MAX./MIN. COMPONENT REACTIONS														
L - B	2x3	DRY	No.2	SPF	JT	COMBINED		SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
K - C	2x3	DRY	No.2	SPF	H	1059		645 / 0		0 / 0		0 / 0		0 / 0		413 / 0		0 / 0	
I - E	2x3	DRY	No.2	SPF	M	1067		652 / 0		0 / 0		0 / 0		0 / 0		415 / 0		0 / 0	
A - L	2x3	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, M														
DRY: SEASONED LUMBER.					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART														

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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H177		1	TRUSS DESC. JT 45147	E21104150



TOTAL WEIGHT = 196 lb [M]

L. L. G. A. RULES				BUILDING DESIGNER							DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS							SPECIFIED LOADS:			
A - B	2x6	DRY	No.2	FACTORED			MAXIMUM FACTORED		INPUT	REQRD	TOP CH. LL = 21.0 PSF			
B - D	2x4	DRY	No.2	GROSS REACTION			GROSS REACTION		BRG		DL = 6.0 PSF			
D - G	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF	
N - A	2x4	DRY	No.2	SPF	H	1486	0	1486	0	0	2-0	1-10	DL = 7.4 PSF	
N - L	2x4	DRY	No.2	SPF	N	1495	0	1495	0	0	1-10	1-10	TOTAL LOAD = 34.4 PSF	
L - J	2x4	DRY	No.2	SPF										
J - H	2x4	DRY	No.2	SPF										

ALL WEBS	2x4	DRY	No.2	SPF						
EXCEPT										
F - H	2x6	DRY	No.2	SPF						
A - M	2x3	DRY	No.2	SPF						

DRY: SEASONED LUMBER.

PLATES (table is in inches)						LOADING									
JT	TYPE	PLATES	W	LEN	Y	X									
A	TMVW+p	MT20	4.0	6.0	2.25	2.00									
B	TTWW+m	MT20	6.0	7.0	Edge	1.50									
C	TMW+w	MT20	2.0	4.0											
D	TS-t	MT20	3.0	6.0											
E	TMWW-t	MT20	4.0	4.0											
F	TMWW-t	MT20	4.0	6.0	2.00	2.75									
H	BMW1+w	MT20	2.0	4.0											
I	BMWW-t	MT20	4.0	4.0	1.75	1.75									
J	BS-t	MT20	3.0	6.0											
K	BMWWWW-t	MT20	5.0	8.0											
L	BS-t	MT20	3.0	6.0											
M	BMWW-t	MT20	4.0	4.0	2.00	1.75									
N	BMV1+p	MT20	2.0	4.0											

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

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



ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CSI: TC=0.59/1.00 (B-C:1), BC=0.42/1.00 (I-K:4),
WB=0.73/1.00 (F-H:1), SSI=0.25/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

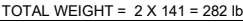
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.49 (A) (INPUT = 1.00)

JSI GRIP= 0.89 (G) (INPUT = 0.90)
JSI METAL= 0.29 (I) (INPUT = 1.00)

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CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336336	H251A		2	JT 45147	E21104152(2)

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTWW-h	MT20	5.0	8.0	1.75	5.50
D	TMWW-t	MT20	4.0	4.0	1.50	1.50
E	TMWW-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW+t	MT20	4.0	6.0		
H	TS-t	MT20	3.0	8.0		
I	TMWW-t	MT20	4.0	4.0		
J	TMWW-t	MT20	4.0	6.0	1.75	2.75
L	BMW1+w	MT20	2.0	4.0		
M	BMWW-t	MT20	4.0	6.0	2.00	1.75
N	BS-t	MT20	3.0	6.0		
O	BBWW-m	MT20	5.0	8.0	Edge	
P	BBWWW-p	MT20	7.0	8.0	4.00	4.50
Q	BMWW-t	MT20	4.0	6.0		
R	BBWW-l	MT20	7.0	8.0		
S	BBWW-h	MT20	5.0	6.0	2.50	3.50
T	BMV1+p	MT20	2.0	4.0		

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

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

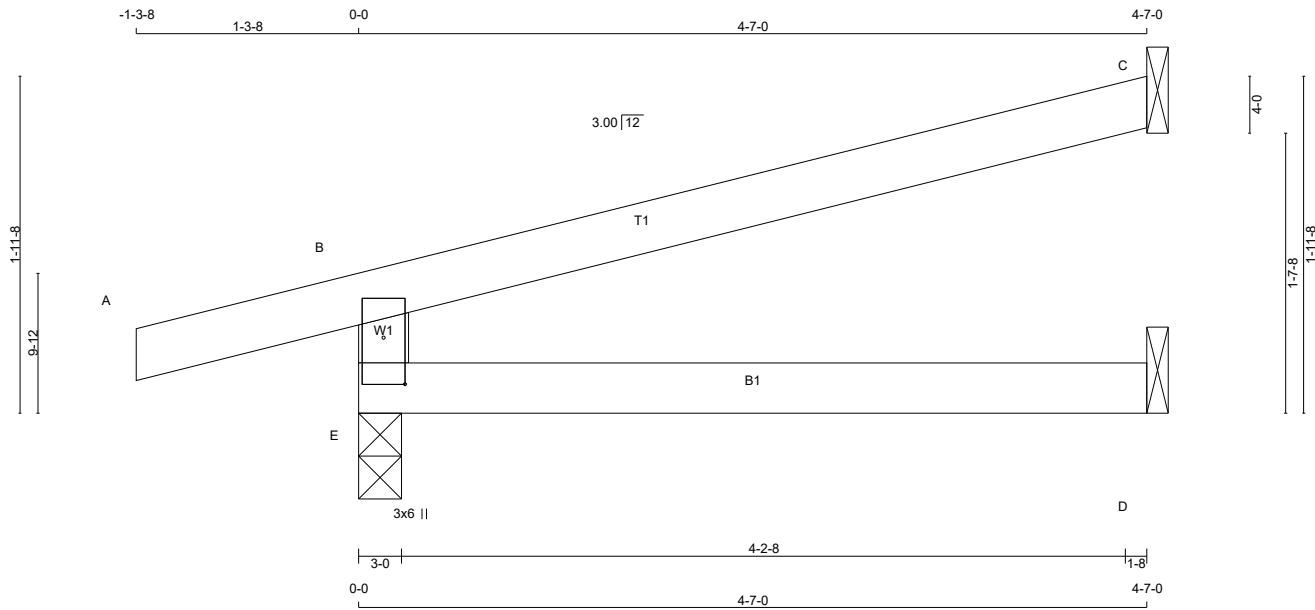
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)

JSI METAL= 0.58 (O) (INPUT = 1.00)

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





TOTAL WEIGHT = 9 X 13 = 113 lb

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B						
E	TMBMV1+p	MT20	3.0	6.0	3.25	1.50

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

BEARINGS

	FACTORED			FACTORED		INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	377	0	377	0	0	3-0	1-8
C	134	0	134	0	0	1-8	1-8
D	34	0	39	0	0	1-8	1-8

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

UNFACTORED REACTIONS

1ST LCASE		MAX MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	266	176 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0
C	93	72 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0
D	28	0 / 0	0 / 0	0 / 0	0 / 0	28 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO					
E-B	-327 / 0	0.0	0.0	0.09 (4)	7.81		
A-B	0 / 13	-78.0	-78.0	0.10 (1)	10.00		
B-C	-11 / 0	-78.0	-78.0	0.28 (1)	6.25		
E-D	0 / 0	-18.5	-18.5	0.09 (4)	10.00		

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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	21.0	PSF
		DL =	6.0	PSF

BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.28/1.00 (B-C:1), BC=0.09/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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= 0.20 (E) (INPUT = 0.90)
JSI METAL= 0.05 (E) (INPUT = 1.00)

LUS – Double Shear Joist Hangers



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

Material: 18 gauge

Finish: G90 galvanized

Design:

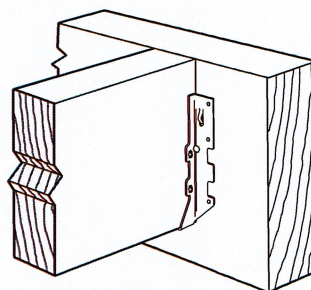
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

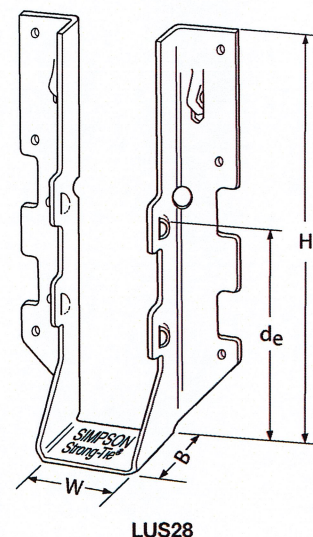
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



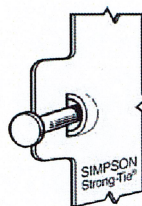
Typical LUS Installation



LUS28

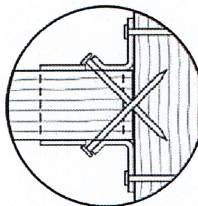
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1¾	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3½	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4½	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4½	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 15/16	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4½	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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



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

U.S. Patent 5,603,580



Double Shear Nailing Top View.



LIMIT STATES DESIGN

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T-SPECLUS20 3/20 exp. 6/22

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HUS/LJS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: See table

Finish: G90 galvanized

Design:

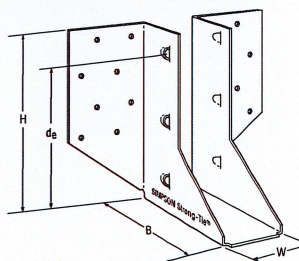
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

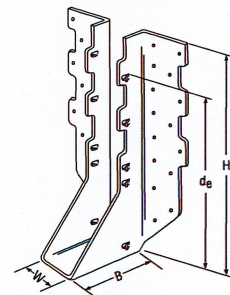
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

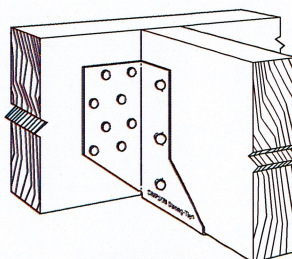
- See current catalogue for options



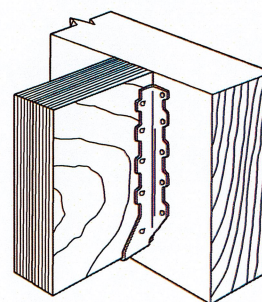
LJS26DS



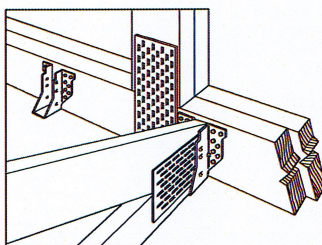
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



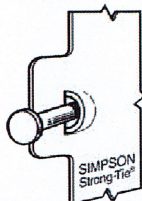
Typical HUS
Installation



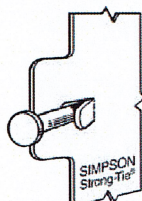
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.	Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.
LJS26DS	18	1½	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅝	3	3½	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7⅝	3	6⅜	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9⅝	3	7⅜	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅜	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

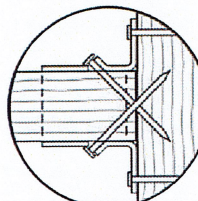
1. d_e is the distance from the seat of the hanger to the highest joist nail.



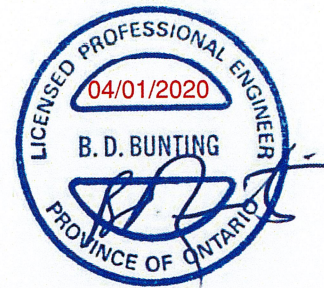
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

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(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

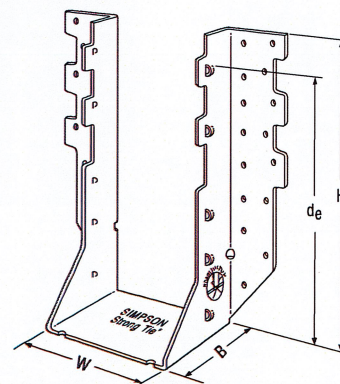
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

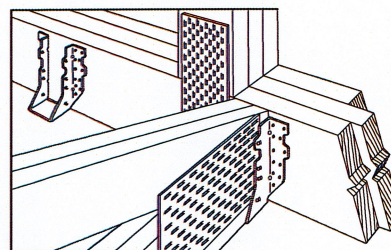
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

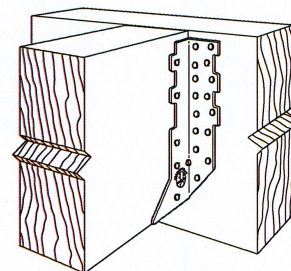
- See current catalogue for options



HHUS410



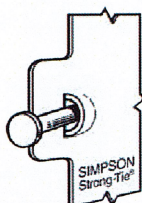
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

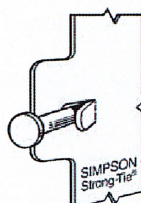
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
HHUS26-2	14	3½	5¼	3	3¼	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3½	7½	3	6½	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3½	9½	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4¼	9	3	7¼	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6¼	8¾	3	7¾	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3½	5¼	3	3¼	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3½	7½	3	6½	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3½	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5½	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7¼	9	3½	7¾	(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.

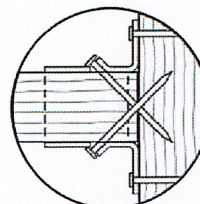


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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TC – Truss Connectors

SIMPSON
Strong-Tie

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

Material: 16 gauge

Finish: G90 galvanized

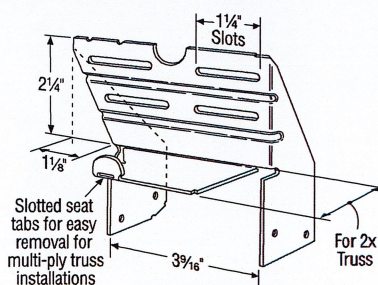
Design: Factored resistances are in accordance with CSA 086-14

Installation:

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

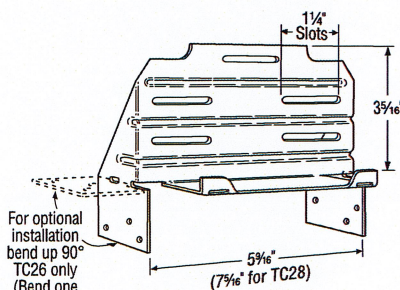
Optional TC Installation:

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



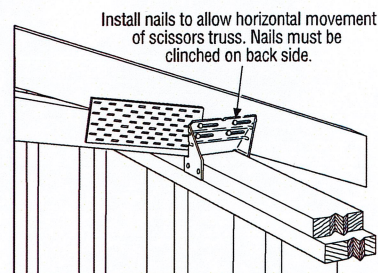
TC24

U.S. Patent 4,932,173

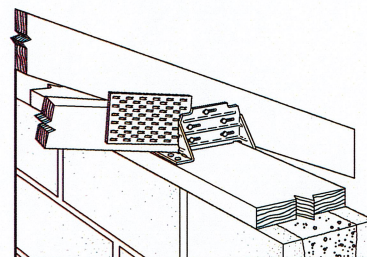


TC26

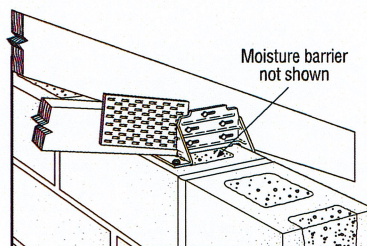
(TC28 Similar)



Typical TC24 Installation



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



Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC26	(5) 10d	(6) 10d x 1½"	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) – ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



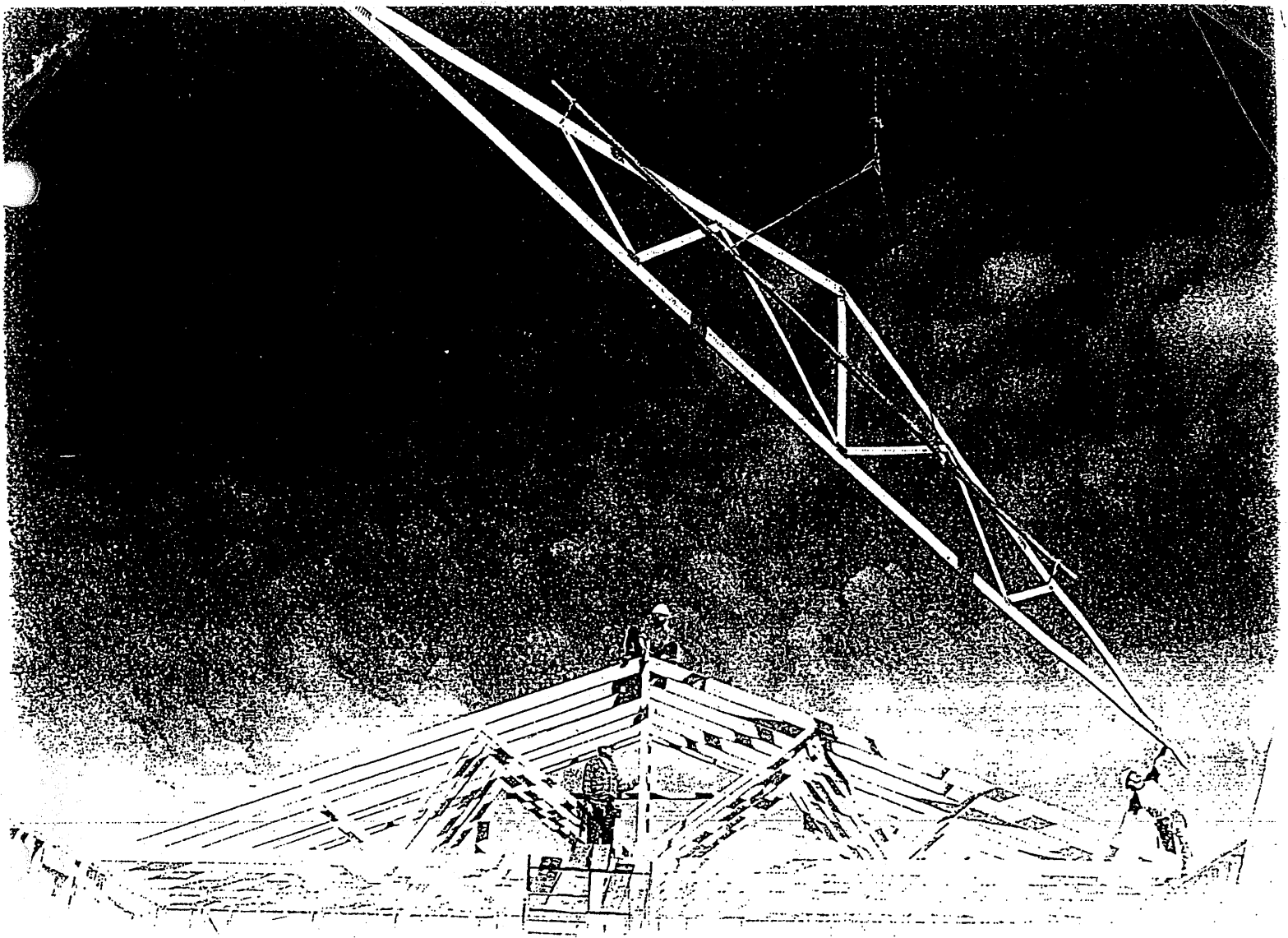
**LIMIT
STATES
DESIGN**

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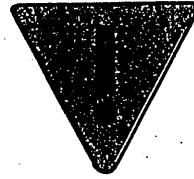
Wood Truss Installation

**A Guide to proper handling, erecting and bracing
metal plate connected wood trusses**

Table of Content

Warning.....	4
1 Unloading & Lifting.....	5
2 Job Site Handling.....	5
3 Hoisting.....	6
4 Beginning the Erection Process.....	7
5 Erection Tolerance.....	8
6 Bracing.....	8
7 Bracing Requirements for 3 Planes of Roof.....	9
8 Stacking Materials.....	10
Caution Notes.....	11

Warning



General

Familiarity with the Construction Design Documents, the Truss Design Drawings, and Truss Placement Plans (if required by the Construction Design Documents) is required to properly erect, brace, and connect the trusses to the building system.

All of the care and quality involved in the design and manufacture of wood trusses can be jeopardized if the trusses are not properly handled, erected, and braced.

The consequences of improper handling, erecting, and bracing may be a collapse of the structure, which at best is a substantial loss of time and materials, and at worst is a loss of life. The majority of truss accidents occur during truss installation and not as a result of improper design or manufacture.

Prior to truss erection, the builder/erector shall meet with the erection crew for a safety and planning meeting, making sure each crew member understands his or her roles and responsibilities during the erection process.

Temporary Erection Bracing

Trusses are not marked in any way to identify the frequency, or location of temporary erection bracing.

All temporary bracing shall comply with the latest edition of *Commentary and Recommendations for Handling, Installing & Bracing Metal Plate Connected Wood Trusses* (HIB), published by the Truss Plate Institute, and/or as specified in the Construction Design Documents prepared by the building designer.

Permanent Truss Bracing

Permanent bracing for the roof or floor trusses is the responsibility of the building designer and should be shown on the Construction Design Documents. Permanent bracing locations for individual compression members of a wood truss are shown on the Truss Design Drawings, and shall be installed by the building or erection contractor. This bracing is needed for the proper performance of individual trusses within the roof or floor system. The design and connection of the bracing to the truss and then to the overall building system is the responsibility of the building designer, and is in addition to the permanent bracing plan, which is also specified by the building designer.

Special Design Requirements

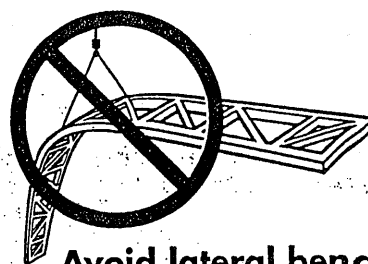
Special design requirements, such as wind bracing, portal bracing, seismic bracing, diaphragms, shear walls, or other load transfer elements and their connections to wood trusses must be considered separately by the building designer, who shall determine size, location, and method of connections for all bracing as needed to resist these forces.

1

Unloading & Lifting

Never handle trusses flat

Beginning with the unloading process, and throughout all phases of construction, care must be taken to avoid lateral bending of trusses, which can cause damage to the lumber and metal connector plates at the joints.

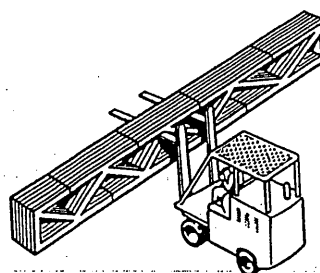
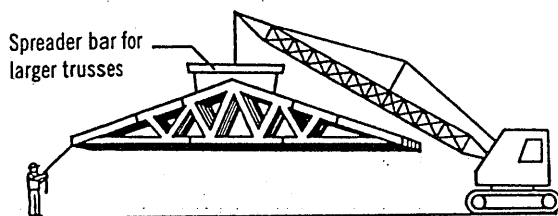


Avoid lateral bending

- Use special care in windy weather.
- If using a crane within 10 feet of an electric line, contact the local power company.
- If using a crane within 5 miles of an airport, contact the airport 30 days prior to erection to learn about any safety regulations that must be followed.

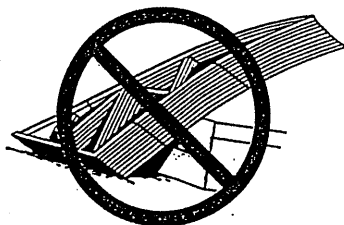
2

Job Site Handling



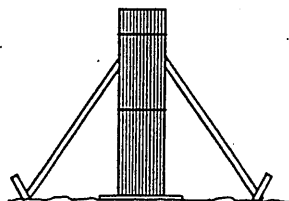
All trusses should be picked up at the top chords in a vertical position only

Proper banding and smooth ground allow for unloading of trusses without damage. This should be done as close to the building site as possible to minimize handling. Do not break banding until installation begins. Hand erection of trusses is allowed, provided excessive lateral bending is prevented.



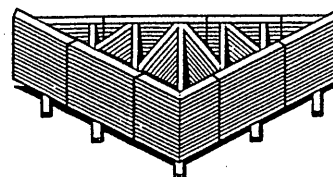
Do not store unbraced bundles upright

If trusses are stored vertically they shall be braced in a manner that will prevent tipping or topping. Generally cutting of the banding is done just prior to installation.



Do not store on uneven ground

If trusses are stored horizontally, blocking should be used on eight to ten foot centers, or as required, to minimize lateral bending and moisture gain.

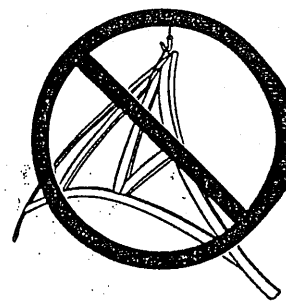


Care should be exercised when removing banding to avoid damaging trusses.

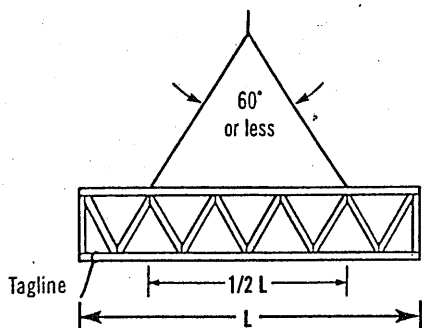
During long term storage, trusses shall be protected from the environment in a manner that provides for adequate ventilation of the trusses. If tarpaulins or other material is used, the ends shall be left open for ventilation. Plastic is not recommended, since it can trap moisture.

3 Hoisting

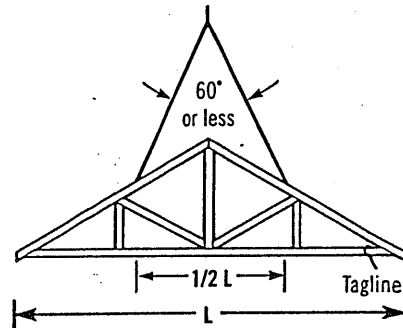
All trusses that are erected one at a time shall be held safely in position by the erection equipment until such time as all necessary bracing has been installed and the ends of the trusses are securely fastened to the building.



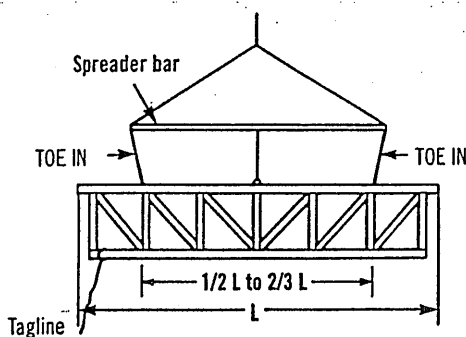
Avoid lateral bending



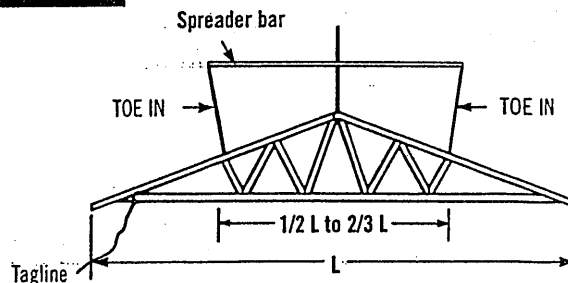
$L \leq 30'$



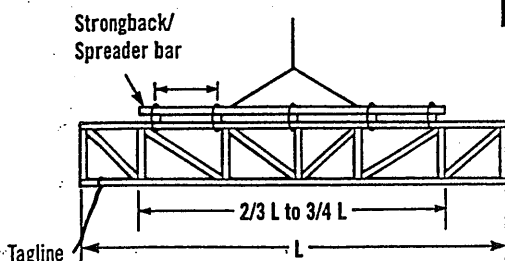
Truss sling is acceptable where these criteria are met.



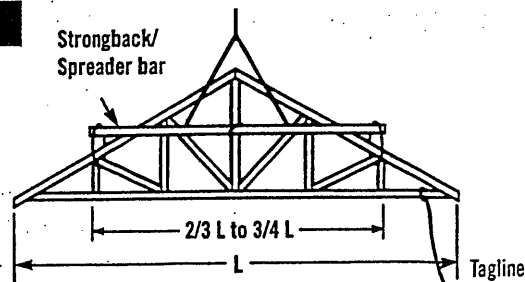
$30' < L \leq 60'$



Use spreader bar in all other cases. It should be noted that the lines from the ends of the spreader bar "TOE IN"; if these lines should "TOE OUT" the truss may fold in half.



$L > 60'$



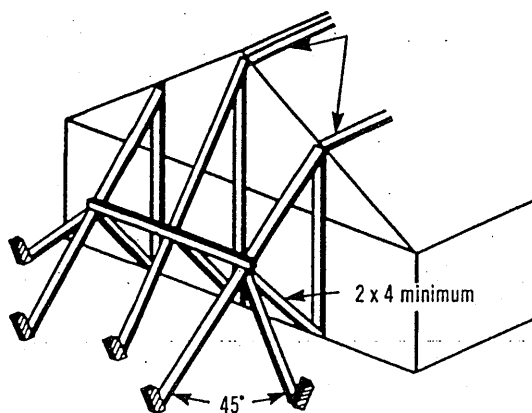
For lifting trusses with spans in excess of 60 feet, it is recommended that a strongback/spreader bar be used as illustrated. The strongback/spreader bar should be attached to the top chord and web members at intervals of approximately 10 feet. Further, the strongback/spreader bar should be at or above the mid-height of the truss to prevent overturning. The strongback/spreader bar can be of any material with sufficient strength to safely carry the weight of the truss and sufficient rigidity to adequately resist bending of the truss.

4 Beginning the Erection Process

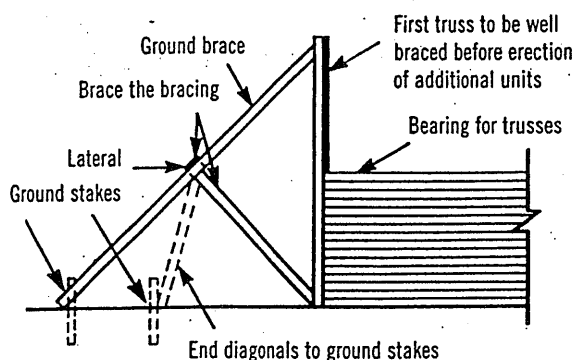
It is important for the builder or erection contractor to provide substantial bracing for the first truss erected. The two or more trusses making up the rest of the first set are tied to and rely upon the first truss for stability. Likewise, after this first set of trusses is adequately cross-braced, the remaining trusses installed rely upon this first set for stability. Thus, the performance of the truss bracing system depends to a great extent on how well the first group of trusses is braced.

Ground Brace - Exterior

One satisfactory method ties the first unit of trusses off to a series of braces that are attached to a stake driven into the ground and securely anchored. The ground brace itself should be supported as shown below or it is apt to buckle. Additional ground braces in the opposite direction, inside the building, are also recommended.

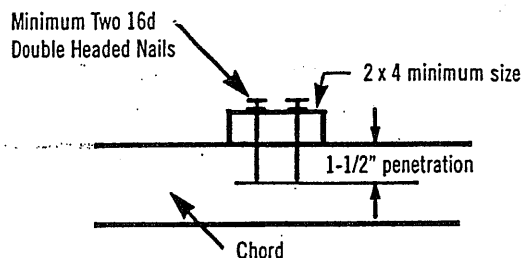
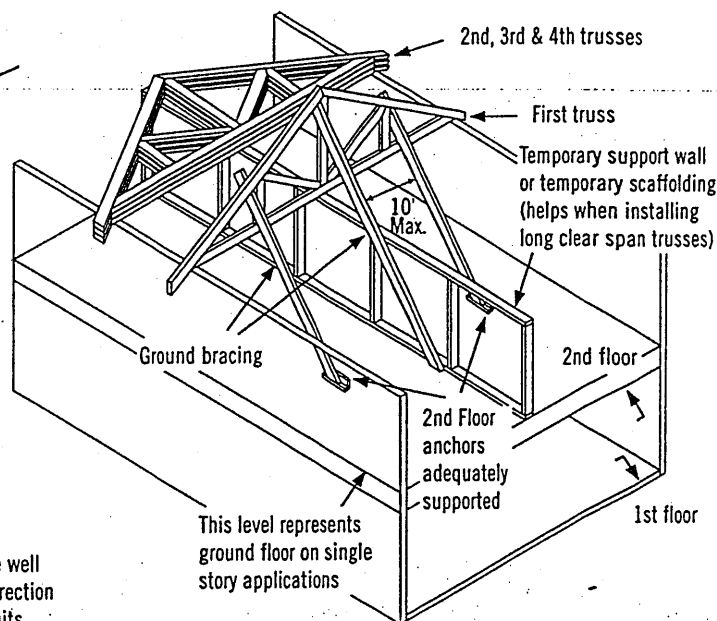


Note: Locate ground braces for first truss directly in line with all rows of top chord continuous lateral bracing (either temporary or permanent).



Ground Brace - Interior

Another satisfactory method where height of building or ground conditions prohibit bracing from the exterior is to tie the first truss rigidly in place from the interior at the floor level, provided the floor is substantially completed and capable of supporting the ground bracing forces. Securely fasten the first truss to the middle of the building. Brace the bracing similar to exterior ground bracing shown at left. Set trusses from the middle toward the end of the building. Properly cross-brace the first set of trusses before removing floor braces and setting remaining trusses.

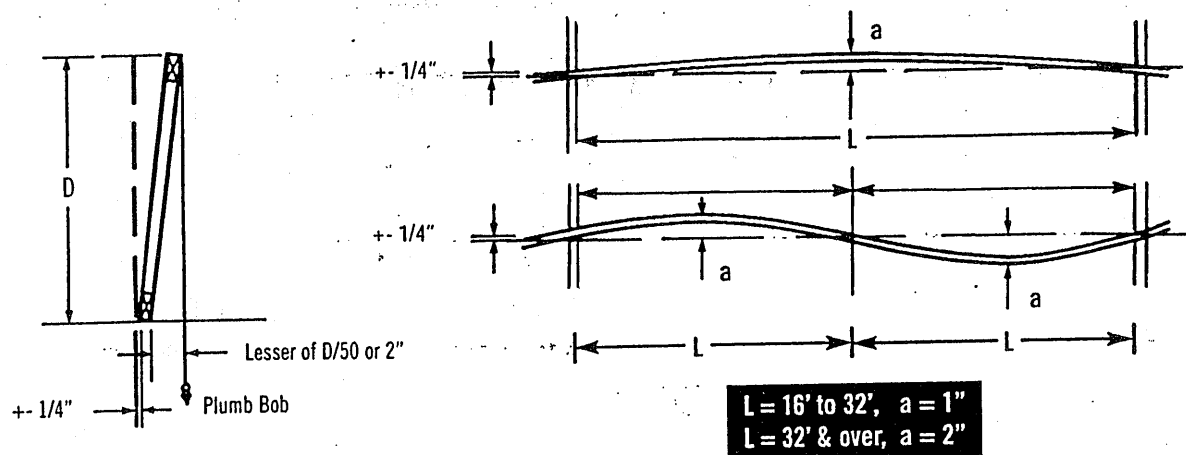


Inadequate size of bracing material or inadequate fastening is a major cause of erection dominoing.

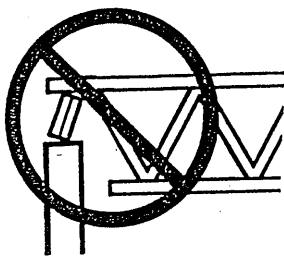
5 Erection Tolerance

Complying with erection tolerances is critical to achieving an acceptable roof or floor line, and to accomplishing effective bracing. Setting trusses within tolerance the first time will prevent the need for the hazardous practice of respacing or adjusting trusses when roof sheathing or roof purlins are installed. Trusses leaning or bowing can cause nails to miss the top chords when sheathing is applied, and create cumulative stresses on the bracing, which is a frequent cause of dominoing.

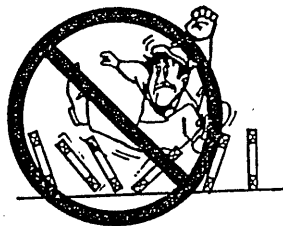
When sheathing, make sure nails are driven into the top chord of the trusses.



6 Bracing



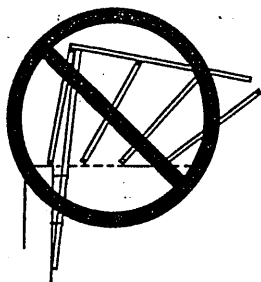
Do not install trusses on temporarily connected supports



Do not walk on unbraced trusses



Do not walk on trusses or gable ends lying flat

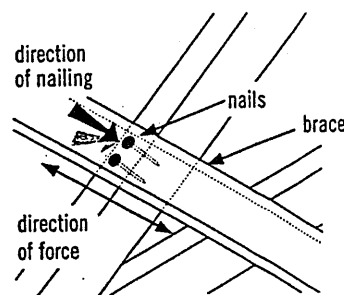


Nails in withdrawal (parallel to force)

All anchors, hangers, tie-downs, seats, bearing ledgers, etc., that are part of the supporting structure shall be accurately and properly placed and permanently attached before truss installation begins. No trusses shall ever be installed on anchors or ties that have temporary connections to the supporting structure.

Nailing scabs to the end of the building to brace the first truss is not recommended.

All nailing of bracing should be done so that nails are driven perpendicular to the direction of force, as shown at right.



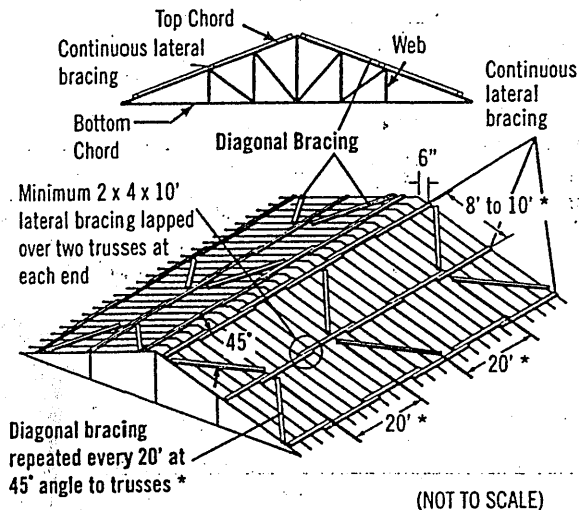
Well nailed (perpendicular to force)

7 Bracing Requirements for 3 Planes of Roof

Temporary erection bracing must be applied to three planes of the roof system to ensure stability: Plane 1) Top Chord (sheathing), Plane 2) Bottom Chord (ceiling plane), and Plane 3) Web Member plane or vertical plane perpendicular to trusses.

1) Top Chord Plane

Most important to the builder or erection contractor is bracing in the plane of the top chord. Truss top chords are susceptible to lateral buckling before they are braced or sheathed.

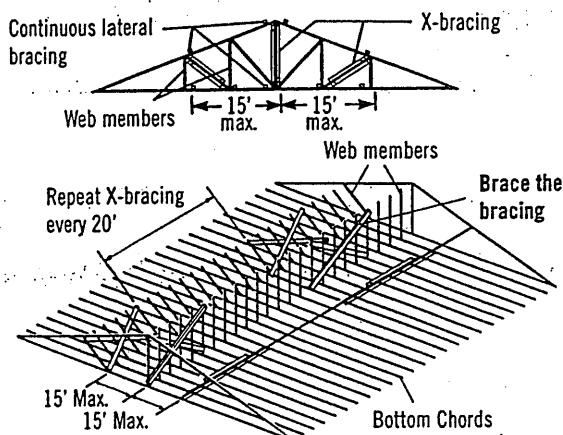


Exact spacing between trusses should be maintained as bracing is installed to avoid the hazardous practice of removing bracing to adjust spacing. This act of "adjusting spacing" can cause trusses to topple if connections are removed at the wrong time.

3) Web Member Plane

"X" bracing, as shown, is critical in preventing trusses from leaning or dominoing. Repeat as shown to create a succession of rigid units.

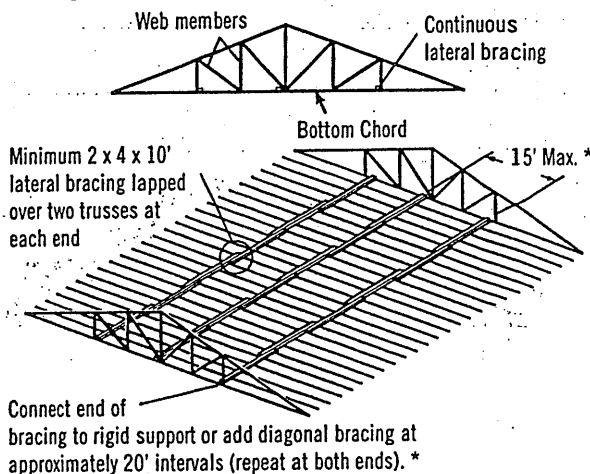
X-bracing should be installed on vertical web members wherever possible, at or near lateral bracing. Plywood or OSB may be substituted for X-bracing.



Note: Top chords and some web members are not shown, in order to make drawings more readable.

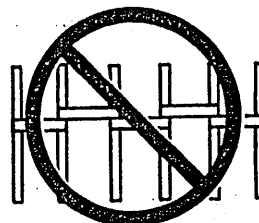
2) Bottom Chord Plane

In order to hold proper spacing on the bottom chord, temporary bracing is recommended on the top of the bottom chord.

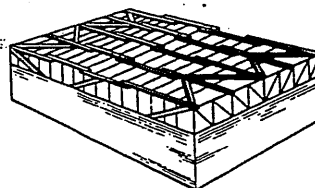


* Long spans, heavy loads or other spacing configurations may require closer spacing between lateral bracing and closer intervals between diagonals. Consult the building designer or HIB and DSB (Recommended Design Specification for Temporary Bracing of Metal-Plate Connected Wood Trusses) for details.

Diagonal or cross-bracing is very important!



Do not use short blocks to brace individual trusses without a specific bracing plan detailing their use

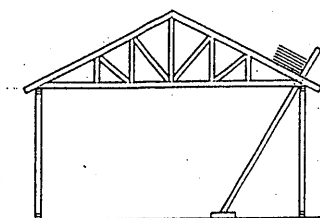
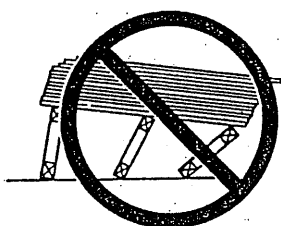


Bracing requirements using the same principles apply to parallel chord trusses

8 Stacking Materials

Do not proceed with building completion until all bracing is securely and properly in place

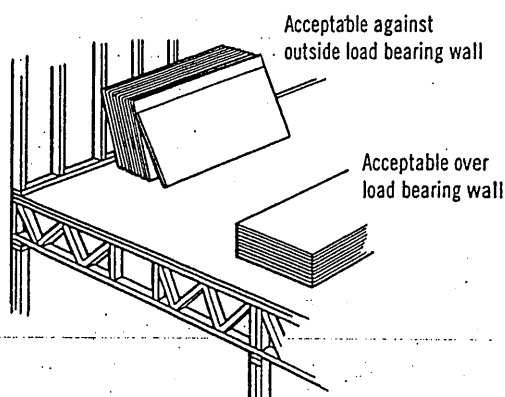
Never stack materials on unbraced or inadequately braced trusses



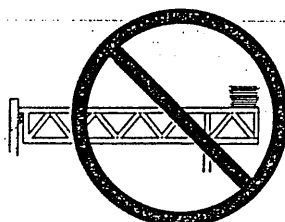
Platform must be rigidly braced

Proper distribution of construction materials is a must during construction.

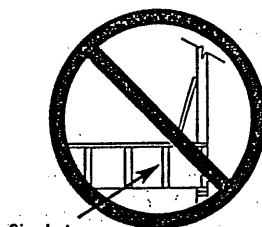
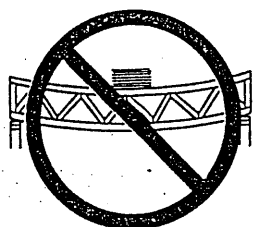
Never stack materials near a peak



Never stack materials on the cantilever of a truss

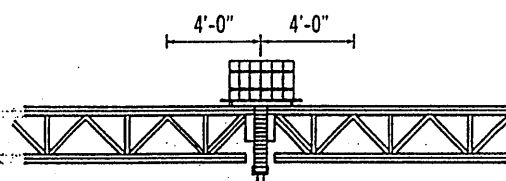


Always stack materials over two or more trusses.



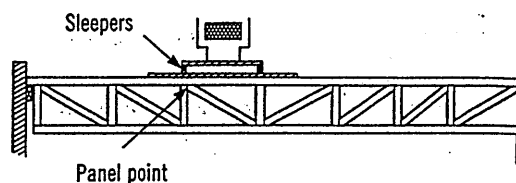
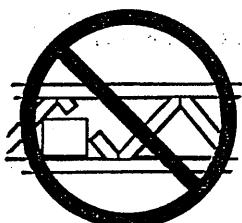
Single truss

Never overload small groups or single trusses. Position load over as many trusses as possible.



Roofing and mechanical contractors are cautioned to stack materials only along outside supporting members or directly over inside supporting members. Trusses are not designed for dynamic loads (i.e., moving vehicles). Extreme care should be taken when loading and stacking construction materials (rolled roofing, mechanical equipment, etc.) on the roof or floor system.

Never cut any structural member of a truss.



Sleepers for mechanical equipment should be located at panel points (joints) or over main supporting members, and only on trusses that have been designed for such loads.

Caution Notes

Errors in building lines and/or dimensions, or errors by others shall be corrected by the contractor or responsible construction trade subcontractor or supplier before erection of trusses begins.

Cutting of nonstructural overhangs is considered a part of normal erection and shall be done by the builder or erection contractor.

Any field modification that involves the cutting, drilling, or relocation of any structural truss member or connector plate shall not be done without the approval of the truss manufacturer or a licensed design professional.

The methods and procedures outlined are intended to ensure that the overall construction techniques employed will put floor and roof trusses safely in place in a completed structure. These recommendations for bracing wood trusses originate from the collective experience of leading technical personnel in the wood truss industry, but must, due to the nature of responsibilities involved, be presented only as a guide for use by a qualified building designer, builder, or erection contractor. Thus, the Wood Truss Council of America expressly disclaims any responsibility for damages arising from the use, application, or reliance on the recommendations and information contained herein.

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