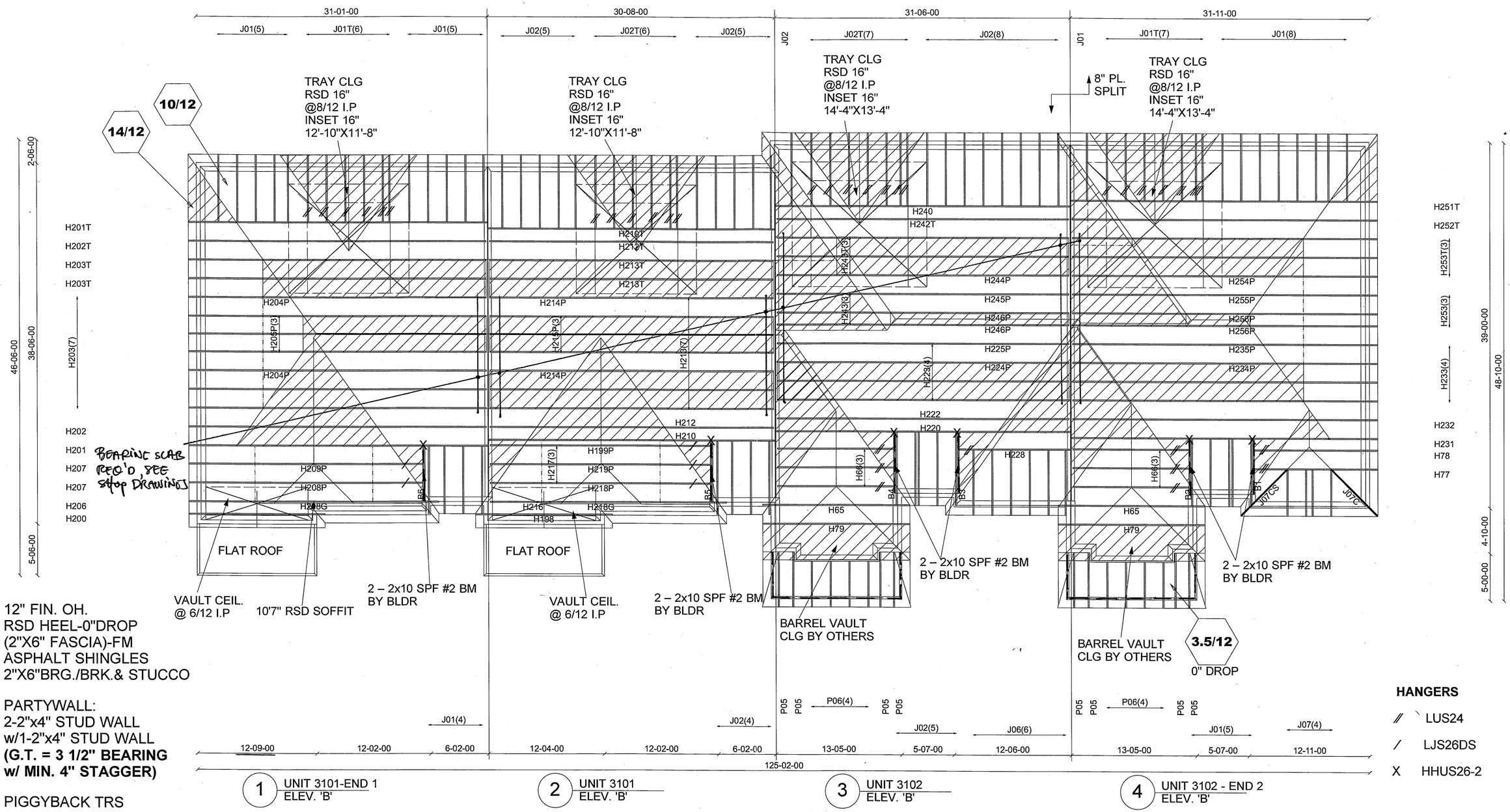


12" FIN. OH.
RSD HEEL-0"DROP
(2"X6" FASCIA)-FM
ASPHALT SHINGLES
2"X6"BRG./BRK.& STUCCO

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

HANGERS

// LUS24
/ LJS26DS
X HHUS26-2

E21104174 - E21104180
E21104184 - E21104185
E21104189 - E21104192
E21104231 - E21104234
E21104435 - E21104487

PL: 111206(TYP.), 114170E

Mitek V. 8.2.0

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'

CONVEN FRAMING OTHERS

Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN		Model / Elevation: BLOCK 5 / UNIT 1-4
Layout ID: 336325	Project: PINE VALLEY		
Plan Log: 113123	Date: 9/28/2021	Designer: marika/C	

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

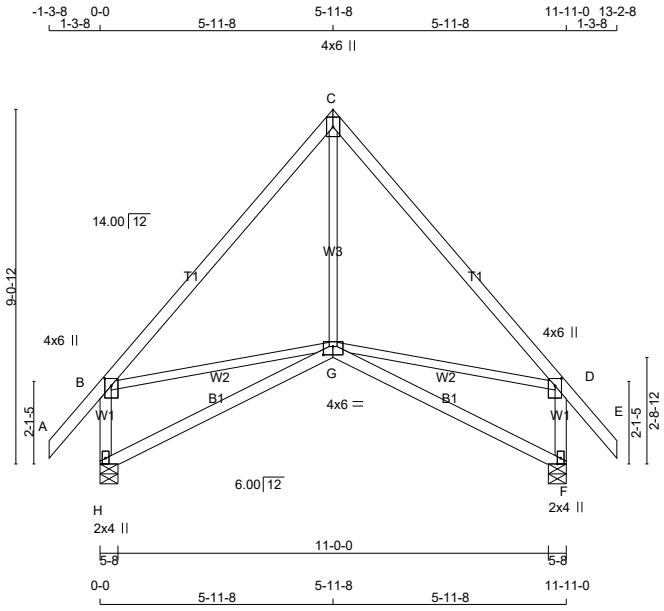
1. Trusses designed by EWP DESIGN INC. conform to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type, as indicated on the EWP DESIGN INC. drawings, and conform to the design procedures established 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.

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H200		1	TRUSS DESC. JT 45147	E21104174

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:09 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-2GzrSt3n0hrsWi7vosIn5GeGTxRPmpqHUIYMGeyTZH8



TOTAL WEIGHT = 60 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	1650F 1.5E	SPF
C - E	2x4	DRY	1650F 1.5E	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 EXCEPT	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	4.0	6.0		
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.

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	684	0	684	0	0	5-8	1-8
F	684	0	684	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	486	309 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
F	486	309 / 0	0 / 0	0 / 0	0 / 0	177 / 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.09 (1)	10.00	G- C	0 / 208	0.06 (4)
B- C	-443 / 0	-78.0	-78.0	0.30 (1)	6.25	B- G	0 / 292	0.07 (1)
C- D	-443 / 0	-78.0	-78.0	0.30 (1)	6.25	G- D	0 / 292	0.07 (1)
D- E	0 / 42	-78.0	-78.0	0.09 (1)	10.00			
H- B	-629 / 0	0.0	0.0	0.08 (1)	7.81			
F- D	-629 / 0	0.0	0.0	0.08 (1)	7.81			
H- G	0 / 0	-18.5	-18.5	0.19 (4)	10.00			
G- F	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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.30/1.00 (C-D:1) , BC=0.19/1.00 (G-H:4) , WB=0.07/1.00 (D-G: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

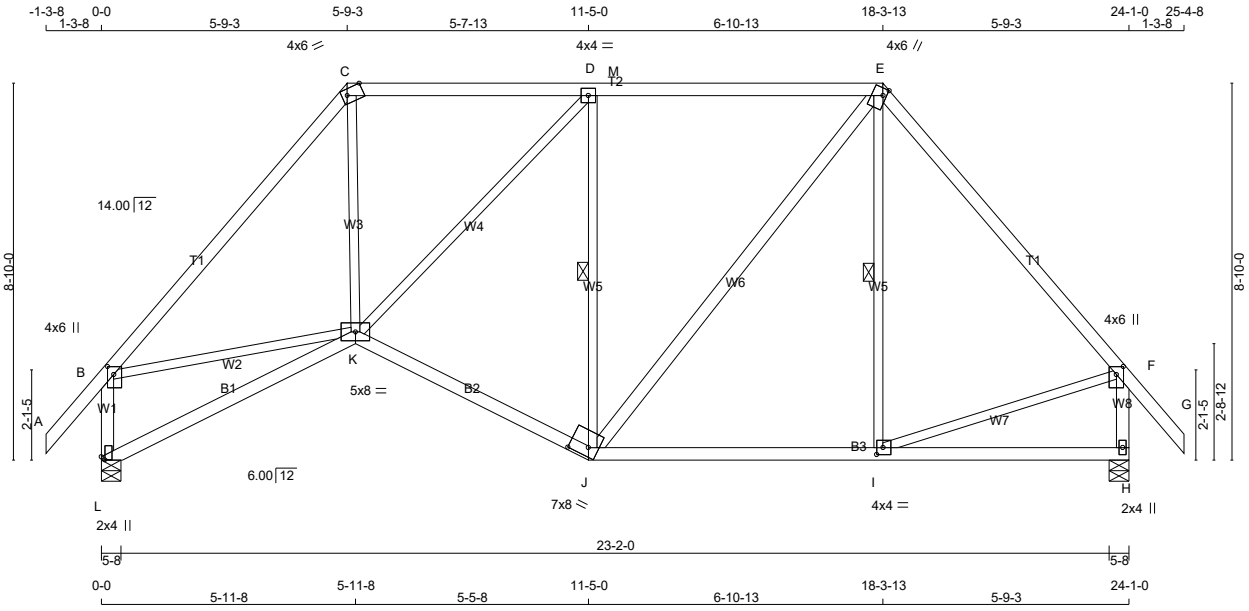
JSI GRIP= 0.48 (G) (INPUT = 0.90)
JSI METAL= 0.26 (H) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H206		1	TRUSS DESC. JT 45147	E21104175

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:10 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-WTXDgD4Qn?zj8rh5Maq0eUBLsLmAVCTQjyIvo4yTZH7



TOTAL WEIGHT = 119 lb [M]

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
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
J - E	2x4	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	1.75
C	TTW-m	MT20	4.0	6.0	Edge	4.50
D	TMWW-t	MT20	4.0	4.0		
E	TTWW+m	MT20	4.0	6.0	2.00	1.00
F	TMVW+p	MT20	4.0	6.0	2.25	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	2.00	1.75
J	BBWW-h	MT20	7.0	8.0	2.50	5.25
K	BBWWW-p	MT20	5.0	8.0		
L	BMV1+p	MT20	2.0	4.0	1.00	1.00

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
L	1318	0	1318	0	0	5-8	1-8
H	1318	0	1318	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	942	564 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0
H	942	564 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, 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 D-J, E-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C- K	0 / 682	0.15 (1)
B- C	-1426 / 0	-78.0	-78.0	0.64 (1)	4.79	K- D	0 / 52	0.01 (1)
C- D	-947 / 0	-85.5	-85.5	0.62 (1)	2.00	J- D	-698 / 0	0.35 (1)
D- M	-920 / 0	-85.5	-85.5	0.64 (1)	2.00	J- E	0 / 440	0.07 (1)
M- E	-920 / 0	-85.5	-85.5	0.64 (1)	2.00	I- E	-45 / 80	0.03 (4)
E- F	-991 / 0	-78.0	-78.0	0.56 (1)	5.55	B- K	0 / 938	0.21 (1)
F- G	0 / 42	-78.0	-78.0	0.11 (1)	10.00	I- F	0 / 671	0.15 (1)
L- B	-1263 / 0	0.0	0.0	0.16 (1)	7.16			
H- F	-1279 / 0	0.0	0.0	0.15 (1)	7.13			
L- K	0 / 0	-18.5	-18.5	0.19 (4)	10.00			
K- J	0 / 1020	-18.5	-18.5	0.27 (4)	10.00			
J- I	0 / 642	-18.5	-18.5	0.29 (4)	10.00			
I- H	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/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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.64/1.00 (B-C:1) , BC=0.29/1.00 (I-J:4) , WB=0.35/1.00 (D-J:1) , SSI=0.28/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (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.

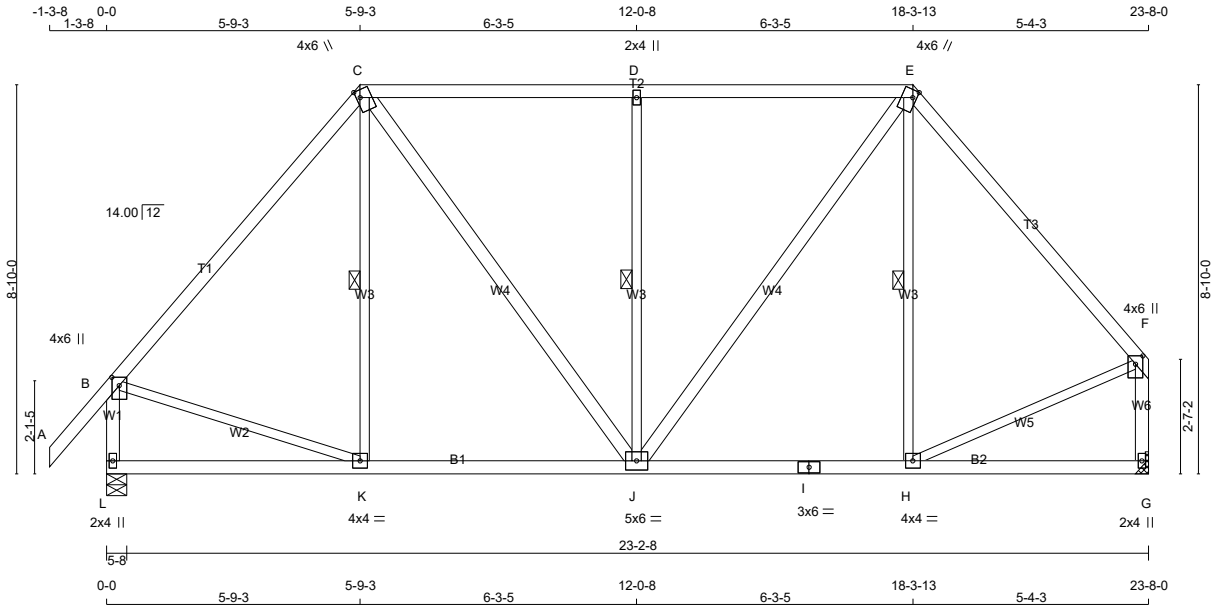
JSI GRIP= 0.80 (B) (INPUT = 0.90)
JSI METAL= 0.53 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H207		1	TRUSS DESC. JT 45147	E21104176

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:12 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-Srez5u6gJcDRN9rTU?sUjvGiq9SYz6HjAFn0szyTZH5



TOTAL WEIGHT = 2 X 121 = 242 lb [M]

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 - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
C - J	2x4	DRY	No.2	SPF
J - E	2x4	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	TTWW+m	MT20	4.0	6.0	2.00	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	4.0	6.0	2.00	1.00
F	TMVW+p	MT20	4.0	6.0	2.25	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	4.0	4.0		
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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
L	1297	0	1297	0	0	5-8	1-8
G	1189	0	1189	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
L	927	556 / 0	0 / 0	0 / 0	0 / 0	371 / 0	0 / 0
G	852	497 / 0	0 / 0	0 / 0	0 / 0	355 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	K- C	-60 / 60	0.03 (1)
B- C	-965 / 0	-78.0	-78.0	0.55 (1)	5.60	C- J	0 / 449	0.07 (1)
C- D	-892 / 0	-85.5	-85.5	0.61 (1)	2.00	J- D	-657 / 0	0.33 (1)
D- E	-892 / 0	-85.5	-85.5	0.61 (1)	2.00	J- E	0 / 502	0.08 (1)
E- F	-918 / 0	-78.0	-78.0	0.46 (1)	5.84	H- E	-122 / 30	0.06 (1)
L- B	-1254 / 0	0.0	0.0	0.15 (1)	7.18	B- K	0 / 653	0.15 (1)
G- F	-1151 / 0	0.0	0.0	0.16 (1)	7.42	H- F	0 / 643	0.14 (1)
L- K	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
K- J	0 / 625	-18.5	-18.5	0.23 (4)	10.00			
J- I	0 / 594	-18.5	-18.5	0.21 (4)	10.00			
I- H	0 / 594	-18.5	-18.5	0.21 (4)	10.00			
H- G	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 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 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.61/1.00 (D-E:1) , BC=0.23/1.00 (J-K:4) , WB=0.33/1.00 (D-J:1) , SSI=0.26/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

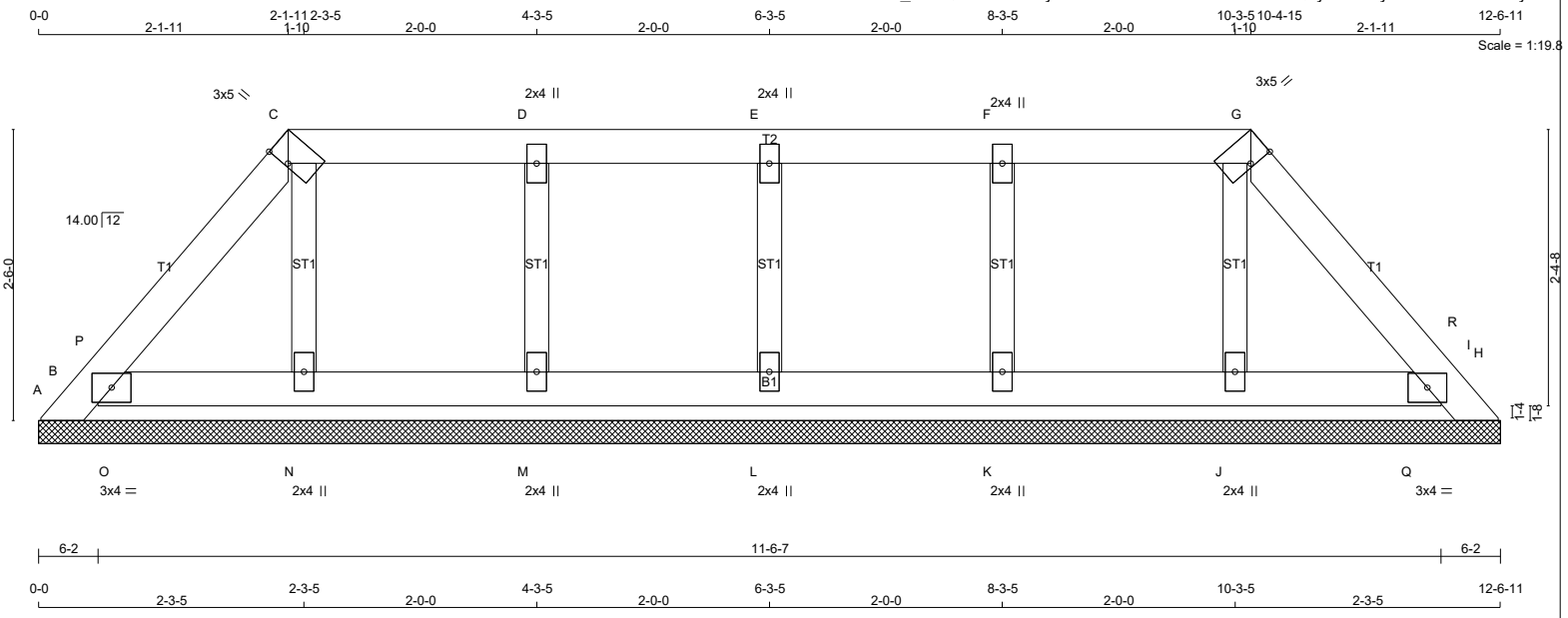
JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.41 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H208G		1	TRUSS DESC. JT 45147	E21104177

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:14 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-OEmkWa7wrDT8dT?sbQuyoKLA8yBKR5U0dZG7xryTZH3



TOTAL WEIGHT = 37 lb [M]

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 - I	2x4	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTW+h	MT20	3.0	5.0	Edge	0.25
D, E, F						
D	TMW+w	MT20	2.0	4.0		
G	TTW+h	MT20	3.0	5.0	Edge	0.25
H	TMB1-I	MT20	3.0	4.0		
J, K, L, M, N						
J	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

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): L , M , N , K , J

PROVIDE ANCHORAGE AT BEARING JOINT A FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT I FOR 150 LBS FACTORED UPLIFT
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. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 26	-96.5	-96.5	0.02 (1)	10.00	L- E	-142 / 0	0.02 (1)
B- P	-62 / 0	-78.0	-78.0	0.02 (1)	6.25	M- D	-184 / 0	0.03 (1)
P- C	-42 / 0	-78.0	-78.0	0.02 (1)	6.25	N- C	-88 / 0	0.01 (1)
C- D	-17 / 0	-78.0	-78.0	0.05 (1)	6.25	K- F	-184 / 0	0.03 (1)
D- E	-17 / 0	-78.0	-78.0	0.05 (1)	6.25	J- G	-88 / 0	0.01 (1)
E- F	-17 / 0	-78.0	-78.0	0.05 (1)	6.25	O- P	-41 / 8	0.00 (1)
F- G	-17 / 0	-78.0	-78.0	0.05 (1)	6.25	Q- R	-41 / 8	0.00 (1)
G- R	-42 / 0	-78.0	-78.0	0.02 (1)	6.25			
R- H	-62 / 0	-78.0	-78.0	0.02 (1)	6.25			
H- I	0 / 26	-96.5	-96.5	0.02 (1)	10.00			
B- O	0 / 23	-18.5	-18.5	0.01 (1)	10.00			
O- N	0 / 23	-18.5	-18.5	0.02 (4)	10.00			
N- M	0 / 17	-18.5	-18.5	0.02 (4)	10.00			
M- L	0 / 17	-18.5	-18.5	0.02 (4)	10.00			
L- K	0 / 17	-18.5	-18.5	0.02 (4)	10.00			
K- J	0 / 17	-18.5	-18.5	0.02 (4)	10.00			
J- Q	0 / 23	-18.5	-18.5	0.02 (4)	10.00			
Q- H	0 / 23	-18.5	-18.5	0.01 (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 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=0.05/1.00 (C-D:1) , BC=0.02/1.00 (N-O:4) , WB=0.03/1.00 (D-M:1) , SSI=0.08/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

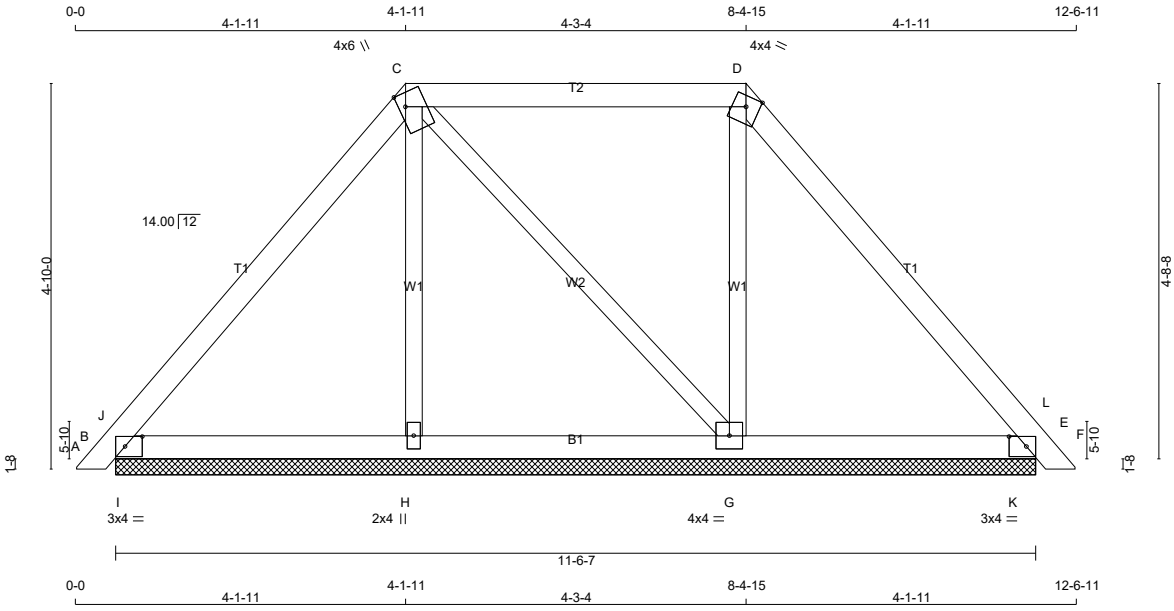
JSI GRIP= 0.12 (B) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H208P		1	TRUSS DESC. JT 45147	E21104178

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:15 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-sQK6jw8YcXb?Eda297PBLXuIsMW0AYL9sD?gTlyTZH2



TOTAL WEIGHT = 44 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
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	2.00	1.00
D	TTW-m	MT20	4.0	4.0	Edge	
E	TMB1-I	MT20	3.0	4.0	1.50	2.50
G	BMWW1-t	MT20	4.0	4.0		
H	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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	344	0	344	0	0	11-6-7	1-8
E	319	0	319	0	0	11-6-7	1-8
H	221	0	221	0	0	11-6-7	1-8
G	290	0	290	0	0	11-6-7	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	242	167 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0
E	225	153 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
H	161	79 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
G	209	118 / 0	0 / 0	0 / 0	0 / 0	90 / 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	1	0.01 (1)	10.00	H- C	-119 / 0	0.04 (1)
B- J	-38 / 26	-78.0	-78.0	1	0.08 (1)	6.25	C- G	-31 / 0	0.02 (1)
J- C	-201 / 0	-78.0	-78.0	1	0.13 (1)	6.25	G- D	-165 / 0	0.05 (1)
C- D	-98 / 0	-78.0	-78.0	1	0.24 (1)	6.25	I- J	-403 / 0	0.00 (1)
D- L	-170 / 0	-78.0	-78.0	1	0.13 (1)	6.25	K- L	-410 / 0	0.00 (1)
L- E	-31 / 64	-78.0	-78.0	1	0.08 (1)	6.25			
E- F	0 / 10	-78.0	-78.0	1	0.01 (1)	10.00			
B- I	0 / 123	-18.5	-18.5	1	0.12 (1)	10.00			
I- H	0 / 123	-18.5	-18.5	1	0.12 (1)	10.00			
H- G	0 / 120	-18.5	-18.5	1	0.08 (4)	10.00			
G- K	0 / 102	-18.5	-18.5	1	0.11 (1)	10.00			
K- E	0 / 102	-18.5	-18.5	1	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/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=0.24/1.00 (C-D:1) , BC=0.12/1.00 (H-I:1) , WB=0.05/1.00 (D-G:1) , SSI=0.32/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

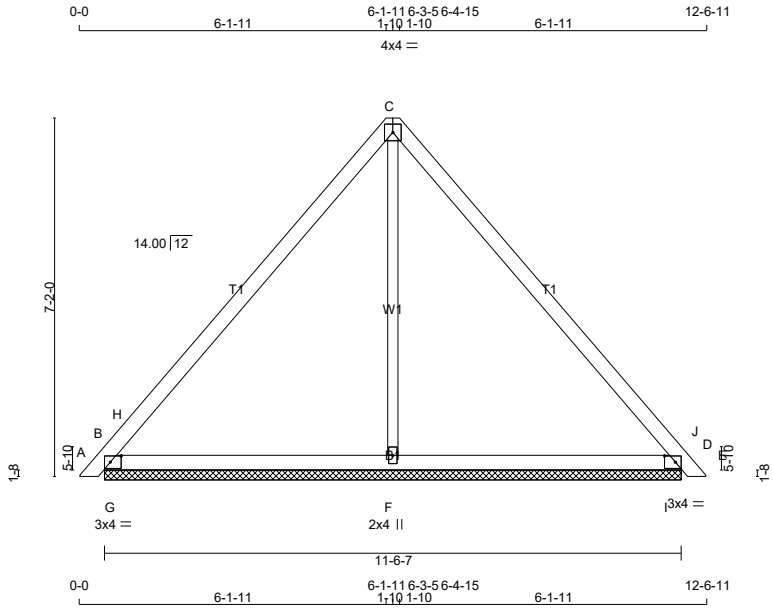
JSI GRIP= 0.40 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H209P		1	TRUSS DESC. JT 45147	E21104179

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:17 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-ppSs8c9p88rjUwkRGYSfQyzc5A9jeSWSKXUnYAyTZH0



TOTAL WEIGHT = 40 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.50
C	TTW-p	MT20	4.0	4.0		
D	TMB1-I	MT20	3.0	4.0	1.50	2.50
F	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	485	0	485	0	0	11-6-7	1-8
D	485	0	485	0	0	11-6-7	1-8
F	203	0	203	0	0	11-6-7	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	342	230 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
D	342	230 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
F	151	56 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	F- C	0 / 32	0.01 (4)
B- H	0 / 494	-78.0	-78.0	0.31 (1)	10.00	G- H	-1130 / 0	0.00 (1)
H- C	-292 / 0	-78.0	-78.0	0.32 (1)	6.25	I- J	-1130 / 0	0.00 (1)
C- J	-292 / 0	-78.0	-78.0	0.32 (1)	6.25			
J- D	0 / 494	-78.0	-78.0	0.31 (1)	10.00			
D- E	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- G	0 / 175	-18.5	-18.5	0.29 (1)	10.00			
G- F	0 / 175	-18.5	-18.5	0.29 (1)	10.00			
F- I	0 / 175	-18.5	-18.5	0.29 (1)	10.00			
I- D	0 / 175	-18.5	-18.5	0.29 (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

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=0.32/1.00 (C-J:1) , BC=0.29/1.00 (F-I:1) , WB=0.01/1.00 (C-F:4) , SSI=0.87/1.00 (D-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

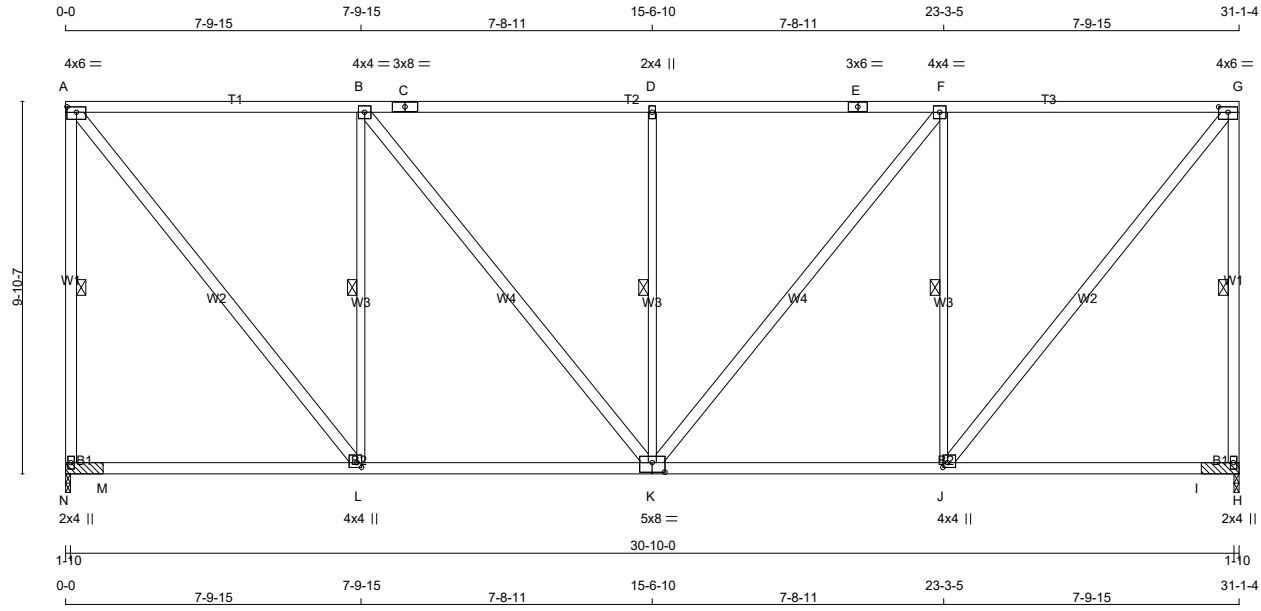
JSI GRIP= 0.59 (D) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H223		1	TRUSS DESC. JT 45147	E21104180

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:52:36 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-WwTMXag5oYhY3d5ZNRD1GJnWye7rXk1Quf36b2yTZHf



TOTAL WEIGHT = 2 X 171 = 343 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	3.00
B	TMWW-t	MT20	4.0	4.0		
C	TS-t	MT20	3.0	8.0		
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	4.0	6.0	1.75	3.00
H	BMV1+p	MT20	2.0	4.0		
J	BMWW+t	MT20	4.0	4.0	1.50	1.50
K	BSWWW-l	MT20	5.0	8.0	3.00	4.00
L	BMWW+t	MT20	4.0	4.0	1.50	1.50
N	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1617	0	1617	0	0	1-10	1-10 & BLOCK
H	1617	0	1617	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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, D-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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
N- A	-1562 / 0	0.0	0.0	0.73 (1)	5.27	A- L	0 / 1676	0.27 (1)
A- B	-1060 / 0	-85.5	-85.5	0.71 (1)	2.00	L- B	-1119 / 0	0.74 (1)
B- C	-1350 / 0	-85.5	-85.5	0.74 (1)	2.00	B- K	0 / 461	0.07 (1)
C- D	-1350 / 0	-85.5	-85.5	0.74 (1)	2.00	K- D	-609 / 0	0.40 (1)
D- E	-1350 / 0	-85.5	-85.5	0.74 (1)	2.00	K- F	0 / 461	0.07 (1)
E- F	-1350 / 0	-85.5	-85.5	0.74 (1)	2.00	J- F	-1119 / 0	0.74 (1)
F- G	-1060 / 0	-85.5	-85.5	0.71 (1)	2.00	J- G	0 / 1676	0.27 (1)
H- G	-1562 / 0	0.0	0.0	0.73 (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 / 1060	-18.5	-18.5	0.44 (4)	10.00			
K- J	0 / 1060	-18.5	-18.5	0.44 (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=0.74/1.00 (B-D:1) , BC=0.44/1.00 (K-L:4) , WB=0.74/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

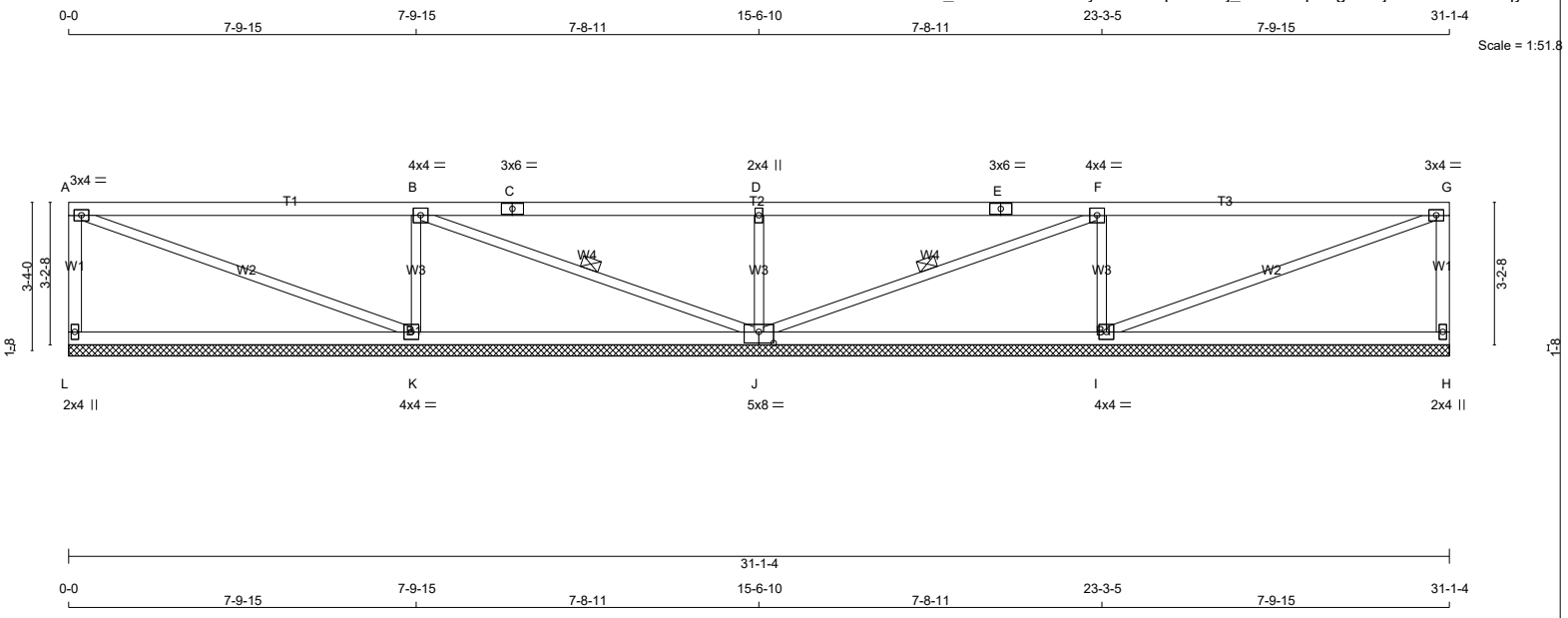
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)
JSI METAL= 0.47 (L) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H224P		1	TRUSS DESC. JT 45147	E21104184

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:23 2021 Page 1
ID:hd511hZTz_bdeQoS817GKByhVxV-dzp7OfEZj_ctCrBbdpZ3gDDZjaBa28BLiTx5kqyTZGw



TOTAL WEIGHT = 109 lb [M]

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	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-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	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	BSWWW1-I	MT20	5.0	8.0	3.00	4.00
K	BMWW1-t	MT20	4.0	4.0		
L	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	296	0	296	0	0	31-1-4 (15-6-10	3.00
H	296	0	296	0	0	31-1-4 (15-6-10	3.00
K	854	0	854	0	0	31-1-4 (15-6-10	3.00
J	701	0	701	0	0	31-1-4 (15-6-10	3.00
I	854	0	854	0	0	31-1-4 (15-6-10	3.00

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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	610	363 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
J	497	320 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
I	610	363 / 0	0 / 0	0 / 0	0 / 0	248 / 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.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-J, 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- A	-242 / 0	0.0	0.0	0.04 (1)	7.81	A- K	0 / 4	0.00 (1)
A- B	-4 / 0	-78.0	-78.0	0.69 (1)	10.00	K- B	-675 / 0	0.13 (1)
B- C	0 / 47	-78.0	-78.0	0.70 (1)	10.00	B- J	-55 / 0	0.03 (1)
C- D	0 / 47	-78.0	-78.0	0.70 (1)	10.00	J- D	-556 / 0	0.10 (1)
D- E	0 / 47	-78.0	-78.0	0.70 (1)	10.00	J- F	-55 / 0	0.03 (1)
E- F	0 / 47	-78.0	-78.0	0.70 (1)	10.00	I- F	-675 / 0	0.13 (1)
F- G	-4 / 0	-78.0	-78.0	0.69 (1)	10.00	I- G	0 / 4	0.00 (1)
H- G	-242 / 0	0.0	0.0	0.04 (1)	7.81			
L- K	0 / 0	-18.5	-18.5	0.33 (4)	10.00			
K- J	0 / 4	-18.5	-18.5	0.33 (4)	10.00			
J- I	0 / 4	-18.5	-18.5	0.33 (4)	10.00			
I- H	0 / 0	-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

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=0.70/1.00 (B-D:1) , BC=0.33/1.00 (K-L:4) , WB=0.13/1.00 (B-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

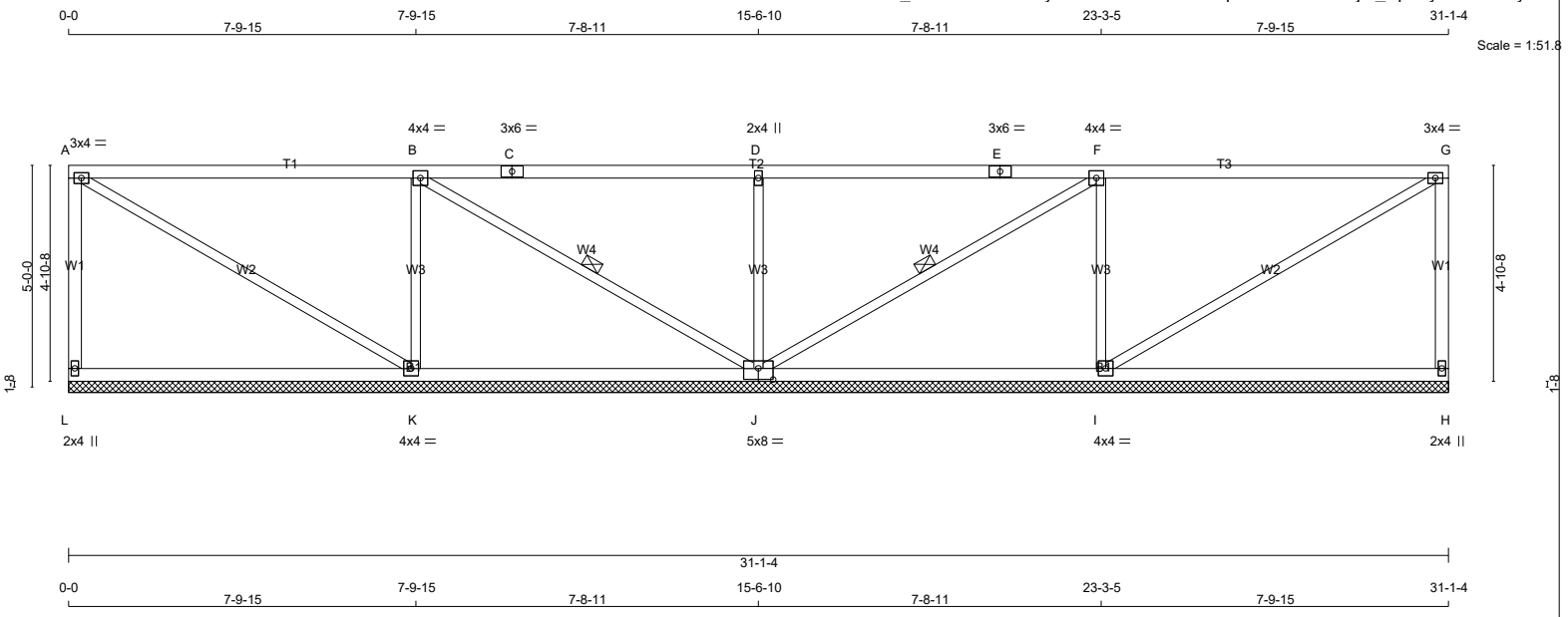
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (G) (INPUT = 0.90)
JSI METAL= 0.30 (J) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H225P		1	TRUSS DESC. JT 45147	E21104185

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:24 2021 Page 1
ID:hd511hZTz_bdeQoS817GKByhVxV-69NVc?FCUIkkp?mnBW4ICQmjM_XpnZyUx7heHGyTZGv



TOTAL WEIGHT = 119 lb [M]

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	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-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	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	BSWWW1-I	MT20	5.0	8.0	3.00	4.00
K	BMWW1-t	MT20	4.0	4.0		
L	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	297	0	297	0	0	31-1-4 (15-6-10)	3.00
H	297	0	297	0	0	31-1-4 (15-6-10)	3.00
K	814	0	814	0	0	31-1-4 (15-6-10)	3.00
J	780	0	780	0	0	31-1-4 (15-6-10)	3.00
I	814	0	814	0	0	31-1-4 (15-6-10)	3.00

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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	583	341 / 0	0 / 0	0 / 0	0 / 0	241 / 0	0 / 0
J	551	362 / 0	0 / 0	0 / 0	0 / 0	189 / 0	0 / 0
I	583	341 / 0	0 / 0	0 / 0	0 / 0	241 / 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.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-J, 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- A	-242 / 0	0.0	0.0	0.09 (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	-636 / 0	0.22 (1)
B- C	0 / 96	-78.0	-78.0	0.71 (1)	10.00	B- J	-115 / 0	0.06 (1)
C- D	0 / 96	-78.0	-78.0	0.71 (1)	10.00	J- D	-556 / 0	0.19 (1)
D- E	0 / 96	-78.0	-78.0	0.71 (1)	10.00	J- F	-115 / 0	0.06 (1)
E- F	0 / 96	-78.0	-78.0	0.71 (1)	10.00	I- F	-636 / 0	0.22 (1)
F- G	-3 / 0	-78.0	-78.0	0.69 (1)	10.00	I- G	0 / 3	0.00 (1)
H- G	-242 / 0	0.0	0.0	0.09 (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			

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=0.71/1.00 (B-D:1) , BC=0.33/1.00 (K-L:4) , WB=0.22/1.00 (B-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

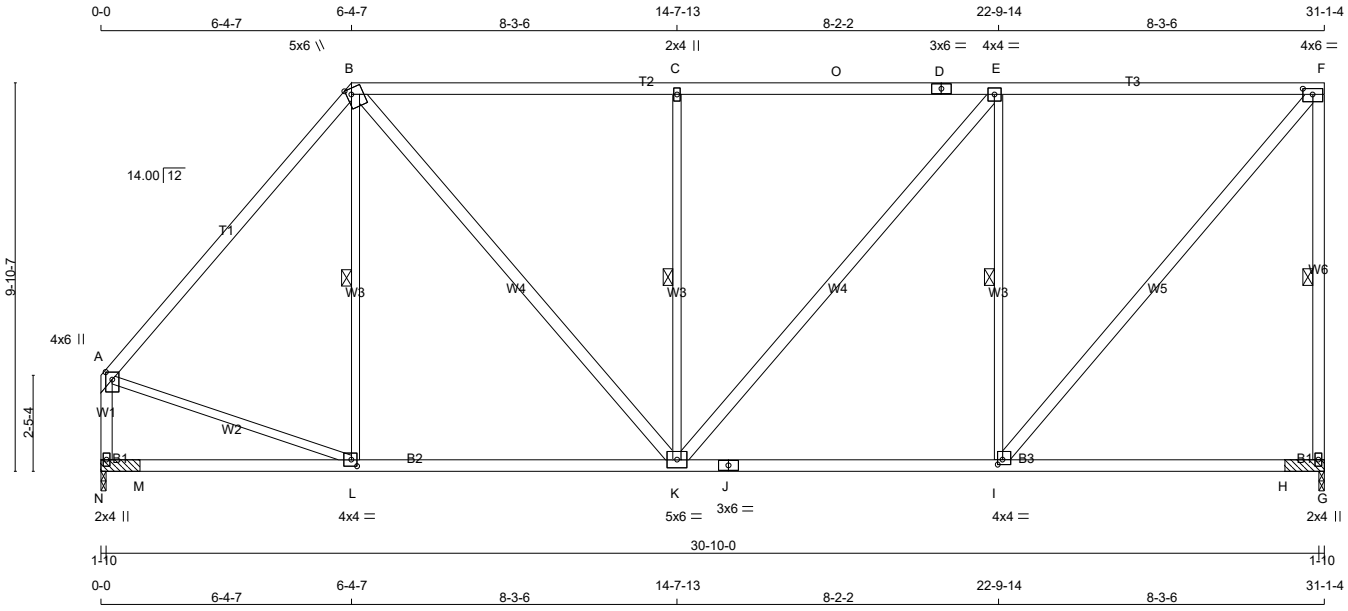
JSI GRIP= 0.76 (A) (INPUT = 0.90)
JSI METAL= 0.33 (J) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H243		1	TRUSS DESC. JT 45147	E21104189

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:52:40 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-OhjtNyjbrnBzYEPKcHHzQ9xBCFU_TYH0pH1JkqyTZHb



TOTAL WEIGHT = 7 X 160 = 1121 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	2100F 1.8E	SPF
B - D	2x4	DRY	1650F 1.5E	SPF
D - F	2x4	DRY	1650F 1.5E	SPF
G - F	2x4	DRY	No.2	SPF
N - A	2x4	DRY	No.2	SPF
N - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
B - K	2x4	DRY	No.2	SPF
K - E	2x4	DRY	No.2	SPF
I - F	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	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	6.0	1.75	3.00
G	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	4.0	2.00	1.75
N	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1612	0	1612	0	0	1-10	1-10 & BLOCK
N	1574	0	1574	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	1159	653 / 0	0 / 0	0 / 0	0 / 0	506 / 0	0 / 0
N	1129	653 / 0	0 / 0	0 / 0	0 / 0	476 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. G 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. N ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G, B-L, C-K, E-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1324 / 0	-78.0	-78.0	0.46 (1)	6.10
B- C	-1368 / 0	-85.5	-85.5	0.79 (1)	2.00
C- O	-1369 / 0	-85.5	-85.5	0.79 (1)	2.00
O- D	-1369 / 0	-85.5	-85.5	0.79 (1)	2.00
D- E	-1369 / 0	-85.5	-85.5	0.79 (1)	2.00
E- F	-1095 / 0	-85.5	-85.5	0.76 (1)	2.00
G- F	-1551 / 0	0.0	0.0	0.73 (1)	5.29
N- A	-1530 / 0	0.0	0.0	0.20 (1)	6.65
N- M	0 / 0	-18.5	-18.5	0.24 (4)	10.00
M- L	0 / 0	-18.5	-18.5	0.24 (4)	10.00
L- K	0 / 858	-18.5	-18.5	0.33 (4)	10.00
K- J	0 / 1095	-18.5	-18.5	0.43 (4)	10.00
J- I	0 / 1095	-18.5	-18.5	0.43 (4)	10.00
I- H	0 / 0	-18.5	-18.5	0.31 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.31 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- B	-121 / 50	0.08 (1)
B- K	0 / 780	0.13 (1)
K- C	-765 / 0	0.50 (1)
K- E	0 / 422	0.07 (1)
I- E	-1094 / 0	0.72 (1)
I- F	0 / 1674	0.27 (1)
A- L	0 / 902	0.20 (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 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 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.79/1.00 (C-E:1) , BC=0.43/1.00 (I-K:4) , WB=0.72/1.00 (E-I:1) , SSI=0.33/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

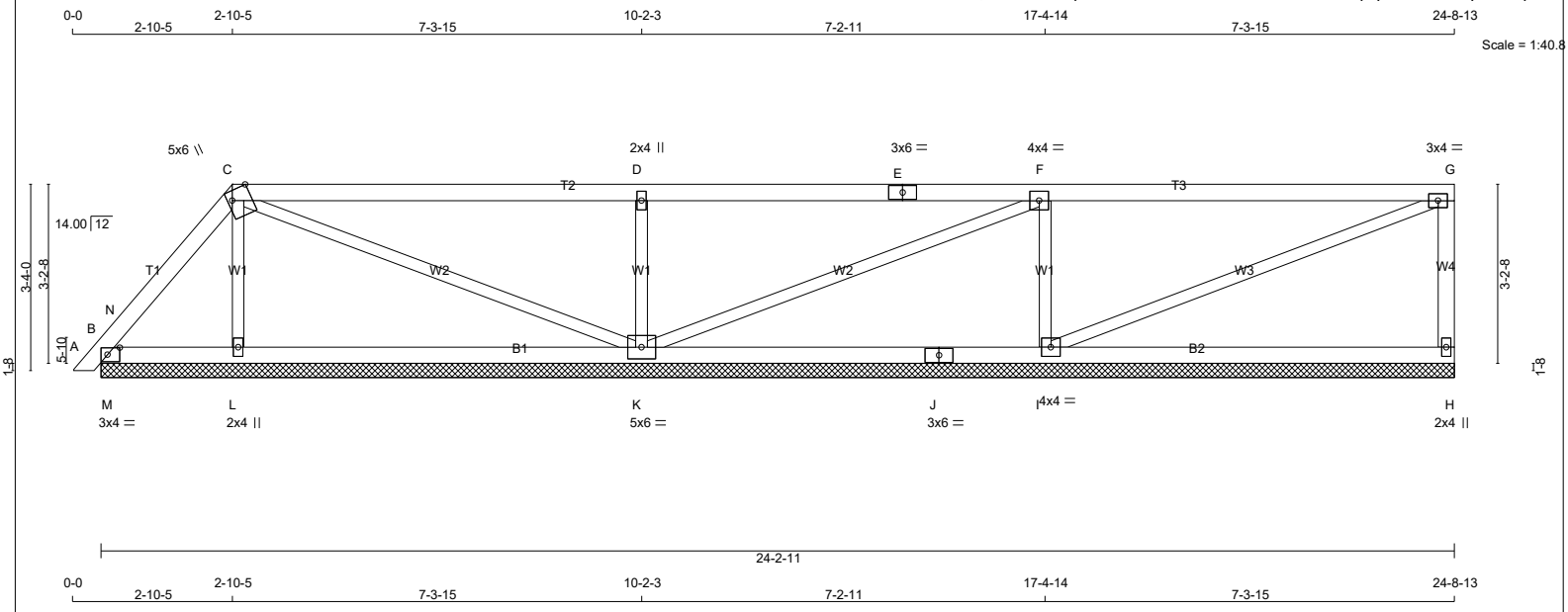
JSI GRIP= 0.89 (I) (INPUT = 0.90)
JSI METAL= 0.50 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H244P		1	TRUSS DESC. JT 45147	E21104190

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:31 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-OVl94OKbrRck94o75Uix vYyopxnwmJWYjtW0MyTZGo



TOTAL WEIGHT = 85 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	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	6.0		
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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	288	0	288	0	0	24-2-11 (9-2-11)	
B	177	0	177	0	0	24-2-11 (9-2-11)	
L	354	0	354	0	0	24-2-11 (9-2-11)	
K	789	0	789	0	0	24-2-11 (9-2-11)	
I	759	0	759	0	0	24-2-11 (9-2-11)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	205	126 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
B	122	100 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
L	258	126 / 0	0 / 0	0 / 0	0 / 0	132 / 0	0 / 0
K	560	354 / 0	0 / 0	0 / 0	0 / 0	206 / 0	0 / 0
I	542	327 / 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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- N	0 / 49	-78.0	-78.0	0.05 (1)	10.00
N- C	-87 / 0	-78.0	-78.0	0.04 (1)	6.25
C- D	0 / 16	-78.0	-78.0	0.56 (1)	10.00
D- E	0 / 16	-78.0	-78.0	0.56 (1)	10.00
E- F	0 / 16	-78.0	-78.0	0.56 (1)	10.00
F- G	-13 / 0	-78.0	-78.0	0.56 (1)	6.25
H- G	-235 / 0	0.0	0.0	0.04 (1)	7.81
B- M	0 / 49	-18.5	-18.5	0.06 (1)	10.00
M- L	0 / 49	-18.5	-18.5	0.16 (4)	10.00
L- K	0 / 41	-18.5	-18.5	0.19 (4)	10.00
K- J	0 / 13	-18.5	-18.5	0.24 (4)	10.00
J- I	0 / 13	-18.5	-18.5	0.24 (4)	10.00
I- H	0 / 0	-18.5	-18.5	0.24 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- C	-220 / 0	0.04 (1)
C- K	-62 / 0	0.08 (1)
K- D	-624 / 0	0.12 (1)
K- F	-32 / 0	0.04 (1)
I- F	-612 / 0	0.11 (1)
I- G	0 / 14	0.00 (1)
M- N	-245 / 0	0.00 (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, 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=0.56/1.00 (C-D:1) , BC=0.24/1.00 (I-K:4) , WB=0.12/1.00 (D-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

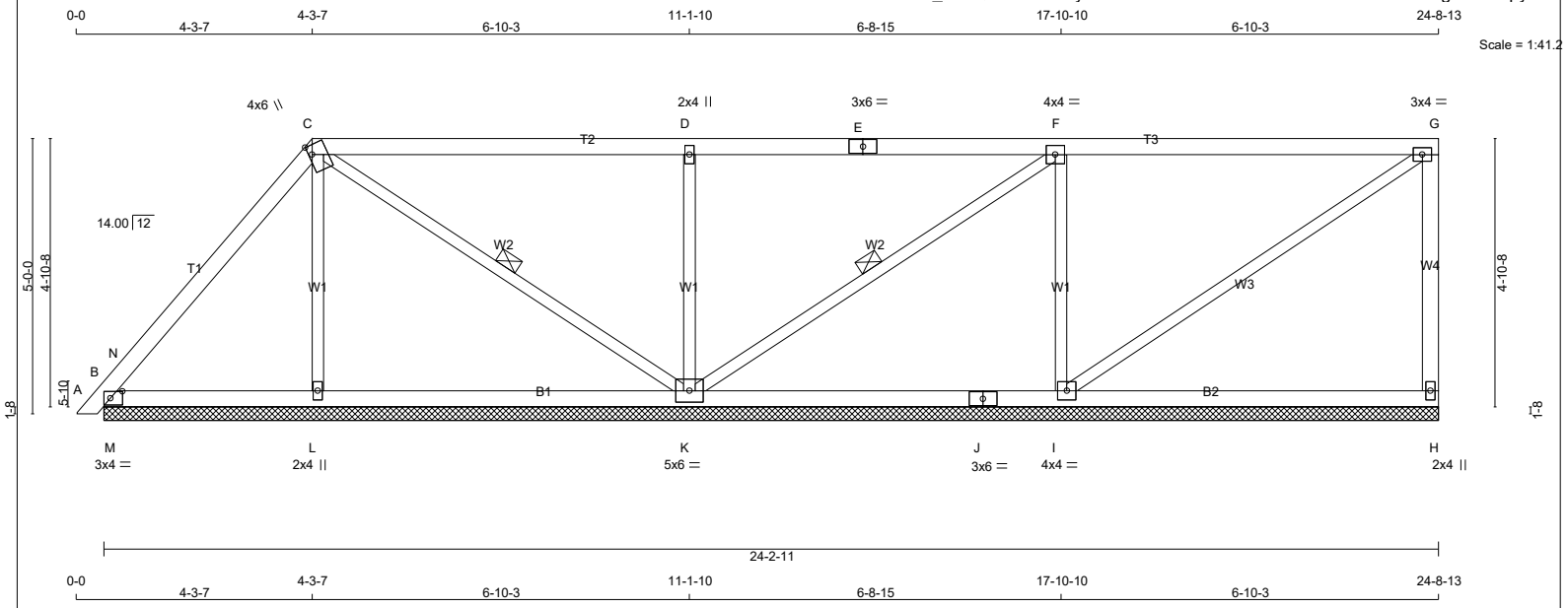
JSI GRIP= 0.85 (K) (INPUT = 0.90)
JSI METAL= 0.14 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H245P		1	TRUSS DESC. JT 45147	E21104191

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:32 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-tisXHkLDclkbnENJfCDAX658dDHTfBDgmNd3ZpyTZGn



TOTAL WEIGHT = 93 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	2.00	0.75
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	6.0		
L	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	280	0	280	0	0	24-2-11 (8-3-3)	3.8
B	285	0	285	0	0	24-2-11 (8-3-3)	3.8
L	322	0	322	0	0	24-2-11 (8-3-3)	3.8
K	809	0	809	0	0	24-2-11 (8-3-3)	3.8
I	672	0	672	0	0	24-2-11 (8-3-3)	3.8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	200	124 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
B	200	141 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0
L	235	114 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
K	573	369 / 0	0 / 0	0 / 0	0 / 0	204 / 0	0 / 0
I	480	285 / 0	0 / 0	0 / 0	0 / 0	195 / 0	0 / 0

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

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

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- N	0 / 167	-78.0	-78.0	0.11 (1)	10.00
N- C	-129 / 0	-78.0	-78.0	0.13 (1)	6.25
C- D	0 / 33	-78.0	-78.0	0.50 (1)	10.00
D- E	0 / 33	-78.0	-78.0	0.50 (1)	10.00
E- F	0 / 33	-78.0	-78.0	0.50 (1)	10.00
F- G	-24 / 0	-78.0	-78.0	0.49 (1)	6.25
H- G	-230 / 0	0.0	0.0	0.09 (1)	7.81
B- M	0 / 75	-18.5	-18.5	0.13 (1)	10.00
M- L	0 / 75	-18.5	-18.5	0.15 (4)	10.00
L- K	0 / 71	-18.5	-18.5	0.16 (4)	10.00
K- J	0 / 24	-18.5	-18.5	0.21 (4)	10.00
J- I	0 / 24	-18.5	-18.5	0.21 (4)	10.00
I- H	0 / 0	-18.5	-18.5	0.21 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- C	-181 / 0	0.06 (1)
C- K	-124 / 0	0.06 (1)
K- D	-583 / 0	0.20 (1)
K- F	-68 / 0	0.03 (1)
I- F	-544 / 0	0.19 (1)
I- G	0 / 29	0.01 (1)
M- N	-489 / 0	0.00 (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, 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=0.50/1.00 (D-F:1) , BC=0.21/1.00 (I-K:4) , WB=0.20/1.00 (D-K:1) , SSI=0.38/1.00 (B-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

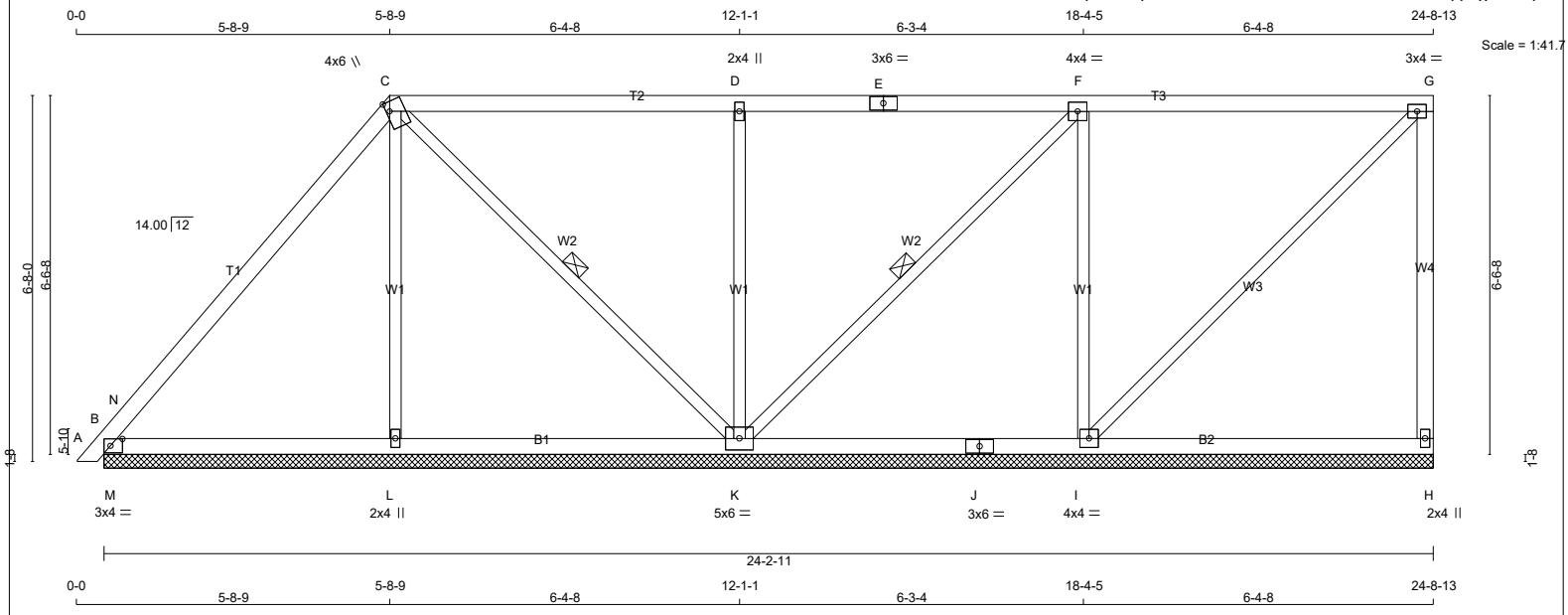
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.23 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	H246P		1	TRUSS DESC. JT 45147	E21104192

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:53:34 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-p4zHiQNT7M J0XXimdFecXAV80zl73yyEq6AdhyTZGl



TOTAL WEIGHT = 101 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	2.00	0.75
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	6.0		
L	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	277	0	277	0	0	24-2-11 (8-3-3)	3.8
B	386	0	386	0	0	24-2-11 (8-3-3)	3.8
L	287	0	287	0	0	24-2-11 (8-3-3)	3.8
K	834	0	834	0	0	24-2-11 (8-3-3)	3.8
I	583	0	583	0	0	24-2-11 (8-3-3)	3.8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	197	123 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0
B	272	183 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0
L	210	97 / 0	0 / 0	0 / 0	0 / 0	114 / 0	0 / 0
K	590	389 / 0	0 / 0	0 / 0	0 / 0	201 / 0	0 / 0
I	418	242 / 0	0 / 0	0 / 0	0 / 0	176 / 0	0 / 0

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

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

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	L- C	-123 / 0	0.09 (1)
B- N	0 / 410	-78.0	-78.0	0.23 (1)	10.00	C- K	-183 / 0	0.10 (1)
N- C	-176 / 0	-78.0	-78.0	0.26 (1)	6.25	K- D	-542 / 0	0.38 (1)
C- D	0 / 31	-78.0	-78.0	0.43 (1)	10.00	K- F	-89 / 0	0.05 (1)
D- E	0 / 31	-78.0	-78.0	0.43 (1)	10.00	I- F	-479 / 0	0.34 (1)
E- F	0 / 31	-78.0	-78.0	0.43 (1)	10.00	I- G	0 / 45	0.01 (1)
F- G	-32 / 0	-78.0	-78.0	0.43 (1)	6.25	M- N	-879 / 0	0.00 (1)
H- G	-231 / 0	0.0	0.0	0.20 (1)	7.81			
B- M	0 / 102	-18.5	-18.5	0.22 (1)	10.00			
M- L	0 / 102	-18.5	-18.5	0.22 (1)	10.00			
L- K	0 / 100	-18.5	-18.5	0.17 (4)	10.00			
K- J	0 / 32	-18.5	-18.5	0.19 (4)	10.00			
J- I	0 / 32	-18.5	-18.5	0.19 (4)	10.00			
I- H	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

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=0.43/1.00 (D-F:1) , BC=0.22/1.00 (B-M:1) , WB=0.38/1.00 (D-K:1) , SSI=0.69/1.00 (B-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

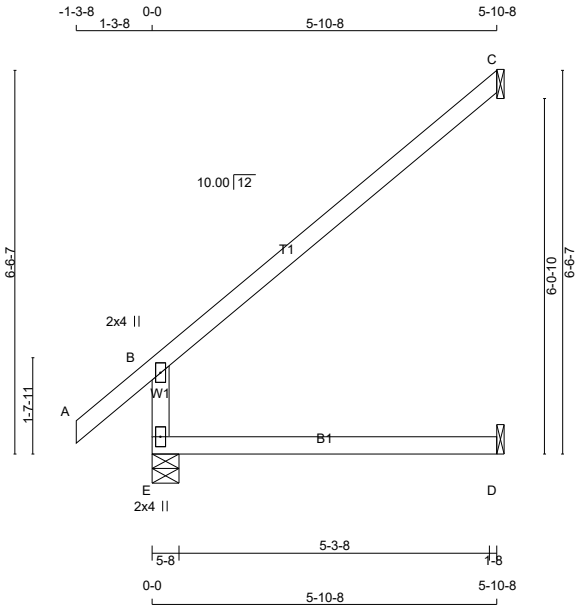
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.17 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	J01		1	TRUSS DESC. JT 45147	E21104231

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-qRcQYUOn6UiFjbX2FzHZZTC0EH?1XawTnPCA6GyTZFQ

Scale = 1:39.3



TOTAL WEIGHT = 28 X 19 = 532 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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	457	0	457	0	0	5-8	1-8
C	172	0	172	0	0	1-8	1-8
D	46	0	52	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	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	37	0 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO					
E- B	-394 / 0	0.0 0.0	0.11 (4)	7.81			
A- B	0 / 35	-78.0 -78.0	0.11 (1)	10.00			
B- C	-37 / 0	-78.0 -78.0	0.46 (1)	6.25			
E- D	0 / 0	-18.5 -18.5	0.14 (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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.46/1.00 (B-C:1) , BC=0.14/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

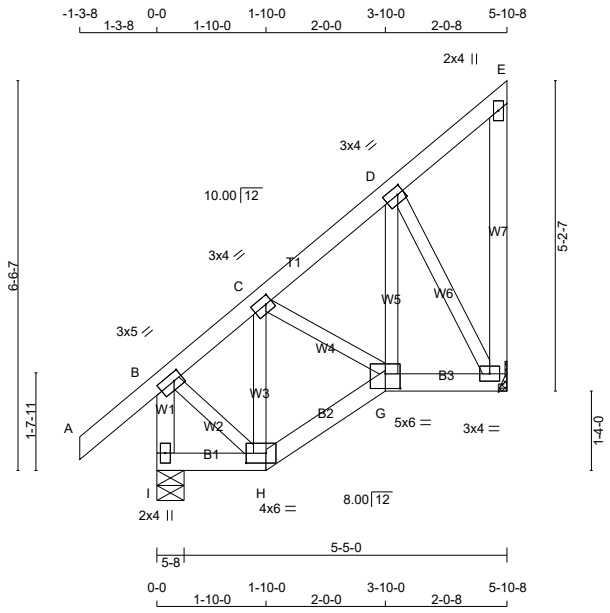
JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.21 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	J01T		1	TRUSS DESC. JT 45147	E21104232

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-mpkAzAQ2e5yzyvhQMOJ1euHSD5i3?UZmEjhHB9yTZFO

Scale = 1:38.6



TOTAL WEIGHT = 12 X 35 = 425 lb [M]

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	SPF

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	TMWW-t	MT20	3.0	4.0	1.50	1.25
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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
I	404	0	404	0	0	5-8	1-8
F	271	0	271	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	286	188 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
F	193	116 / 0	0 / 0	0 / 0	0 / 0	77 / 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)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- B	-387 / 0		0.0	0.0	0.04 (1)	7.81	B- H	0 / 138	0.03 (1)
A- B	0 / 35		-78.0	-78.0	0.11 (1)	10.00	H- C	-116 / 0	0.02 (1)
B- C	-171 / 0		-78.0	-78.0	0.10 (1)	6.25	C- G	0 / 14	0.00 (1)
C- D	-148 / 0		-78.0	-78.0	0.05 (1)	6.25	G- D	0 / 103	0.02 (4)
D- E	-12 / 0		-78.0	-78.0	0.05 (1)	6.25	D- F	-229 / 0	0.06 (1)
F- E	-56 / 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 / 130		-18.5	-18.5	0.04 (4)	10.00			
G- F	0 / 117		-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/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=0.11/1.00 (A-B:1) , BC=0.04/1.00 (G-H:4) , WB=0.06/1.00 (D-F: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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

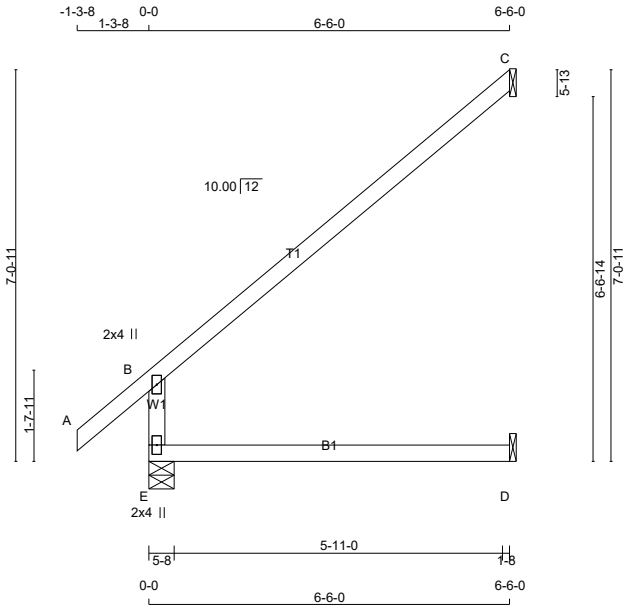
JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.08 (I) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	J02		1	TRUSS DESC. JT 45147	E21104233

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:55:03 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-iCsxOrRIAjChBDqpUpLWjJMjVuMXTOv3i1AOG1yTZFM



Scale = 1:41.5

TOTAL WEIGHT = 36 X 21 = 743 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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	494	0	494	0	0	5-8	1-8
C	190	0	190	0	0	1-8	1-8
D	51	0	57	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	350	229 / 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	41	0 / 0	0 / 0	0 / 0	0 / 0	41 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	-425 / 0	0.0	0.0	0.13 (4)	7.81			
A- B	0 / 35	-78.0	-78.0	0.11 (1)	10.00			
B- C	-41 / 0	-78.0	-78.0	0.44 (1)	6.25			
E- D	0 / 0	-18.5	-18.5	0.16 (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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.44/1.00 (B-C:1) , BC=0.16/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

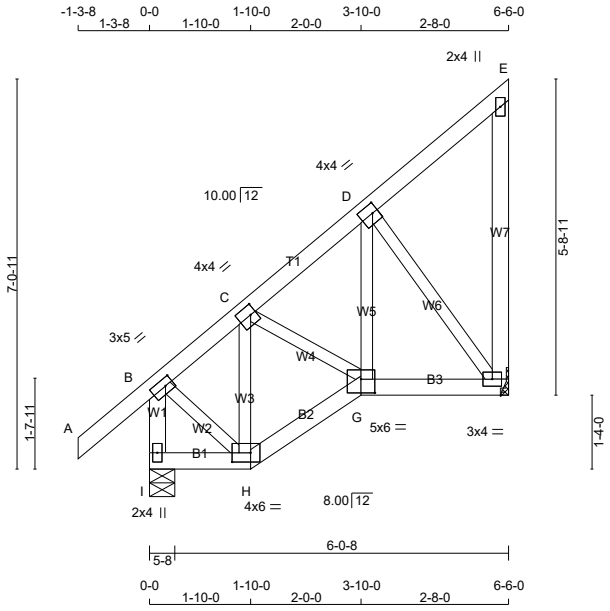
JSI GRIP= 0.29 (B) (INPUT = 0.90)
JSI METAL= 0.23 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336335	J02T		1	TRUSS DESC. JT 45147	E21104234

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Oct 14 08:55:05 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-ebzhpXTYiKSPRW_BbEO_okS7Di4jxHKM9LfUKwyTZFK



TOTAL WEIGHT = 12 X 38 = 455 lb

[M][F]

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	SPF

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	4.0	4.0	2.00	1.25
D	TMWW-t	MT20	4.0	4.0	2.00	1.25
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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
I	433	0	433	0	0	IN-SX 5-8	IN-SX 1-8
F	302	0	302	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	306	201 / 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

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)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- B	-416 / 0		0.0	0.0	0.04 (1)	7.81	B- H	0 / 159	0.04 (1)
A- B	0 / 35		-78.0	-78.0	0.11 (1)	10.00	H- C	-139 / 0	0.03 (1)
B- C	-195 / 0		-78.0	-78.0	0.08 (1)	6.25	C- G	0 / 43	0.01 (1)
C- D	-194 / 0		-78.0	-78.0	0.06 (1)	6.25	G- D	0 / 104	0.03 (4)
D- E	-13 / 0		-78.0	-78.0	0.06 (1)	6.25	D- F	-253 / 0	0.07 (1)
F- E	-79 / 0		0.0	0.0	0.05 (1)	7.81			
I- H	0 / 0		-18.5	-18.5	0.02 (4)	10.00			
H- G	0 / 150		-18.5	-18.5	0.04 (4)	10.00			
G- F	0 / 157		-18.5	-18.5	0.05 (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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.11/1.00 (A-B:1) , BC=0.05/1.00 (F-G:4) , WB=0.07/1.00 (D-F:1) , SSI=0.07/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

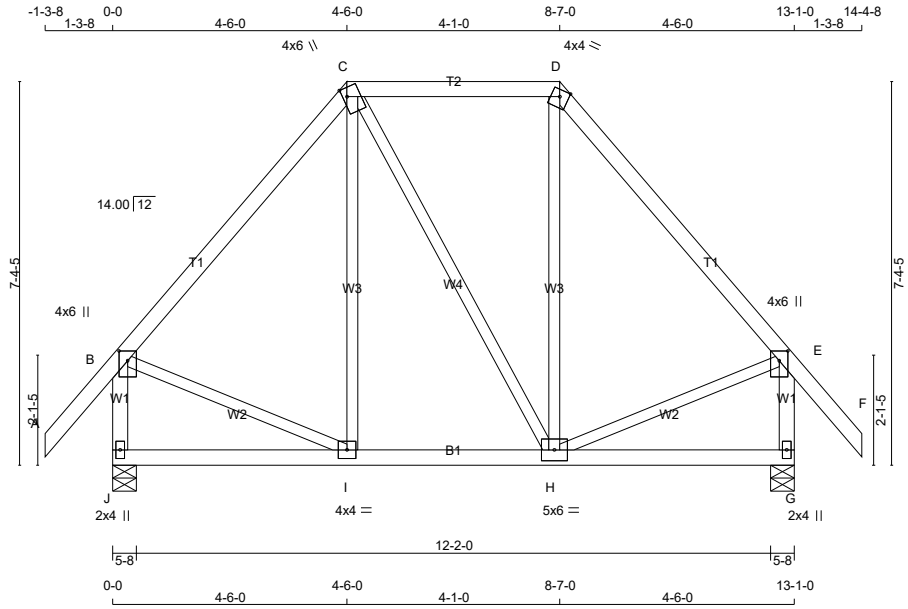
JSI GRIP= 0.35 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H65		1	TRUSS DESC. JT 45147	E21104435

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-JY3zgt0zrskmq2W9DVsK4STg?RzQN7_OXY5XqGyTDbG

Scale = 1:44.2



TOTAL WEIGHT = 2 X 69 = 139 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
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

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	TTWW+m	MT20	4.0	6.0	2.00	1.00
D	TTW-m	MT20	4.0	4.0	Edge	
E	TMVW+p	MT20	4.0	6.0	2.25	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWWW-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.

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
J	740	0	740	0	0	5-8	1-8
G	740	0	740	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	526	333 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
G	526	333 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	I- C	-17 / 55	0.02 (4)
B- C	-417 / 0	-78.0	-78.0	0.21 (1)	6.25	C- H	0 / 0	0.00 (1)
C- D	-270 / 0	-78.0	-78.0	0.17 (1)	6.25	H- D	-17 / 55	0.02 (4)
D- E	-417 / 0	-78.0	-78.0	0.21 (1)	6.25	B- I	0 / 289	0.07 (1)
E- F	0 / 42	-78.0	-78.0	0.11 (1)	10.00	H- E	0 / 289	0.07 (1)
J- B	-705 / 0	0.0	0.0	0.08 (1)	7.81			
G- E	-705 / 0	0.0	0.0	0.08 (1)	7.81			
J- I	0 / 0	-18.5	-18.5	0.08 (4)	10.00			
I- H	0 / 270	-18.5	-18.5	0.11 (4)	10.00			
H- G	0 / 0	-18.5	-18.5	0.08 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	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 (0.44")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.44")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.21/1.00 (D-E:1) , BC=0.11/1.00 (H-I:4) , WB=0.07/1.00 (B-I:1) , SSI=0.12/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

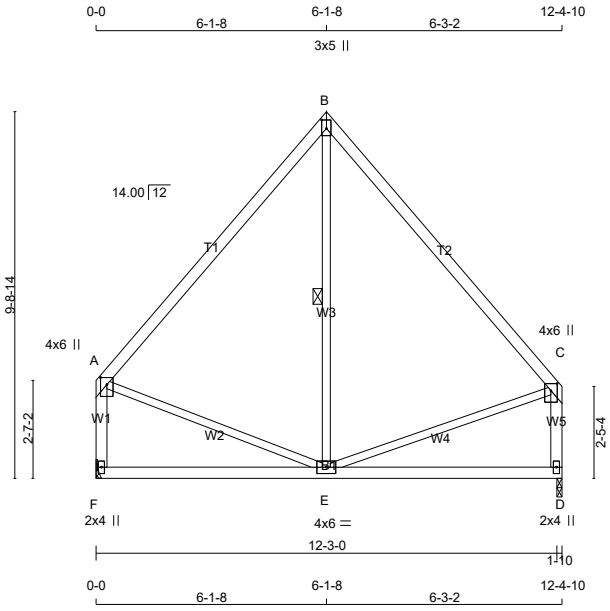
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (H) (INPUT = 0.90)
JSI METAL= 0.21 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H66		1	TRUSS DESC. JT 45147	E21104436

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:34 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-nlcLtD1bcAsdRB5MnCOZcf?qvrH76bTYmCr4MiyTDbF



TOTAL WEIGHT = 6 X 59 = 353 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	2100F 1.8E	SPF
B - C	2x4	DRY	2100F 1.8E	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	BMWWW-t	MT20	4.0	6.0		
F	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	597	0	597	0	0	MECHANICAL	
D	597	0	597	0	0	1-10	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	426	260 / 0	0 / 0	0 / 0	0 / 0	166 / 0	0 / 0
D	426	260 / 0	0 / 0	0 / 0	0 / 0	166 / 0	0 / 0

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

BRACING

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

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

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-317 / 0	-78.0	-78.0	0.25 (1)	6.25	E- B	0 / 99	0.03 (4)
B- C	-317 / 0	-78.0	-78.0	0.26 (1)	6.25	A- E	0 / 220	0.05 (1)
F- A	-555 / 0	0.0	0.0	0.08 (1)	7.81	E- C	0 / 218	0.05 (1)
D- C	-553 / 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	0.20 (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/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 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.26/1.00 (B-C:1) , BC=0.20/1.00 (E-F:4) , WB=0.05/1.00 (A-E:1) , SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

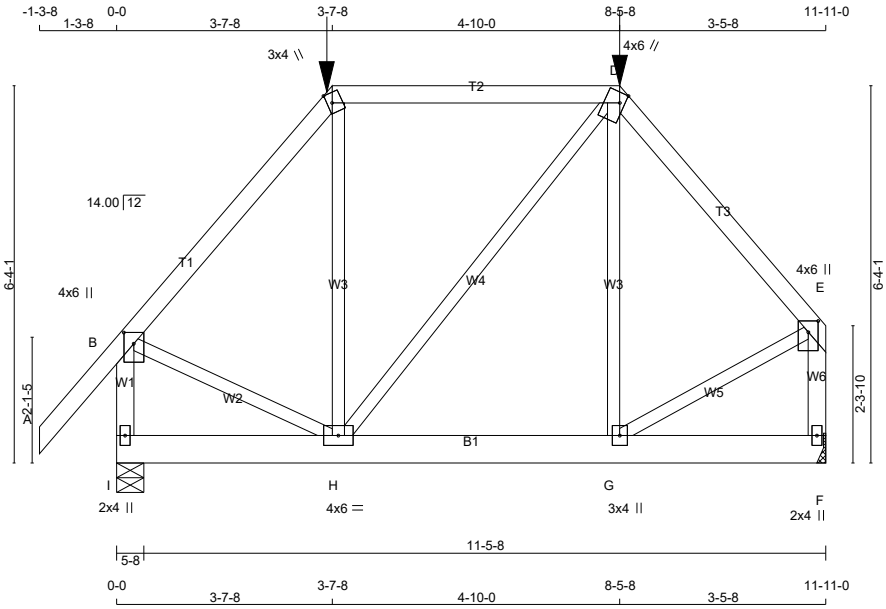
JSI GRIP= 0.33 (E) (INPUT = 0.90)
JSI METAL= 0.17 (C) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H77		1	TRUSS DESC. JT 45147	E21104437

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:36 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-j7k6Iv2r8n6LhVFkudQ1i457Se?TaU3rDWKBRbyTDbD

Scale = 1:38.7



TOTAL WEIGHT = 67 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
D - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - F	2x6	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
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTW+m	MT20	3.0	4.0	2.00	1.00
D	TTWW+m	MT20	4.0	6.0	2.00	1.00
E	TMVW+p	MT20	4.0	6.0	2.25	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWW+t	MT20	3.0	4.0		
H	BMWWW-t	MT20	4.0	6.0		
I	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
I	932	0	932	0	0	5-8	1-8
F	826	0	826	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	662	414 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
F	589	357 / 0	0 / 0	0 / 0	0 / 0	232 / 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)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO			
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00	H- C	-66 / 67	0.04 (1)
B- C	-608 / 0	-78.0	-78.0	0.21 (1)	6.25	H- D	0 / 15	0.00 (1)
C- D	-393 / 0	-114.5	-114.5	0.51 (1)	6.25	G- D	-78 / 59	0.05 (1)
D- E	-594 / 0	-78.0	-78.0	0.19 (1)	6.25	B- H	0 / 431	0.11 (1)
I- B	-889 / 0	0.0	0.0	0.11 (1)	7.81	G- E	0 / 433	0.11 (1)
F- E	-787 / 0	0.0	0.0	0.10 (1)	7.81			
I- H	0 / 0	-27.2	-27.2	0.05 (4)	10.00			
H- G	0 / 383	-27.2	-27.2	0.08 (4)	10.00			
G- F	0 / 0	-27.2	-27.2	0.05 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-7-8	-112	-112	---	FRONT	VERT	TOTAL	---	C1
D	8-5-8	-107	-107	---	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 = 3-7-8
RIGHT SETBACK = 3-5-8
END SETBACK = 3-10-8
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.

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 (0.01")

CSI: TC=0.51/1.00 (C-D:1) , BC=0.08/1.00 (G-H:4) , WB=0.11/1.00 (E-G:1) , SSI=0.24/1.00 (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 .

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

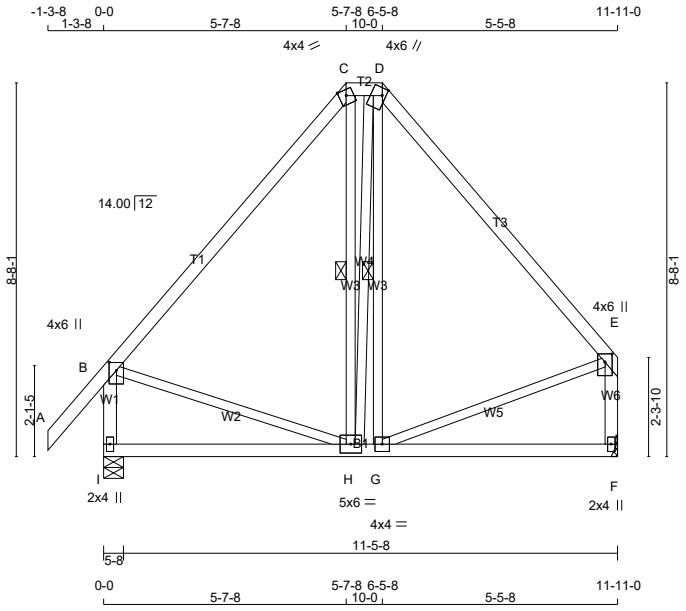
JSI GRIP= 0.78 (G) (INPUT = 0.90)
JSI METAL= 0.27 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H78		1	TRUSS DESC. JT 45147	E21104438

Alpa Roof Truss, Maple

ID:hd511hZTz bdeQoS817GKByhVxV-fWssjb45qPM3wpP702SVnVAVzSfX2PS7hqpHVUyTDbB

Scale = 1:53.4



TOTAL WEIGHT = 70 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
D - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTW-m	MT20	4.0	4.0	Edge	
D	TTWW+m	MT20	4.0	6.0	2.00	1.00
E	TMVW+p	MT20	4.0	6.0	2.25	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	4.0	4.0		
H	BMWWW-t	MT20	5.0	6.0		
I	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
I	684	0	684	0	0	5-8	1-8
F	575	0	575	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	486	309 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
F	410	250 / 0	0 / 0	0 / 0	0 / 0	160 / 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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00
B- C	-327 / 0	-78.0	-78.0	0.32 (1)	6.25
C- D	-212 / 0	-78.0	-78.0	0.01 (1)	6.25
D- E	-326 / 0	-78.0	-78.0	0.30 (1)	6.25
I- B	-642 / 0	0.0	0.0	0.08 (1)	7.81
F- E	-534 / 0	0.0	0.0	0.07 (1)	7.81
I- H	0 / 0	-18.5	-18.5	0.15 (4)	10.00
H- G	0 / 211	-18.5	-18.5	0.17 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.14 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-3 / 49	0.02 (4)
H- D	0 / 15	0.01 (4)
G- D	-8 / 34	0.01 (4)
B- H	0 / 222	0.05 (1)
G- E	0 / 224	0.05 (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, 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=0.32/1.00 (B-C:1) , BC=0.17/1.00 (G-H:4) , WB=0.05/1.00 (E-G:1) , SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

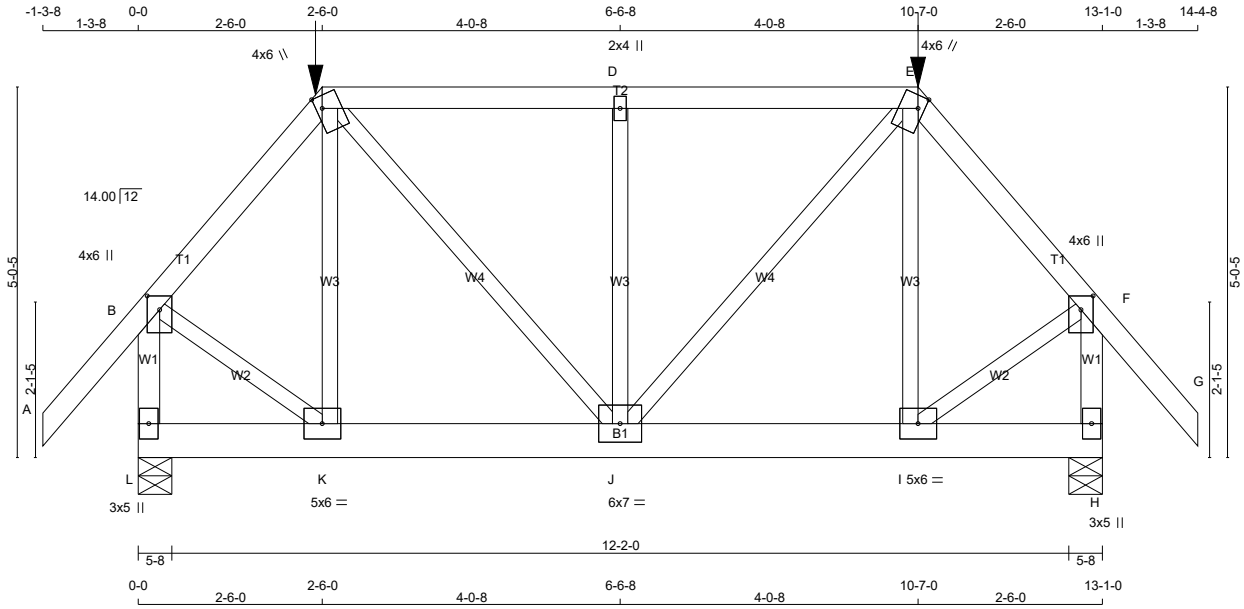
JSI GRIP= 0.36 (B) (INPUT = 0.90)
JSI METAL= 0.19 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H79		1	TRUSS DESC. JT 45147	E21104439

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:39 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-7iQEww5kQiUwYz_JalzkJjjfSs09npQHvUYr2wyTDbA



TOTAL WEIGHT = 2 X 74 = 149 lb [M]

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
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - H	2x6	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
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTWW+m	MT20	4.0	6.0	2.00	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	4.0	6.0	2.00	1.00
F	TMVW+p	MT20	4.0	6.0	2.25	2.00
H	BMV1+p	MT20	3.0	5.0		
I	BMWW-t	MT20	5.0	6.0		
J	BMWWW-t	MT20	6.0	7.0		
K	BMWW-t	MT20	5.0	6.0		
L	BMV1+p	MT20	3.0	5.0		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1004	0	1004	0	0	5-8	1-8
H	1004	0	1004	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	714	447 / 0	0 / 0	0 / 0	0 / 0	267 / 0	0 / 0
H	714	447 / 0	0 / 0	0 / 0	0 / 0	267 / 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 = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00	K- C	-159 / 4	0.06 (1)
B- C	-662 / 0	-78.0	-78.0	0.10 (1)	6.25	C- J	0 / 417	0.10 (1)
C- D	-698 / 0	-112.1	-112.1	0.34 (1)	6.25	J- D	-546 / 0	0.20 (1)
D- E	-698 / 0	-112.1	-112.1	0.34 (1)	6.25	J- E	0 / 417	0.10 (1)
E- F	-662 / 0	-78.0	-78.0	0.10 (1)	6.25	I- E	-159 / 4	0.06 (1)
F- G	0 / 42	-78.0	-78.0	0.12 (1)	10.00	B- K	0 / 506	0.13 (1)
L- B	-984 / 0	0.0	0.0	0.12 (1)	7.81	I- F	0 / 506	0.13 (1)
H- F	-984 / 0	0.0	0.0	0.12 (1)	7.81			
L- K	0 / 0	-26.6	-26.6	0.04 (4)	10.00			
K- J	0 / 424	-26.6	-26.6	0.09 (1)	10.00			
J- I	0 / 424	-26.6	-26.6	0.09 (1)	10.00			
I- H	0 / 0	-26.6	-26.6	0.04 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-6-0	-73	-73	---	FRONT	VERT	TOTAL	---	C1
E	10-7-0	-73	-73	---	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
SIDE SETBACK = 2-6-0
END SETBACK = 3-9-0
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.

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 (0.44")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.44")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.34/1.00 (C-D:1) , BC=0.09/1.00 (I-J:1) , WB=0.20/1.00 (D-J:1) , SSI=0.24/1.00 (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 .

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

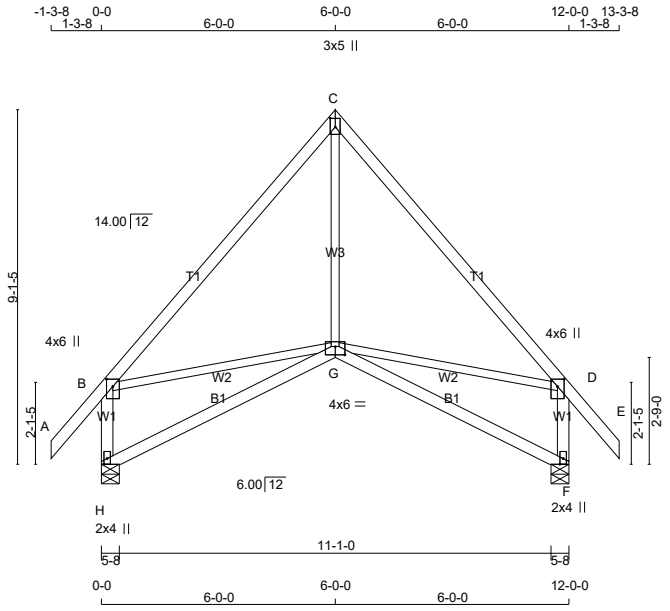
JSI GRIP= 0.56 (F) (INPUT = 0.90)
JSI METAL= 0.27 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H198		1	TRUSS DESC. JT 45147	E21104440

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:41 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-45Y?Lc6 yKkdnG7ihA0CP8o0QfqvFlxaNo1y6oyTDb8



TOTAL WEIGHT = 60 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	1650F 1.5E	SPF
C - E	2x4	DRY	1650F 1.5E	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 EXCEPT	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	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.

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	688	0	688	0	0	5-8	1-8
F	688	0	688	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	488	311 / 0	0 / 0	0 / 0	0 / 0	178 / 0	0 / 0
F	488	311 / 0	0 / 0	0 / 0	0 / 0	178 / 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.09 (1)	10.00	G- C	0 / 211	0.06 (4)
B- C	-447 / 0	-78.0	-78.0	0.31 (1)	6.25	B- G	0 / 295	0.07 (1)
C- D	-447 / 0	-78.0	-78.0	0.31 (1)	6.25	G- D	0 / 295	0.07 (1)
D- E	0 / 42	-78.0	-78.0	0.09 (1)	10.00			
H- B	-633 / 0	0.0	0.0	0.08 (1)	7.81			
F- D	-633 / 0	0.0	0.0	0.08 (1)	7.81			
H- G	0 / 0	-18.5	-18.5	0.20 (4)	10.00			
G- F	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/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 (0.07")

CSI: TC=0.31/1.00 (C-D:1) , BC=0.20/1.00 (F-G:4) , WB=0.07/1.00 (B-G: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

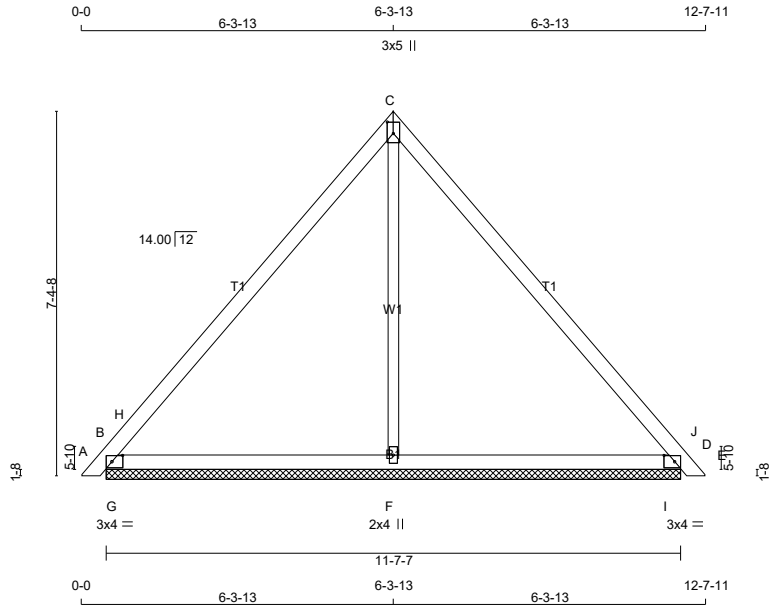
JSI GRIP= 0.49 (G) (INPUT = 0.90)
JSI METAL= 0.26 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H199P		1	TRUSS DESC. JT 45147	E21104441

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:42 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-YH5NZy7cjdsUPQiuFuXRxLLAn3?Z D3jbSnVeFyTDb7



TOTAL WEIGHT = 41 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.50
C	TTW+p	MT20	3.0	5.0	2.75	1.50
D	TMB1-I	MT20	3.0	4.0	1.50	2.50
F	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	489	0	489	0	0	11-7-7	1-8
D	489	0	489	0	0	11-7-7	1-8
F	203	0	203	0	0	11-7-7	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	345	232 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
D	345	232 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
F	151	56 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	F- C	0 / 34	0.01 (4)
B- H	0 / 503	-78.0	-78.0	0.32 (1)	10.00	G- H	-1146 / 0	0.00 (1)
H- C	-295 / 0	-78.0	-78.0	0.33 (1)	6.25	I- J	-1146 / 0	0.00 (1)
C- J	-295 / 0	-78.0	-78.0	0.33 (1)	6.25			
J- D	0 / 503	-78.0	-78.0	0.32 (1)	10.00			
D- E	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- G	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
G- F	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
F- I	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
I- D	0 / 177	-18.5	-18.5	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/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=0.33/1.00 (C-H:1) , BC=0.30/1.00 (B-G:1) , WB=0.01/1.00 (C-F:4) , SSI=0.89/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

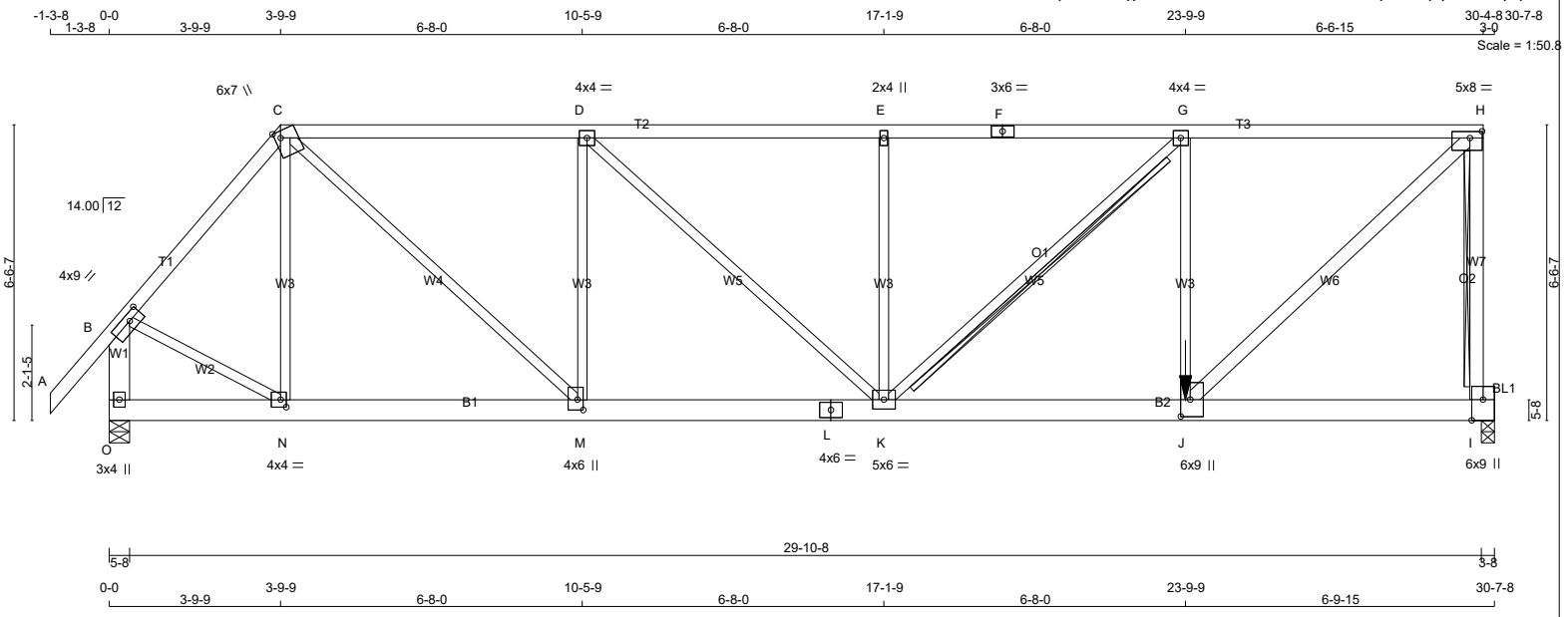
JSI GRIP= 0.59 (D) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H201		1	TRUSS DESC. JT 45147	E21104442

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:44 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-UqD7 e8sFE6CeksHMIZv0mQMptdaSyq03mGcj7yTDb5



TOTAL WEIGHT = 157 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	1650F 1.5E	SPF
F - H	2x4	DRY	1650F 1.5E	SPF
I - H	2x4	DRY	No.2	SPF
O - B	2x6	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
J - H	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	1.75	3.50
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMWW-t	MT20	4.0	4.0		
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	TMVW-t	MT20	5.0	8.0	1.75	3.25
I	BMVK1+t	MT20	6.0	9.0	Edge	3.00
J	BMWW+t	MT20	6.0	9.0	4.50	2.50
K	BMWWW-t	MT20	5.0	6.0		
L	BS-t	MT20	4.0	6.0		
M	BMWW+t	MT20	4.0	6.0	2.75	1.50
N	BMWW-t	MT20	4.0	4.0	2.00	1.50
O	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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	3473	0	3473	0	0	3-8	3-8
O	2025	0	2025	0	0	5-8	2-3

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	2476	1514 / 0	0 / 0	0 / 0	0 / 0	962 / 0	0 / 0
O	1441	892 / 0	0 / 0	0 / 0	0 / 0	549 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 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 H-I, G-K

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 MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00	N- C	-344 / 0	0.23 (1)
B- C	-1688 / 0	-78.0	-78.0	0.29 (1)	4.80	C- M	0 / 1868	0.46 (1)
C- D	-2462 / 0	-78.0	-78.0	0.63 (1)	4.22	M- D	-1142 / 0	0.76 (1)
D- E	-3060 / 0	-78.0	-78.0	0.69 (1)	3.81	D- K	0 / 813	0.20 (1)
E- F	-3060 / 0	-78.0	-78.0	0.98 (1)	3.21	K- E	-435 / 0	0.29 (1)
F- G	-3060 / 0	-78.0	-78.0	0.98 (1)	3.21	K- G	-2 / 2	0.00 (1)
G- H	-3062 / 0	-153.5	-153.5	1.00 (1)	3.14	J- G	-905 / 0	0.60 (1)
I- H	-3363 / 0	0.0	0.0	0.79 (1)	7.81	J- H	0 / 4304	0.76 (1)
O- B	-2007 / 0	0.0	0.0	0.17 (1)	7.10	B- N	0 / 1187	0.29 (1)
O- N	0 / 0	-18.5	-18.5	0.07 (4)	10.00			
N- M	0 / 1087	-18.5	-18.5	0.20 (1)	10.00			
M- L	0 / 2463	-18.5	-18.5	0.38 (1)	10.00			
L- K	0 / 2463	-18.5	-18.5	0.38 (1)	10.00			
K- J	0 / 3062	-18.5	-18.5	0.45 (1)	10.00			
J- I	-80 / 0	-36.4	-36.4	0.18 (4)	6.25			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
J	23-9-9	-1849	-1849	---	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 = 3-9-9
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 6-9-15 OF SPAN MEASURED FROM THE RIGHT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=1.00/1.00 (G-H:1) , BC=0.45/1.00 (J-K:1) , WB=0.76/1.00 (D-M:1) , SSI=0.51/1.00 (G-H: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 .

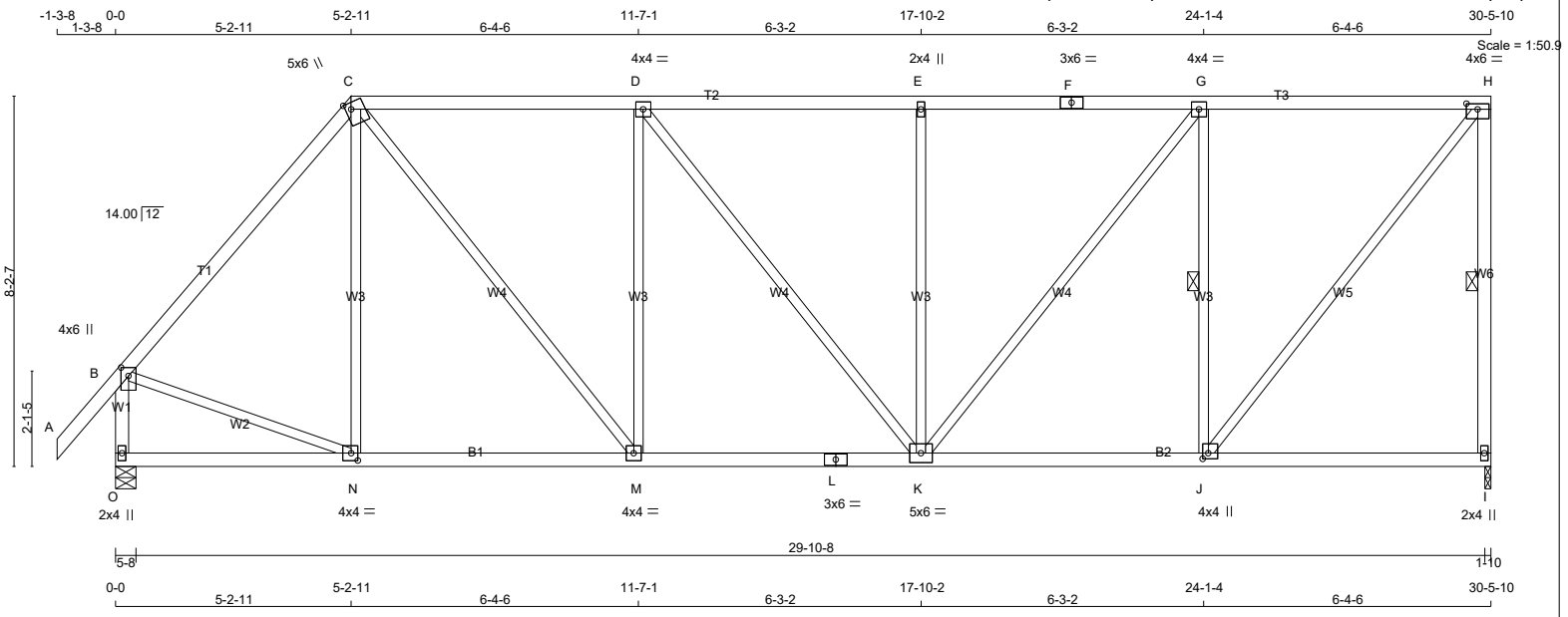
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H202		1	TRUSS DESC. JT 45147	E21104443

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:48 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-NRTep?CNJTce7LA2b8erBca9 U2wOmmc OEpsuyTDb1



TOTAL WEIGHT = 147 lb [M]

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

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	TTWW+m	MT20	5.0	6.0	1.75	1.50
D	TMWW-t	MT20	4.0	4.0		
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	TMVW-t	MT20	4.0	6.0	1.50	3.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW+t	MT20	4.0	4.0	1.50	1.50
K	BMWWW-t	MT20	5.0	6.0		
L	BS-t	MT20	3.0	6.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMWW-t	MT20	4.0	4.0	2.00	1.75
O	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	1470	0	1470	0	0	1-10	1-9
O	1579	0	1579	0	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1048	640 / 0	0 / 0	0 / 0	0 / 0	408 / 0	0 / 0
O	1124	698 / 0	0 / 0	0 / 0	0 / 0	425 / 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 = 4.81 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, 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	N- C	-148 / 28	0.19 (1)
B- C	-1262 / 0	-78.0	-78.0	0.48 (1)	5.19	C- M	0 / 900	0.20 (1)
C- D	-1382 / 0	-78.0	-78.0	0.54 (1)	4.84	M- D	-583 / 0	0.76 (1)
D- E	-1405 / 0	-78.0	-78.0	0.54 (1)	4.81	D- K	0 / 37	0.01 (1)
E- F	-1405 / 0	-78.0	-78.0	0.54 (1)	4.81	K- E	-450 / 0	0.59 (1)
F- G	-1405 / 0	-78.0	-78.0	0.54 (1)	4.81	K- G	0 / 676	0.15 (1)
G- H	-986 / 0	-78.0	-78.0	0.50 (1)	5.54	J- G	-1093 / 0	0.47 (1)
I- H	-1422 / 0	0.0	0.0	0.43 (1)	5.47	J- H	0 / 1573	0.35 (1)
O- B	-1541 / 0	0.0	0.0	0.18 (1)	6.63	B- N	0 / 861	0.19 (1)
O- N	0 / 0	-18.5	-18.5	0.15 (4)	10.00			
N- M	0 / 817	-18.5	-18.5	0.23 (4)	10.00			
M- L	0 / 1383	-18.5	-18.5	0.30 (1)	10.00			
L- K	0 / 1383	-18.5	-18.5	0.30 (1)	10.00			
K- J	0 / 986	-18.5	-18.5	0.27 (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 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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.54/1.00 (C-D:1) , BC=0.30/1.00 (K-M:1) , WB=0.76/1.00 (D-M:1) , SSI=0.23/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

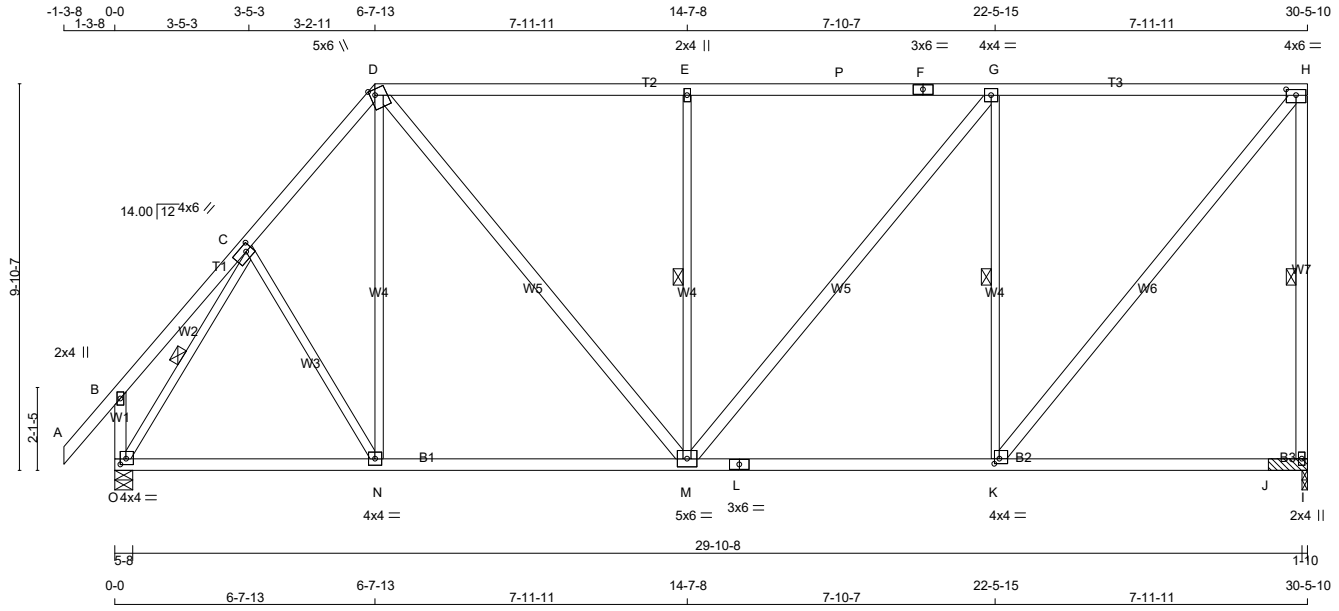
JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.50 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H203		1	TRUSS DESC. JT 45147	E21104444

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:20 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-B2m3xRspvt5cm21fyG7H2iQHIBSrq5iUY1SKtWyTDbT



TOTAL WEIGHT = 7 X 164 = 1147 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - 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
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
D - M	2x4	DRY	No.2	SPF
M - G	2x4	DRY	No.2	SPF
K - H	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		
C	TMWW-t	MT20	4.0	6.0	2.00	2.00
D	TTWW+m	MT20	5.0	6.0	1.75	1.50
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	TMVW-t	MT20	4.0	6.0	1.75	3.00
I	BMV1+p	MT20	2.0	4.0		
K	BMWW-t	MT20	4.0	4.0	1.50	1.50
L	BS-t	MT20	3.0	6.0		
M	BMWWW-t	MT20	5.0	6.0		
N	BMWW-t	MT20	4.0	4.0		
O	BMVW1-t	MT20	4.0	4.0	1.75	1.75

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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	1578	0	1578	0	0	1-10	1-10 & BLOCK
O	1649	0	1649	0	0	5-8	1-13

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1135	640 / 0	0 / 0	0 / 0	0 / 0	495 / 0	0 / 0
O	1179	698 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. I ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION D-H, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.43 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-M, G-K, C-O.

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. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C- N	0 / 76	0.03 (4)
B- C	0 / 21	-78.0	-78.0	0.13 (1)	10.00	N- D	0 / 107	0.04 (4)
C- D	-1350 / 0	-78.0	-78.0	0.16 (1)	5.43	D- M	0 / 704	0.11 (1)
D- E	-1312 / 0	-85.5	-85.5	0.91 (1)	2.00	M- E	-736 / 0	0.48 (1)
E- P	-1312 / 0	-85.5	-85.5	0.91 (1)	2.00	M- G	0 / 433	0.07 (1)
P- F	-1312 / 0	-85.5	-85.5	0.91 (1)	2.00	K- G	-1079 / 0	0.71 (1)
F- G	-1312 / 0	-85.5	-85.5	0.91 (1)	2.00	K- H	0 / 1621	0.26 (1)
G- H	-1037 / 0	-85.5	-85.5	0.86 (1)	2.00	O- C	-1616 / 0	0.46 (1)
I- H	-1520 / 0	0.0	0.0	0.71 (1)	5.33			
O- B	-209 / 0	0.0	0.0	0.02 (1)	7.81			
O- N	0 / 820	-18.5	-18.5	0.32 (4)	10.00			
N- M	0 / 861	-18.5	-18.5	0.33 (4)	10.00			
M- L	0 / 1037	-18.5	-18.5	0.40 (4)	10.00			
L- K	0 / 1037	-18.5	-18.5	0.40 (4)	10.00			
K- J	0 / 0	-18.5	-18.5	0.29 (4)	10.00			
J- I	0 / 0	-18.5	-18.5	0.29 (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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.91/1.00 (E-G:1) , BC=0.40/1.00 (K-M:4) , WB=0.71/1.00 (G-K:1) , SSI=0.32/1.00 (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.

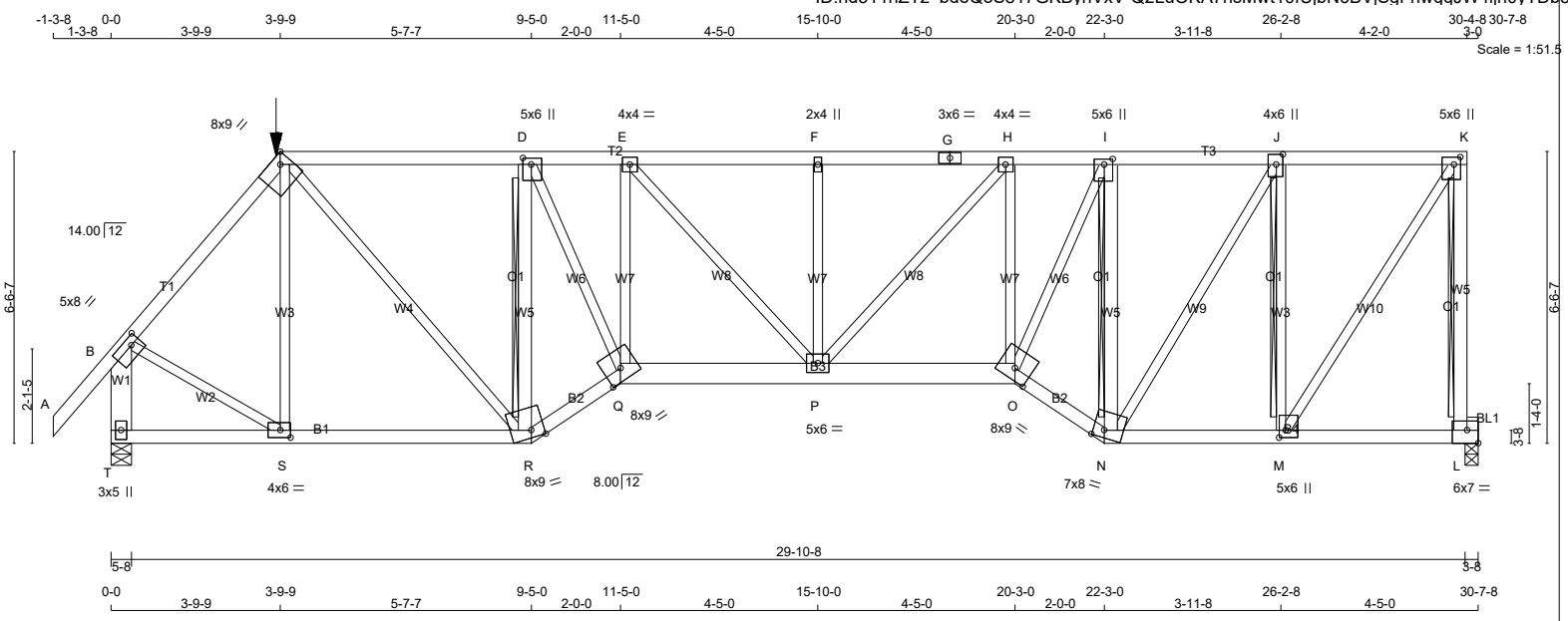
JSI GRIP= 0.88 (O) (INPUT = 0.90)
JSI METAL= 0.36 (K) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H201T		1	TRUSS DESC. JT 45147	E21104445

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:46 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-Q2LuOKA7nsMwt10fUjbN6BVjSqFnwqqJW4ljn0yTDb3



TOTAL WEIGHT = 165 lb [M]

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 - K	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
T - B	2x6	DRY	No.2	SPF
T - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - O	2x6	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
BEARING BLOCKS				
BL1	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
R - D	2x4	DRY	No.2	SPF
N - I	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	2.00	2.50
C	TTWW-h	MT20	8.0	9.0	Edge	2.75
D	TMWW+t	MT20	5.0	6.0	1.75	2.25
E	TMWW-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMWW-t	MT20	4.0	4.0		
I	TMWW+t	MT20	5.0	6.0	1.50	2.25
J	TMWW+t	MT20	4.0	6.0	2.75	1.75
K	TMVW+p	MT20	5.0	6.0	2.00	1.75
L	BMVK1-t	MT20	6.0	7.0	3.50	Edge
M	BMWW+t	MT20	5.0	6.0	2.00	1.75
N	BBWW-m	MT20	7.0	8.0	2.00	3.00
O	BBWW-h	MT20	8.0	9.0	3.00	4.50
P	BMWWW-t	MT20	5.0	6.0		
Q	BBWW-h	MT20	8.0	9.0	3.25	4.50
R	BBWW-m	MT20	8.0	9.0	Edge	3.50
S	BMWW-t	MT20	4.0	6.0	2.00	2.75
T	BMV1+p	MT20	3.0	5.0		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	2891	0	2891	0	0	3-8	3-8
T	2890	0	2890	0	0	5-8	3-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	2061	1260 / 0	0 / 0	0 / 0	0 / 0	801 / 0	0 / 0
T	2060	1259 / 0	0 / 0	0 / 0	0 / 0	800 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, T
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 = 2.10 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 K-L, D-R, I-N, J-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00
B- C	-2464 / 0	-78.0	-78.0	0.37 (1)	4.05
C- D	-3078 / 0	-153.5	-153.5	0.93 (1)	2.83
D- E	-4212 / 0	-78.0	-78.0	0.89 (1)	2.10
E- F	-4551 / 0	-78.0	-78.0	0.62 (1)	2.80
F- G	-4551 / 0	-78.0	-78.0	0.62 (1)	2.80
G- H	-4551 / 0	-78.0	-78.0	0.62 (1)	2.80
H- I	-3956 / 0	-78.0	-78.0	0.36 (1)	3.24
I- J	-2722 / 0	-153.5	-153.5	0.57 (1)	3.53
J- K	-1654 / 0	-153.5	-153.5	0.48 (1)	4.51
L- K	-2833 / 0	0.0	0.0	0.69 (1)	7.81
T- B	-2847 / 0	0.0	0.0	0.25 (1)	6.16
T- S	0 / 0	-36.4	-36.4	0.28 (4)	10.00
S- R	0 / 1587	-36.4	-36.4	0.45 (4)	10.00
R- Q	0 / 3636	-112.0	-112.0	0.73 (1)	10.00
Q- P	0 / 4221	-112.0	-112.0	0.70 (1)	10.00
P- O	0 / 3974	-112.0	-112.0	0.67 (1)	10.00
O- N	0 / 3209	-112.0	-112.0	0.65 (1)	10.00
N- M	0 / 1654	-36.4	-36.4	0.38 (1)	10.00
M- L	-66 / 0	-36.4	-36.4	0.17 (4)	6.25

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
S- C	-496 / 0	0.35 (1)
C- R	0 / 2218	0.55 (1)
R- D	-3506 / 0	0.86 (1)
D- Q	0 / 3009	0.74 (1)
Q- E	-391 / 0	0.15 (1)
E- P	0 / 496	0.12 (1)
P- F	-407 / 0	0.16 (1)
P- H	0 / 867	0.21 (1)
O- H	-847 / 0	0.33 (1)
O- I	0 / 3244	0.80 (1)
N- I	-3324 / 0	0.81 (1)
N- J	0 / 1991	0.49 (1)
M- J	-2409 / 0	0.76 (1)
M- K	0 / 3100	0.77 (1)
B- S	0 / 1747	0.43 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-9-9	-216	-216	---	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 = 3-9-9
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 9-5-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 9-5-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 22-3-0
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 = 3-9-9
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 8-4-8 OF SPAN MEASURED FROM THE RIGHT.

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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 765 (0.47")

CSI: TC=0.93/1.00 (C-D:1) , BC=0.73/1.00 (Q-R:1) , WB=0.86/1.00 (D-R:1) , SSI=0.42/1.00 (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

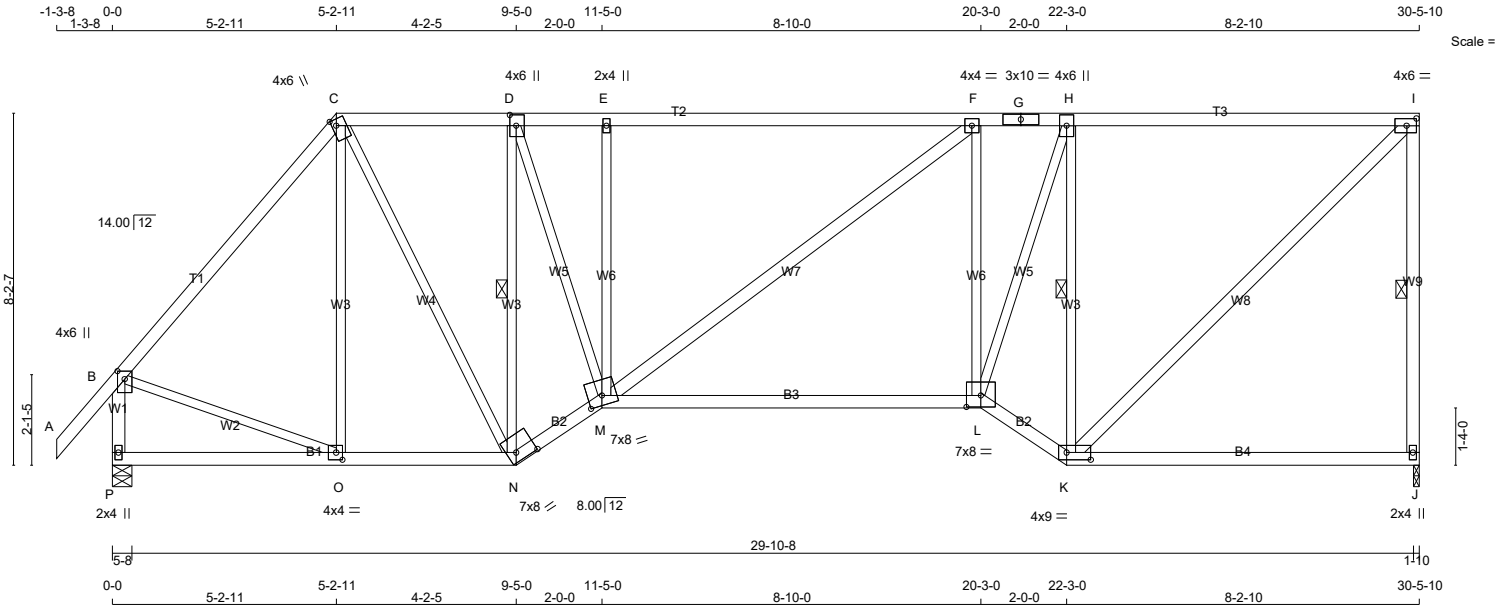
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H202T		1	TRUSS DESC. JT 45147	E21104446

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:49 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-rd001LC?4nlVkVkE9s94jq7FuuKu7BvlC2zNOLyTDb0



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 - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - 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
M - F	2x4	DRY	No.2	SPF
K - I	2x4	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	TTWW+m	MT20	4.0	6.0	1.75	1.25
D	TMWW+t	MT20	4.0	6.0	3.00	1.75
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TS-t	MT20	3.0	10.0		
H	TMWW+t	MT20	4.0	6.0		
I	TMVW-t	MT20	4.0	6.0	2.00	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BBWW-l	MT20	4.0	9.0	2.00	6.75
L	BBWW-l	MT20	7.0	8.0	3.25	4.00
M	BBWWW-m	MT20	7.0	8.0	2.75	4.00
N	BBWW-h	MT20	7.0	8.0	2.50	5.50
O	BMWW-t	MT20	4.0	4.0	2.00	1.75
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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1470	0	1470	0	0	1-10	1-9
P	1579	0	1579	0	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1048	640 / 0	0 / 0	0 / 0	0 / 0	408 / 0	0 / 0
P	1124	698 / 0	0 / 0	0 / 0	0 / 0	425 / 0	0 / 0

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

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 I-J, D-N, 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00
B- C	-1261 / 0	-78.0	-78.0	0.48 (1)	5.19
C- D	-1219 / 0	-78.0	-78.0	0.22 (1)	5.55
D- E	-1658 / 0	-78.0	-78.0	0.61 (1)	4.21
E- F	-1667 / 0	-78.0	-78.0	0.85 (1)	4.20
F- G	-1574 / 0	-78.0	-78.0	0.68 (1)	4.10
G- H	-1574 / 0	-78.0	-78.0	0.68 (1)	4.10
H- I	-1182 / 0	-78.0	-78.0	0.80 (1)	4.66
J- I	-1394 / 0	0.0	0.0	0.42 (1)	5.52
P- B	-1540 / 0	0.0	0.0	0.18 (1)	6.63
P- O	0 / 0	-18.5	-18.5	0.12 (4)	10.00
O- N	0 / 815	-18.5	-18.5	0.20 (4)	10.00
N- M	0 / 1441	-18.5	-18.5	0.24 (1)	10.00
M- L	0 / 1581	-18.5	-18.5	0.57 (4)	10.00
L- K	0 / 1392	-18.5	-18.5	0.24 (1)	10.00
K- J	0 / 0	-18.5	-18.5	0.37 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- C	-160 / 17	0.21 (1)
C- N	0 / 857	0.19 (1)
N- D	-1509 / 0	0.64 (1)
D- M	0 / 1504	0.34 (1)
M- E	-598 / 0	0.48 (1)
M- F	0 / 108	0.02 (1)
L- F	-427 / 0	0.34 (1)
L- H	0 / 1364	0.31 (1)
K- H	-1813 / 0	0.77 (1)
K- I	0 / 1639	0.26 (1)
B- O	0 / 860	0.19 (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, 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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/ 786 (0.47")

CSI: TC=0.85/1.00 (E-F:1) , BC=0.57/1.00 (L-M:4) , WB=0.77/1.00 (H-K:1) , SSI=0.29/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

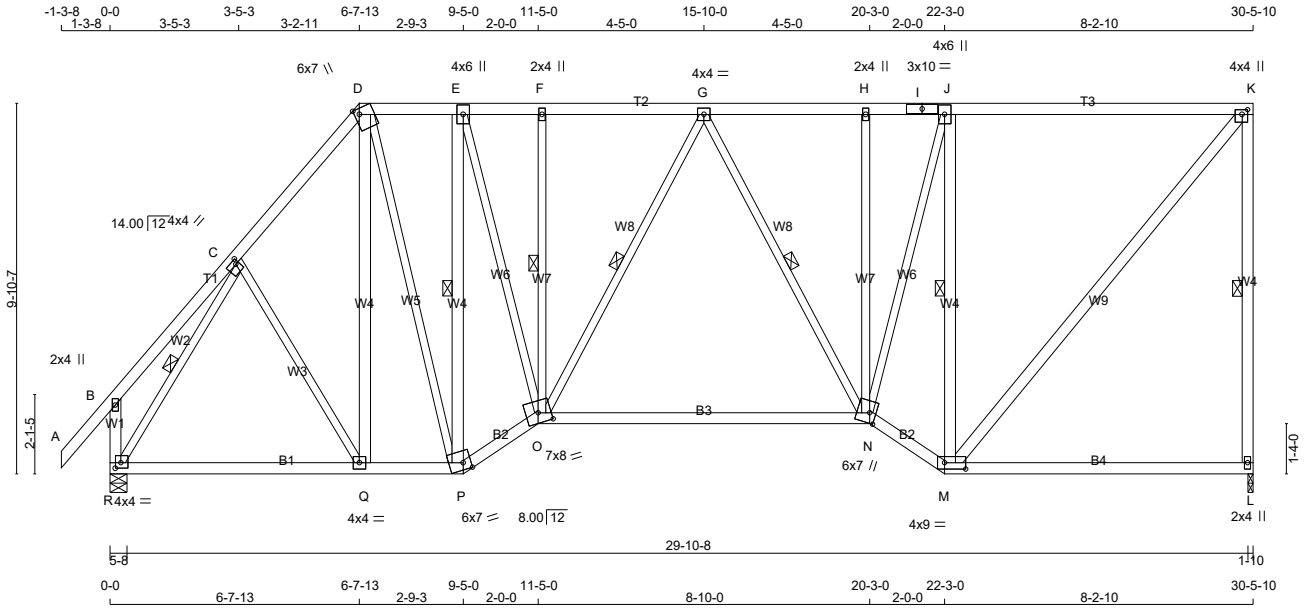
JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.52 (G) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H203T		1	TRUSS DESC. JT 45147	E21104447

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:51 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-n08nS1EFcO?D pudHHBYpFCc?h?kb562gMSTTDyTDb_



TOTAL WEIGHT = 2 X 194 = 389 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
R - P	2x4	DRY	No.2	SPF
P - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
Q - D	2x4	DRY	No.2	SPF
P - E	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
M - K	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		
C	TMWW-t	MT20	4.0	4.0	1.50	1.00
D	TTWW+m	MT20	6.0	7.0	Edge	1.50
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMW+w	MT20	2.0	4.0		
I	TS-t	MT20	3.0	10.0		
J	TMWW+t	MT20	4.0	6.0		
K	TMVW+p	MT20	4.0	4.0	1.50	1.75
L	BMV1+p	MT20	2.0	4.0		
M	BBWW-l	MT20	4.0	9.0	2.00	6.75
N	BBWWW+m	MT20	6.0	7.0	3.25	2.00
O	BBWWW-m	MT20	7.0	8.0	3.25	4.00
P	BBWW-m	MT20	6.0	7.0	Edge	2.50
Q	BMWW-t	MT20	4.0	4.0		
R	BMVW1-t	MT20	4.0	4.0	1.75	1.75

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1470	0	1470	0	0	1-10	1-9
R	1579	0	1579	0	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1048	640 / 0	0 / 0	0 / 0	0 / 0	408 / 0	0 / 0
R	1124	698 / 0	0 / 0	0 / 0	0 / 0	425 / 0	0 / 0

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

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 K-L, E-P, F-O, G-O, G-N, J-M, 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

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI	MAX (LC)	MAX. UNBRAC LENGTH
A- B	0 / 42	-78.0	-78.0	0.11	(1)	10.00
B- C	0 / 22	-78.0	-78.0	0.13	(1)	10.00
C- D	-1271 / 0	-78.0	-78.0	0.16	(1)	5.55
D- E	-1005 / 0	-78.0	-78.0	0.08	(1)	6.15
E- F	-1279 / 0	-78.0	-78.0	0.08	(1)	5.62
F- G	-1282 / 0	-78.0	-78.0	0.26	(1)	5.38
G- H	-1212 / 0	-78.0	-78.0	0.26	(1)	5.50
H- I	-1212 / 0	-78.0	-78.0	0.71	(1)	4.47
I- J	-1212 / 0	-78.0	-78.0	0.71	(1)	4.47
J- K	-981 / 0	-78.0	-78.0	0.81	(1)	4.88
L- K	-1394 / 0	0.0	0.0	0.65	(1)	5.52
R- B	-208 / 0	0.0	0.0	0.02	(1)	7.81
R- Q	0 / 777	-18.5	-18.5	0.26	(4)	10.00
Q- P	0 / 810	-18.5	-18.5	0.27	(4)	10.00
P- O	0 / 1184	-18.5	-18.5	0.20	(1)	10.00
O- N	0 / 1357	-18.5	-18.5	0.55	(4)	10.00
N- M	0 / 1148	-18.5	-18.5	0.20	(1)	10.00
M- L	0 / 0	-18.5	-18.5	0.37	(4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- Q	0 / 60	0.02 (4)
Q- D	0 / 95	0.02 (4)
D- P	0 / 698	0.16 (1)
P- E	-1310 / 0	0.62 (1)
E- O	0 / 1167	0.26 (1)
O- F	-234 / 0	0.11 (1)
O- G	-158 / 0	0.10 (1)
G- N	-307 / 0	0.19 (1)
N- H	0 / 23	0.01 (1)
N- J	0 / 1017	0.23 (1)
M- J	-1684 / 0	0.79 (1)
M- K	0 / 1505	0.24 (1)
R- C	-1531 / 0	0.44 (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, 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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/ 851 (0.43")

CSI: TC=0.81/1.00 (J-K:1) , BC=0.55/1.00 (N-O:4) , WB=0.79/1.00 (J-M:1) , SSI=0.29/1.00 (J-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

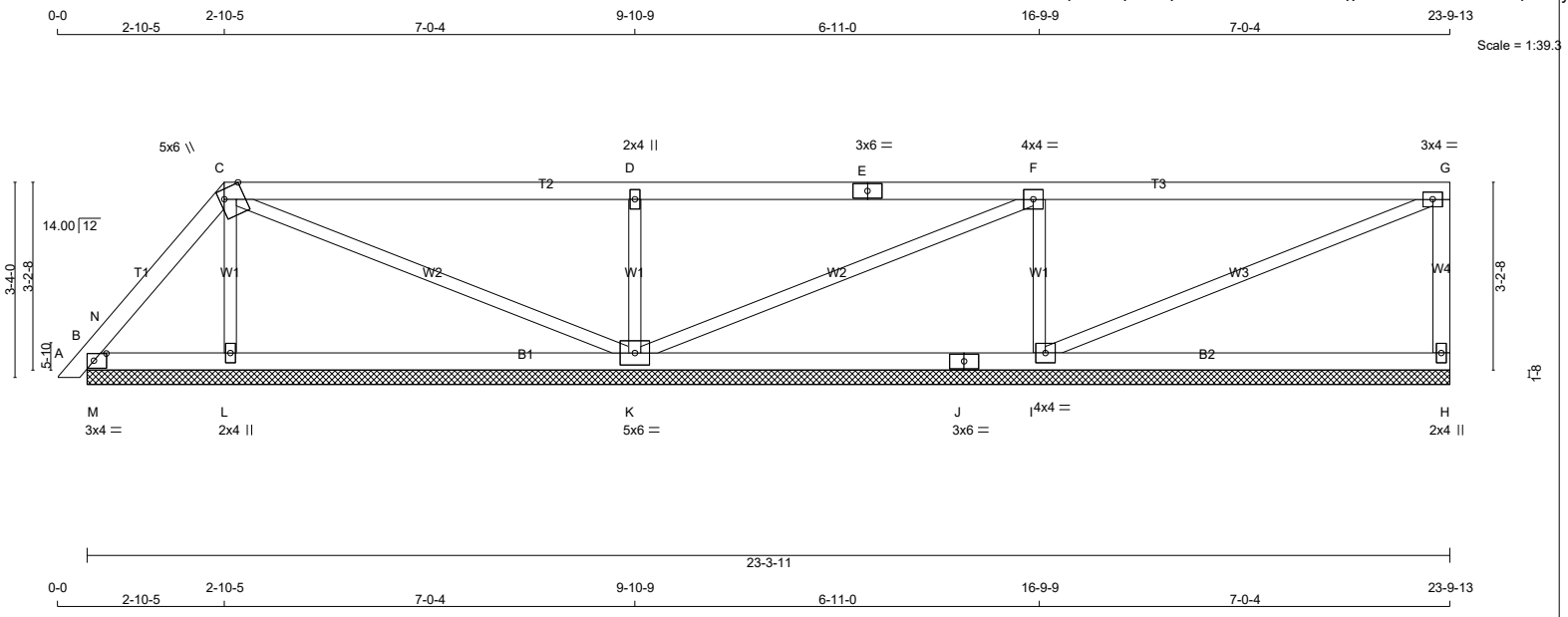
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.51 (C) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H204P		1	TRUSS DESC. JT 45147	E21104448

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:53 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-jPGXtjFW7?FwD62?OhD0uqI?3VmI3ACL7fxaW6yTDay



TOTAL WEIGHT = 2 X 82 = 165 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	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	6.0		
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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	277	0	277	0	0	23-3-11 (8-3-11)	
B	179	0	179	0	0	23-3-11 (8-3-11)	
L	339	0	339	0	0	23-3-11 (8-3-11)	
K	760	0	760	0	0	23-3-11 (8-3-11)	
I	725	0	725	0	0	23-3-11 (8-3-11)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	197	121 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
B	123	99 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
L	247	121 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0
K	539	341 / 0	0 / 0	0 / 0	0 / 0	198 / 0	0 / 0
I	517	312 / 0	0 / 0	0 / 0	0 / 0	206 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	L- C	-210 / 0	0.04 (1)
B- N	0 / 42	-78.0	-78.0	0.04 (1)	10.00	C- K	-63 / 0	0.07 (1)
N- C	-86 / 0	-78.0	-78.0	0.05 (1)	6.25	K- D	-597 / 0	0.11 (1)
C- D	0 / 17	-78.0	-78.0	0.52 (1)	10.00	K- F	-33 / 0	0.04 (1)
D- E	0 / 17	-78.0	-78.0	0.52 (1)	10.00	I- F	-585 / 0	0.11 (1)
E- F	0 / 17	-78.0	-78.0	0.52 (1)	10.00	I- G	0 / 15	0.00 (1)
F- G	-14 / 0	-78.0	-78.0	0.52 (1)	6.25	M- N	-238 / 0	0.00 (1)
H- G	-225 / 0	0.0	0.0	0.04 (1)	7.81			
B- M	0 / 49	-18.5	-18.5	0.06 (1)	10.00			
M- L	0 / 49	-18.5	-18.5	0.14 (4)	10.00			
L- K	0 / 41	-18.5	-18.5	0.17 (4)	10.00			
K- J	0 / 14	-18.5	-18.5	0.22 (4)	10.00			
J- I	0 / 14	-18.5	-18.5	0.22 (4)	10.00			
I- H	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/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=0.52/1.00 (C-D:1) , BC=0.22/1.00 (I-K:4) , WB=0.11/1.00 (D-K:1) , SSI=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

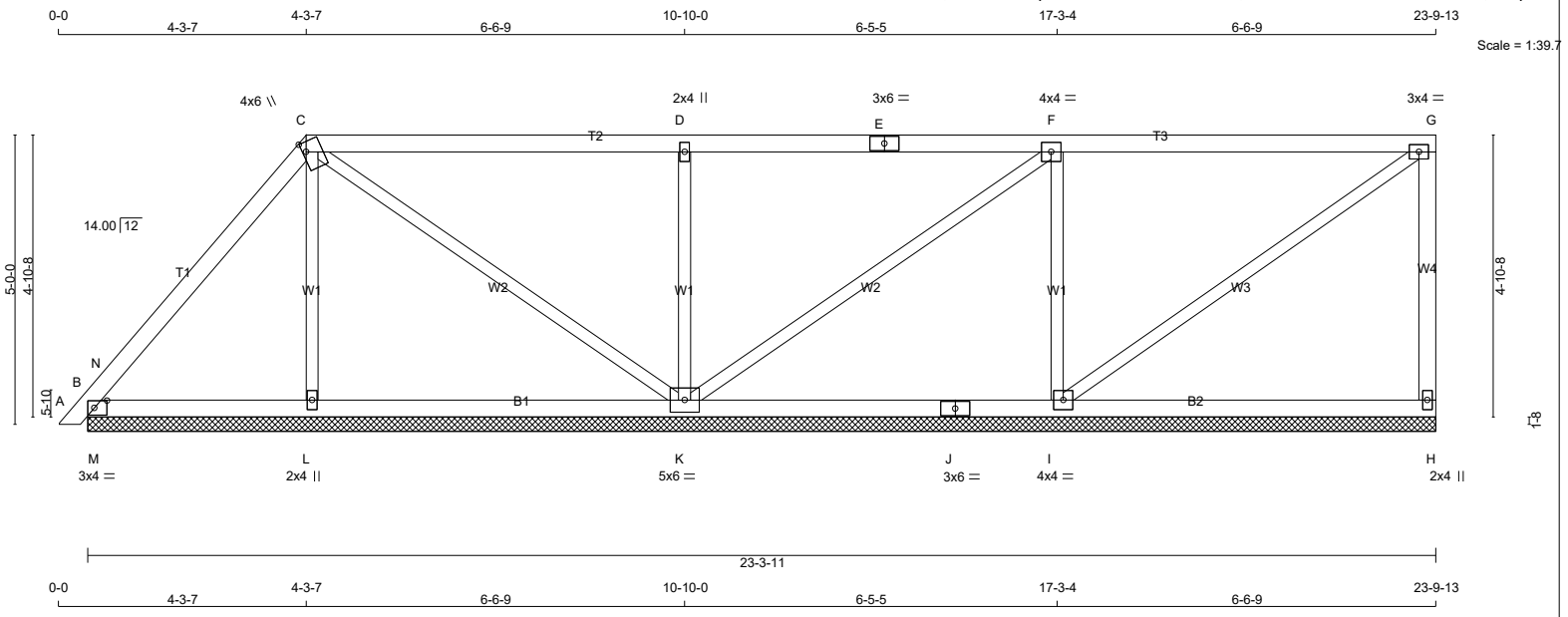
JSI GRIP= 0.83 (K) (INPUT = 0.90)
JSI METAL= 0.21 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H205P		1	TRUSS DESC. JT 45147	E21104449

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:55 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-fnOlHPHmfdVeTQCOW6GUz5NMaISCX2PebzQhb yTDaw



TOTAL WEIGHT = 3 X 90 = 270 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	TTWW+m	MT20	4.0	6.0	2.00	0.75
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	6.0		
L	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	269	0	269	0	0	23-3-11 (8-3-11)	
B	284	0	284	0	0	23-3-11 (8-3-11)	
L	308	0	308	0	0	23-3-11 (8-3-11)	
K	781	0	781	0	0	23-3-11 (8-3-11)	
I	637	0	637	0	0	23-3-11 (8-3-11)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	192	119 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
B	199	140 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0
L	224	109 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
K	554	357 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
I	455	270 / 0	0 / 0	0 / 0	0 / 0	186 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	L- C	-170 / 0	0.06 (1)
B- N	0 / 166	-78.0	-78.0	0.11 (1)	10.00	C- K	-125 / 0	0.16 (1)
N- C	-127 / 0	-78.0	-78.0	0.13 (1)	6.25	K- D	-557 / 0	0.19 (1)
C- D	0 / 33	-78.0	-78.0	0.45 (1)	10.00	K- F	-70 / 0	0.09 (1)
D- E	0 / 33	-78.0	-78.0	0.45 (1)	10.00	I- F	-516 / 0	0.18 (1)
E- F	0 / 33	-78.0	-78.0	0.45 (1)	10.00	I- G	0 / 29	0.01 (1)
F- G	-24 / 0	-78.0	-78.0	0.45 (1)	6.25	M- N	-485 / 0	0.00 (1)
H- G	-221 / 0	0.0	0.0	0.09 (1)	7.81			
B- M	0 / 73	-18.5	-18.5	0.13 (1)	10.00			
M- L	0 / 73	-18.5	-18.5	0.14 (4)	10.00			
L- K	0 / 70	-18.5	-18.5	0.15 (4)	10.00			
K- J	0 / 24	-18.5	-18.5	0.19 (4)	10.00			
J- I	0 / 24	-18.5	-18.5	0.19 (4)	10.00			
I- H	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

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=0.45/1.00 (D-F:1) , BC=0.19/1.00 (I-K:4) , WB=0.19/1.00 (D-K:1) , SSI=0.38/1.00 (B-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

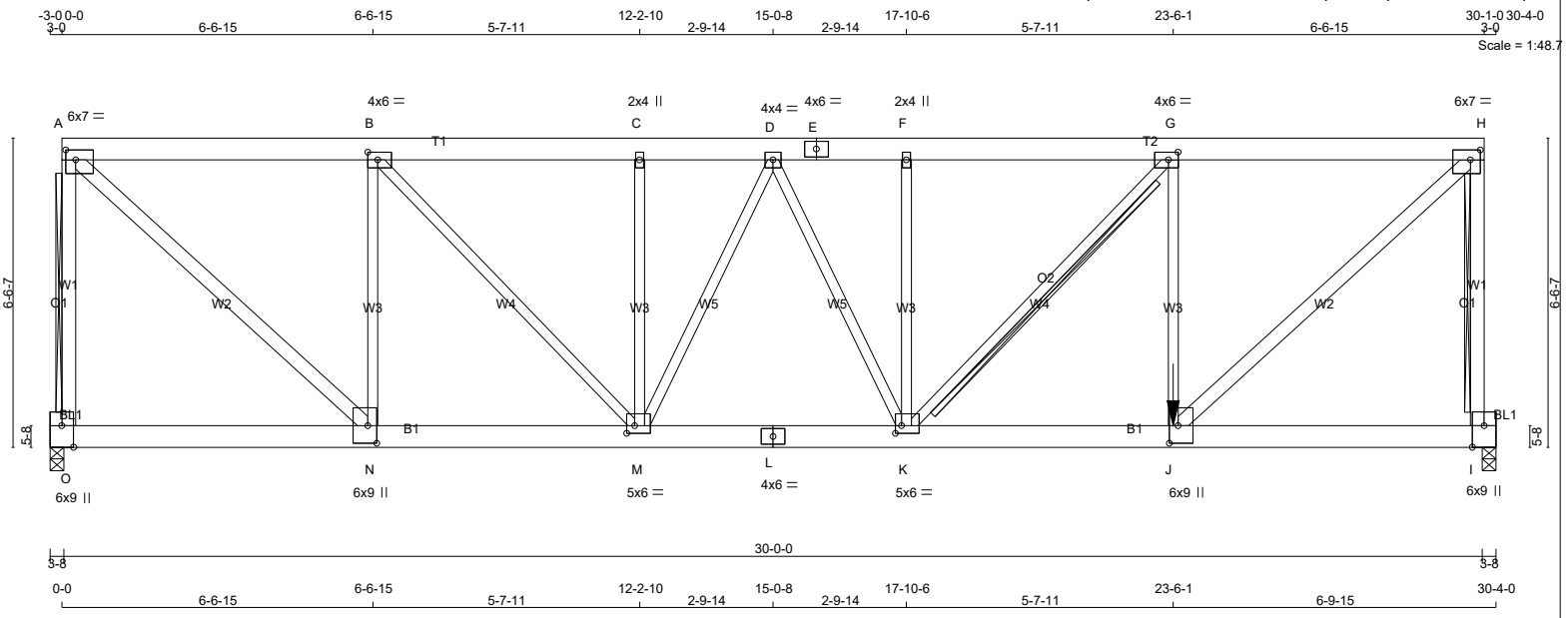
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.20 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H210		1	TRUSS DESC. JT 45147	E21104450

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:57 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-cAV2i4l0BElMikMndXIy2WSdq63a?mhw2HvoftyTDau



TOTAL WEIGHT = 182 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
O - A	2x4	DRY	No.2	SPF
A - E	2x6	DRY	No.2	SPF
E - H	2x6	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	2 - 2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
A - N	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	6.0	7.0	2.50	2.50
B	TMWW-t	MT20	4.0	6.0	2.00	2.50
C	TMW+w	MT20	2.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	4.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	6.0	2.00	2.50
H	TMVW-t	MT20	6.0	7.0	2.50	2.50
I	BMVK1+t	MT20	6.0	9.0	Edge	3.00
J	BMWW+t	MT20	6.0	9.0	4.50	2.25
K	BMWWW-t	MT20	5.0	6.0	2.00	1.50
L	BS-t	MT20	4.0	6.0		
M	BMWWW-t	MT20	5.0	6.0	2.00	2.00
N	BMWW+t	MT20	6.0	9.0	4.50	2.25
O	BMVK1+t	MT20	6.0	9.0	Edge	3.00

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
O	1956	0	1956	0	0	3-8	2-14
I	3652	0	3652	0	0	3-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1394	852 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
I	2603	1592 / 0	0 / 0	0 / 0	0 / 0	1012 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.00 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 A-O, G-K
2x4 DRY SPF No.2 T-BRACE AT H-I

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- A	-1907 / 0	0.0	0.0	0.75 (1)	7.81	A- N	0 / 2502	0.44 (1)
A- B	-1792 / 0	-78.0	-78.0	0.27 (1)	5.62	N- B	-1565 / 0	0.98 (1)
B- C	-2716 / 0	-78.0	-78.0	0.30 (1)	4.74	J- G	-880 / 0	0.55 (1)
C- D	-2716 / 0	-78.0	-78.0	0.10 (1)	4.97	J- H	0 / 4518	0.80 (1)
D- E	-3178 / 0	-78.0	-78.0	0.11 (1)	4.66	B- M	0 / 1358	0.34 (1)
E- F	-3178 / 0	-78.0	-78.0	0.11 (1)	4.66	M- C	-294 / 0	0.18 (1)
F- G	-3178 / 0	-78.0	-78.0	0.48 (1)	4.20	K- G	-82 / 0	0.09 (1)
G- H	-3234 / 0	-165.7	-165.7	0.60 (1)	4.00	K- F	-220 / 0	0.14 (1)
I- H	-3532 / 0	0.0	0.0	0.79 (1)	7.81	M- D	-674 / 0	0.54 (1)
						D- K	0 / 424	0.10 (1)
O- N	-46 / 0	-18.5	-18.5	0.09 (4)	6.25			
N- M	0 / 1792	-18.5	-18.5	0.28 (1)	10.00			
M- L	0 / 3000	-18.5	-18.5	0.44 (1)	10.00			
L- K	0 / 3000	-18.5	-18.5	0.44 (1)	10.00			
K- J	0 / 3234	-18.5	-18.5	0.46 (1)	10.00			
J- I	-85 / 0	-39.3	-39.3	0.20 (4)	6.25			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
J	23-6-1	-2000	-2000	---	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
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
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 7-0-15 OF SPAN MEASURED FROM THE RIGHT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.99")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.99")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.79/1.00 (H-I:1) , BC=0.46/1.00 (J-K:1) , WB=0.98/1.00 (B-N:1) , SSI=0.41/1.00 (G-H: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

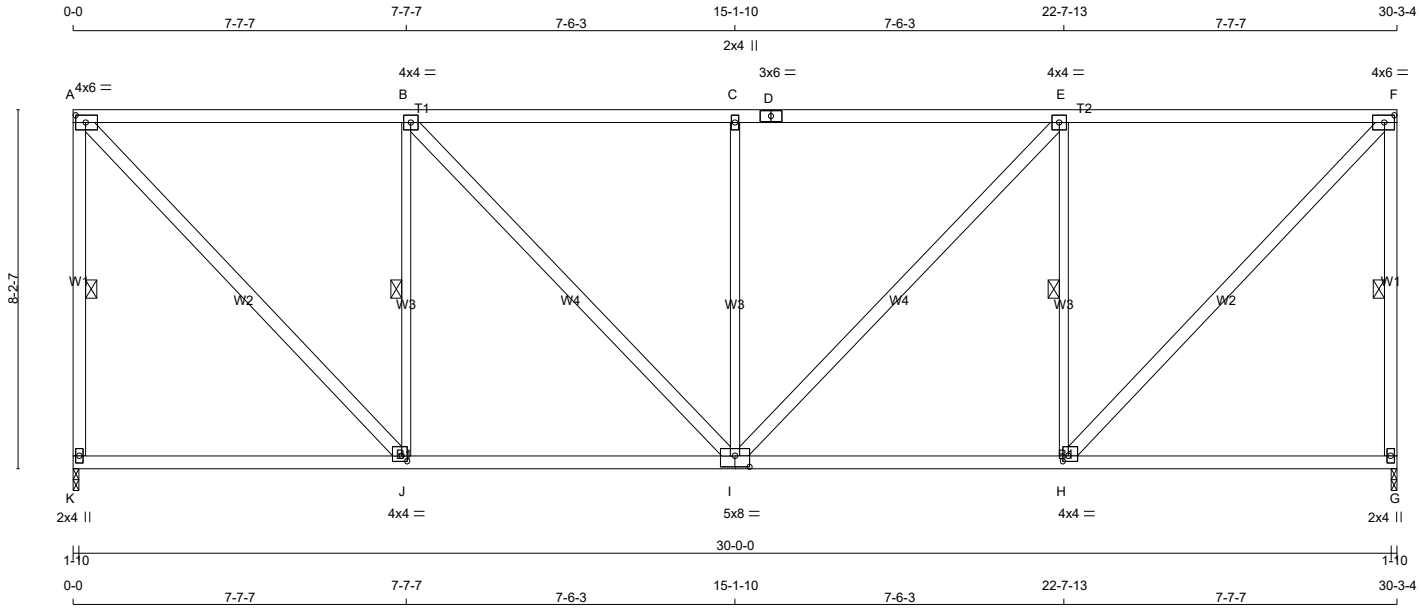
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H212		1	TRUSS DESC. JT 45147	E21104451

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:00 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-0lBBL6LvU97xZB4LIgrfg848XJ6yCBcNkF8SGCyTDar



TOTAL WEIGHT = 153 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	2.00	2.75
B	TMWW-t	MT20	4.0	4.0		
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	6.0	2.00	2.75
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	4.0	4.0	1.50	1.50
I	BSWWW-l	MT20	5.0	8.0	3.00	4.00
J	BMWW-t	MT20	4.0	4.0	1.50	1.50
K	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	1460	0	1460	0	0	1-10	1-9
G	1460	0	1460	0	0	1-10	1-9

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0
G	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- A	-1406 / 0	0.0	0.0	0.43 (1)	5.49	A- J	0 / 1627	0.26 (1)
A- B	-1128 / 0	-78.0	-78.0	0.78 (1)	4.74	J- B	-998 / 0	0.42 (1)
B- C	-1435 / 0	-78.0	-78.0	0.82 (1)	4.26	B- I	0 / 445	0.07 (1)
C- D	-1435 / 0	-78.0	-78.0	0.82 (1)	4.26	I- C	-540 / 0	0.71 (1)
D- E	-1435 / 0	-78.0	-78.0	0.82 (1)	4.26	I- E	0 / 445	0.07 (1)
E- F	-1128 / 0	-78.0	-78.0	0.78 (1)	4.74	H- E	-998 / 0	0.42 (1)
G- F	-1406 / 0	0.0	0.0	0.43 (1)	5.49	H- F	0 / 1627	0.26 (1)
K- J	0 / 0	-18.5	-18.5	0.30 (4)	10.00			
J- I	0 / 1128	-18.5	-18.5	0.41 (4)	10.00			
I- H	0 / 1128	-18.5	-18.5	0.41 (4)	10.00			
H- G	0 / 0	-18.5	-18.5	0.30 (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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.82/1.00 (C-E:1) , BC=0.41/1.00 (I-J:4) , WB=0.71/1.00 (C-I:1) , SSI=0.28/1.00 (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

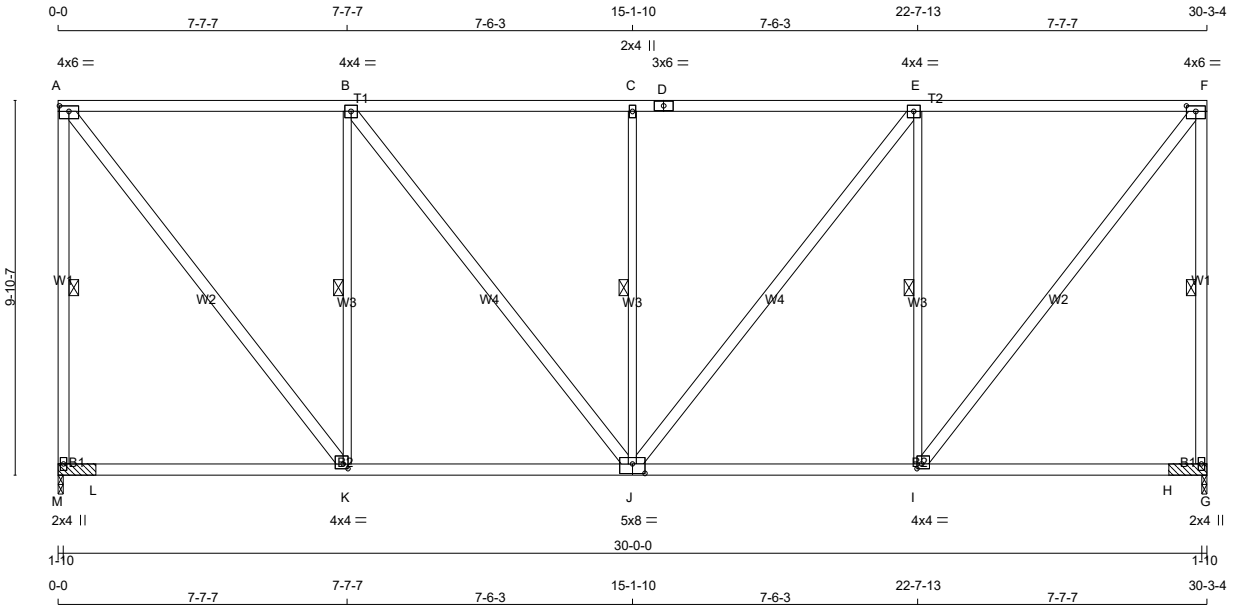
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.38 (J) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H213		1	TRUSS DESC. JT 45147	E21104452

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:22 2021 Page 1
ID:hd511hZTz_bdeQoS817GKByhVxV-7RupM6t3RULK?LA24hAl77WdO?82l?4n?LxRxPyTDbR



TOTAL WEIGHT = 7 X 169 = 1183 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	3.00
B	TMWW-t	MT20	4.0	4.0		
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	6.0	1.75	3.00
G	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BSWWW-l	MT20	5.0	8.0	3.00	4.00
K	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1574	0	1574	0	0	1-10	1-10 & BLOCK
G	1574	0	1574	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1132	635 / 0	0 / 0	0 / 0	0 / 0	496 / 0	0 / 0
G	1132	635 / 0	0 / 0	0 / 0	0 / 0	496 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. M 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. G ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION A-F, 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-M, F-G, B-K, C-J, E-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
M- A	-1520 / 0	0.0	0.0	0.71 (1)	5.33
A- B	-1005 / 0	-85.5	-85.5	0.83 (1)	2.00
B- C	-1278 / 0	-85.5	-85.5	0.87 (1)	2.00
C- D	-1278 / 0	-85.5	-85.5	0.87 (1)	2.00
D- E	-1278 / 0	-85.5	-85.5	0.87 (1)	2.00
E- F	-1005 / 0	-85.5	-85.5	0.83 (1)	2.00
G- F	-1520 / 0	0.0	0.0	0.71 (1)	5.33
M- L	0 / 0	-18.5	-18.5	0.30 (4)	10.00
L- K	0 / 0	-18.5	-18.5	0.30 (4)	10.00
K- J	0 / 1005	-18.5	-18.5	0.41 (4)	10.00
J- I	0 / 1005	-18.5	-18.5	0.41 (4)	10.00
I- H	0 / 0	-18.5	-18.5	0.30 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.30 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- K	0 / 1614	0.26 (1)
K- B	-1089 / 0	0.72 (1)
B- J	0 / 443	0.07 (1)
J- C	-592 / 0	0.39 (1)
J- E	0 / 443	0.07 (1)
I- E	-1089 / 0	0.72 (1)
I- F	0 / 1614	0.26 (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 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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.87/1.00 (C-E:1) , BC=0.41/1.00 (I-J:4) , WB=0.72/1.00 (B-K:1) , SSI=0.31/1.00 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

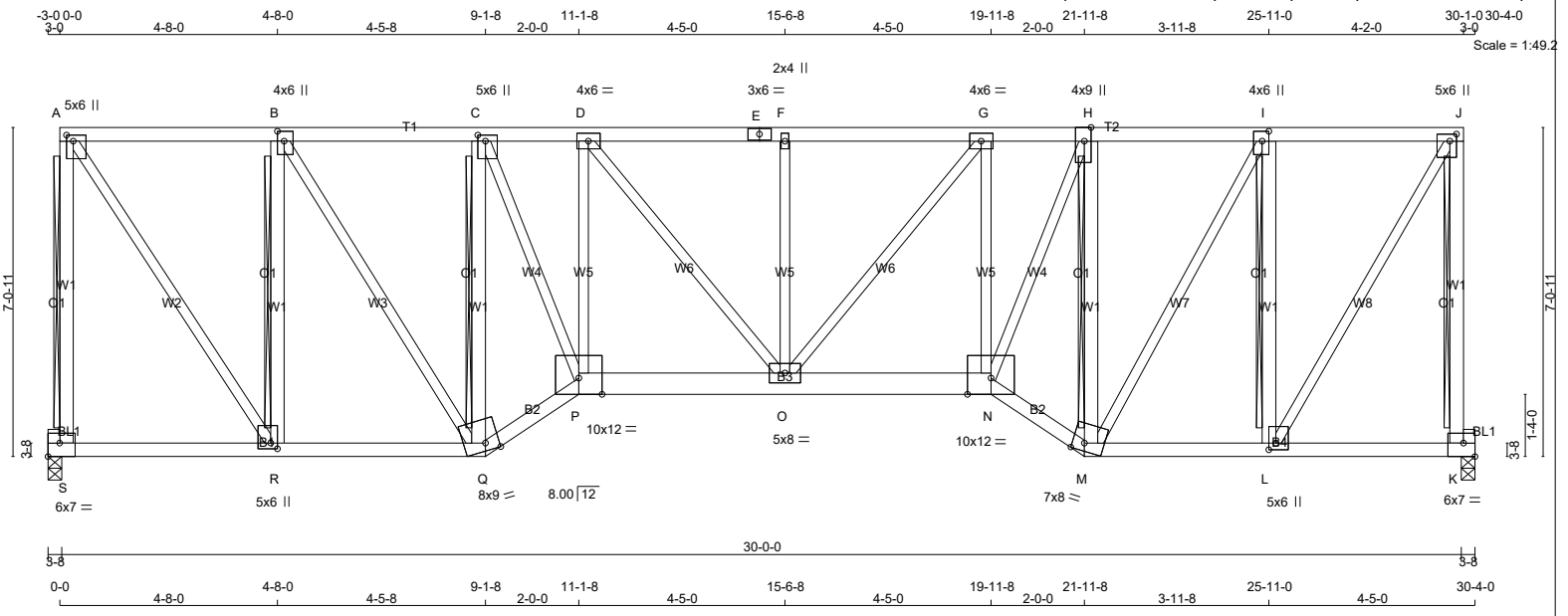
JSI GRIP= 0.86 (I) (INPUT = 0.90)
JSI METAL= 0.36 (K) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H210T		1	TRUSS DESC. JT 45147	E21104453

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:59 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-YYdo7mKHjr?4x1V9lyKQ7xYyNwiOThiDWbOvkmyTDas



TOTAL WEIGHT = 177 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
S - A	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - J	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - P	2x4	DRY	No.2	SPF
P - N	2x6	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
BEARING BLOCKS				
BL1	2 - 2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
Q - C	2x4	DRY	No.2	SPF
M - H	2x4	DRY	No.2	SPF
L - 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	5.0	6.0	1.50	1.75
B	TMWW+t	MT20	4.0	6.0	2.50	1.75
C	TMWW+t	MT20	5.0	6.0	1.50	2.00
D	TMWW-t	MT20	4.0	6.0		
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	6.0		
H	TMWW+t	MT20	4.0	9.0	Edge	1.75
I	TMWW+t	MT20	4.0	6.0	2.50	1.75
J	TMVW+p	MT20	5.0	6.0	1.75	1.75
K	BMVK1-t	MT20	6.0	7.0	3.50	Edge
L	BMWW+t	MT20	5.0	6.0	1.75	1.75
M	BBWW-m	MT20	7.0	8.0	2.00	3.00
N	BBWW-l	MT20	10.0	12.0	Edge	
O	BMWWW-t	MT20	5.0	8.0		
P	BBWW-l	MT20	10.0	12.0	Edge	
Q	BBWW-m	MT20	8.0	9.0	Edge	3.50
R	BMWW+t	MT20	5.0	6.0	1.50	1.75
S	BMVK1-t	MT20	6.0	7.0	3.50	Edge

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
S	3065	0	3065	0	0	3-8	3-8
K	3065	0	3065	0	0	3-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	2185	1335 / 0	0 / 0	0 / 0	0 / 0	850 / 0	0 / 0
K	2185	1335 / 0	0 / 0	0 / 0	0 / 0	850 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.95 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 A-S, J-K, B-R, C-Q, H-M, I-L

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
S- A	-2995 / 0	0.0	0.0	0.85 (1)	7.81
A- B	-1790 / 0	-165.7	-165.7	0.67 (1)	4.01
B- C	-2846 / 0	-165.7	-165.7	0.77 (1)	3.10
C- D	-3920 / 0	-78.0	-78.0	0.43 (1)	3.17
D- E	-4287 / 0	-78.0	-78.0	0.57 (1)	2.95
E- F	-4287 / 0	-78.0	-78.0	0.57 (1)	2.95
F- G	-4287 / 0	-78.0	-78.0	0.57 (1)	2.95
G- H	-3753 / 0	-78.0	-78.0	0.35 (1)	3.33
H- I	-2646 / 0	-165.7	-165.7	0.60 (1)	3.51
I- J	-1615 / 0	-165.7	-165.7	0.52 (1)	4.48
K- J	-3001 / 0	0.0	0.0	0.85 (1)	7.81
S- R	-65 / 0	-39.3	-39.3	0.24 (4)	6.25
R- Q	0 / 1790	-39.3	-39.3	0.44 (1)	10.00
Q- P	0 / 3367	-127.0	-127.0	0.69 (1)	10.00
P- O	0 / 3933	-127.0	-127.0	0.68 (1)	10.00
O- N	0 / 3770	-127.0	-127.0	0.65 (1)	10.00
N- M	0 / 3123	-127.0	-127.0	0.65 (1)	10.00
M- L	0 / 1615	-39.3	-39.3	0.38 (1)	10.00
L- K	-65 / 0	-39.3	-39.3	0.19 (4)	6.25

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- R	0 / 3267	0.81 (1)
R- B	-2482 / 0	0.70 (1)
B- Q	0 / 1915	0.47 (1)
Q- C	-3304 / 0	0.94 (1)
C- P	0 / 3091	0.77 (1)
P- D	-621 / 0	0.30 (1)
D- O	0 / 566	0.14 (1)
O- F	-391 / 0	0.19 (1)
O- G	0 / 825	0.20 (1)
N- G	-843 / 0	0.40 (1)
N- H	0 / 3181	0.79 (1)
M- H	-3332 / 0	0.94 (1)
M- I	0 / 2037	0.50 (1)
L- I	-2546 / 0	0.72 (1)
L- J	0 / 3204	0.79 (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

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
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 8-4-8 OF SPAN MEASURED FROM THE RIGHT.

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
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-1-8 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 9-1-8
START SPAN CARRIED = 6-6-0
END DISTANCE = 21-11-8
END SPAN CARRIED = 6-6-0
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 (0.99")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25")
ALLOWABLE DEFL.(TL)= L/360 (0.99")
CALCULATED VERT. DEFL.(TL) = L/ 736 (0.49")

CSI: TC=0.85/1.00 (J-K:1) , BC=0.69/1.00 (P-Q:1) , WB=0.94/1.00 (H-M:1) , SSI=0.40/1.00 (A-B: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

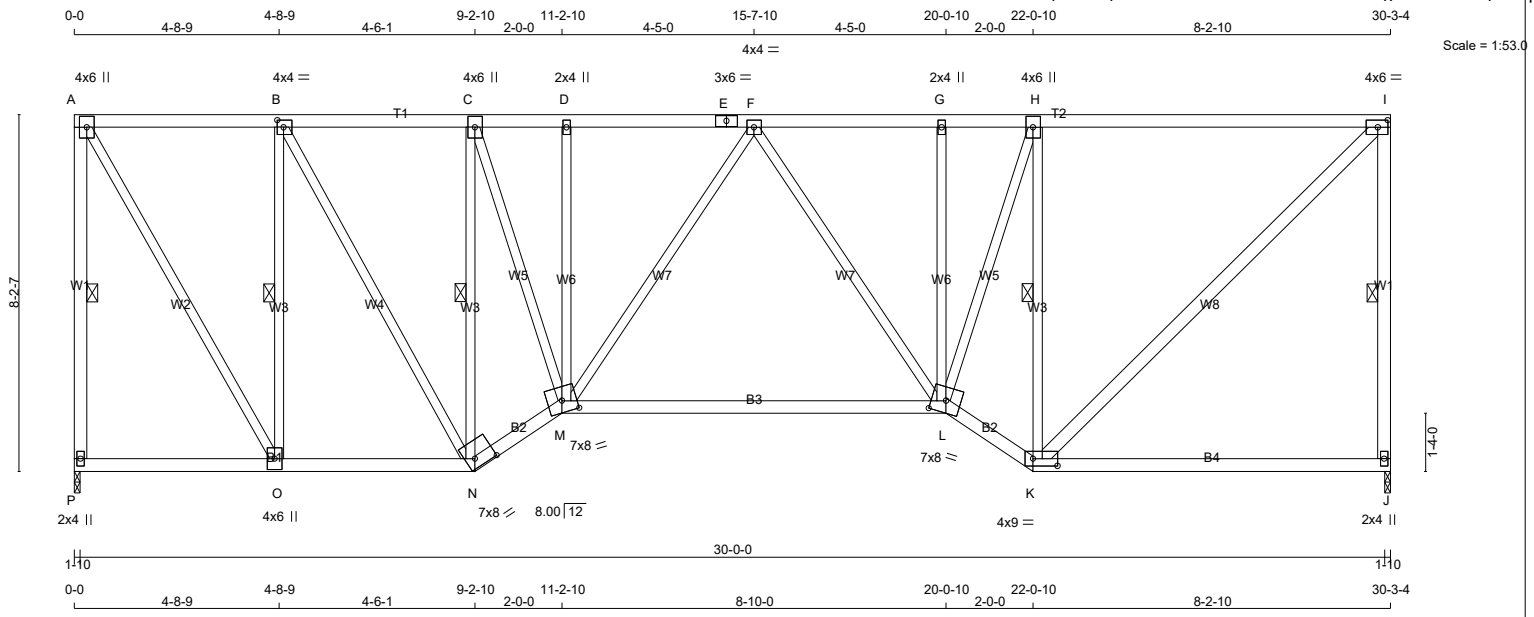
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H212T		1	TRUSS DESC. JT 45147	E21104454

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:02 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-y7JxloM90mNfoVEkQ4u7lZATX7lrq4AfCZdZL4yTDap



TOTAL WEIGHT = 166 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
P - A	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - 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
K - 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		
B	TMWW-t	MT20	4.0	4.0	2.00	1.75
C	TMWW+t	MT20	4.0	6.0		
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	TMW+w	MT20	2.0	4.0		
H	TMWW+t	MT20	4.0	6.0		
I	TMVW-t	MT20	4.0	6.0	2.00	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BBWW-l	MT20	4.0	9.0	2.00	6.75
L	BBWWW-m	MT20	7.0	8.0	3.25	4.00
M	BBWWW-m	MT20	7.0	8.0	3.25	4.00
N	BBWW-h	MT20	7.0	8.0	2.50	5.50
O	BMWW+t	MT20	4.0	6.0		
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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
P	1460	0	1460	0	0	1-10	1-9
J	1460	0	1460	0	0	1-10	1-9

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0
J	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF A-P, I-J, B-O, C-N, 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)

CHORDS						WEBS		
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	FORCE (LBS)	MAX CSI (LC)
P- A	-1426 / 0	0.0	0.0	0.43 (1)	5.47	A- O	0 / 1491	0.34 (1)
A- B	-763 / 0	-78.0	-78.0	0.27 (1)	6.25	O- B	-1179 / 0	0.50 (1)
B- C	-1195 / 0	-78.0	-78.0	0.28 (1)	5.50	B- N	0 / 872	0.20 (1)
C- D	-1576 / 0	-78.0	-78.0	0.12 (1)	5.15	N- C	-1488 / 0	0.63 (1)
D- E	-1580 / 0	-78.0	-78.0	0.28 (1)	4.95	C- M	0 / 1312	0.30 (1)
E- F	-1580 / 0	-78.0	-78.0	0.28 (1)	4.95	M- D	-216 / 0	0.17 (1)
F- G	-1504 / 0	-78.0	-78.0	0.28 (1)	5.05	M- F	-180 / 0	0.23 (1)
G- H	-1505 / 0	-78.0	-78.0	0.73 (1)	4.03	F- L	-315 / 0	0.40 (1)
H- I	-1176 / 0	-78.0	-78.0	0.85 (1)	4.50	L- G	0 / 31	0.01 (1)
J- I	-1384 / 0	0.0	0.0	0.42 (1)	5.53	L- H	0 / 1154	0.26 (1)
						K- H	-1804 / 0	0.77 (1)
P- O	0 / 0	-18.5	-18.5	0.11 (4)	10.00	K- I	0 / 1631	0.26 (1)
O- N	0 / 763	-18.5	-18.5	0.18 (4)	10.00			
N- M	0 / 1413	-18.5	-18.5	0.24 (1)	10.00			
M- L	0 / 1680	-18.5	-18.5	0.58 (4)	10.00			
L- K	0 / 1385	-18.5	-18.5	0.24 (1)	10.00			
K- J	0 / 0	-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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 757 (0.48")

CSI: TC=0.85/1.00 (H-I:1) , BC=0.58/1.00 (L-M:4) , WB=0.77/1.00 (H-K:1) , SSI=0.30/1.00 (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) (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.

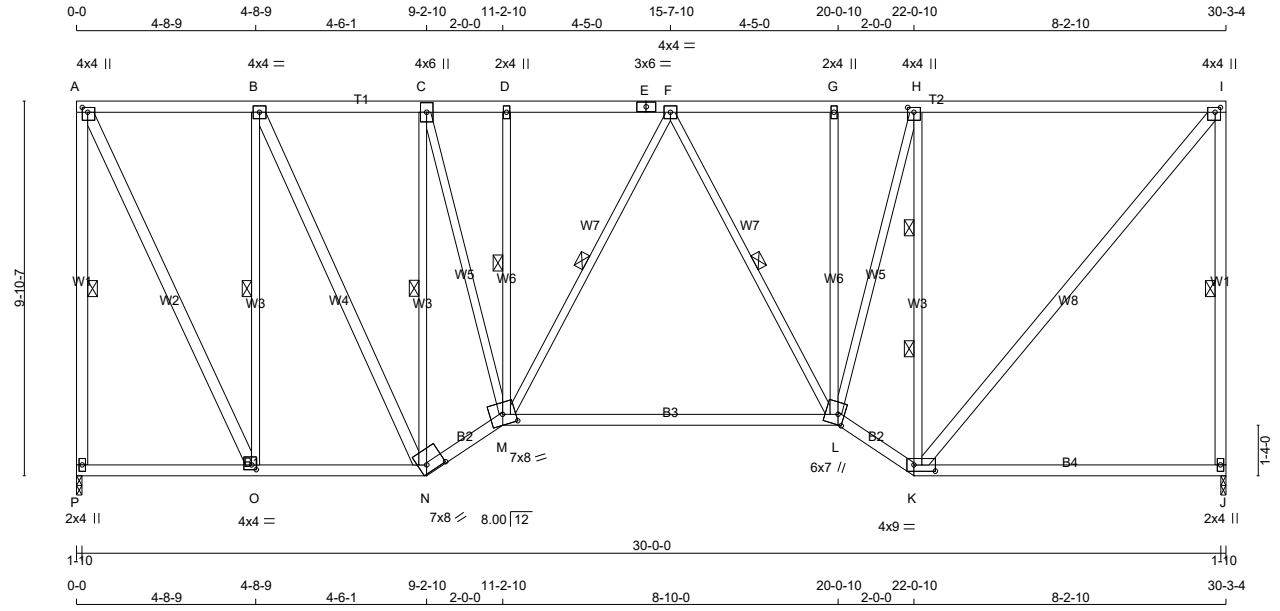
JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.34 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H213T		1	TRUSS DESC. JT 45147	E21104455

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:04 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-vWRhAUOPYOdN2oO7XVwbq FqaxRo8x3yft6qPzyTDan



TOTAL WEIGHT = 2 X 192 = 385 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
P - A	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
A - O	2x4	DRY	No.2	SPF
B - N	2x4	DRY	No.2	SPF
K - 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	4.0	1.50	1.75
B	TMWW-t	MT20	4.0	4.0		
C	TMWW+t	MT20	4.0	6.0		
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	TMW+w	MT20	2.0	4.0		
H	TMWW+t	MT20	4.0	4.0	1.50	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	BBWWW+m	MT20	6.0	7.0	3.25	2.00
M	BBWWW-m	MT20	7.0	8.0	3.25	4.00
N	BBWW-h	MT20	7.0	8.0	2.50	5.50
O	BMWW-t	MT20	4.0	4.0	1.50	1.50
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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
P	1460	0	1460	0	0	1-10	1-9
J	1460	0	1460	0	0	1-10	1-9

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0
J	1041	635 / 0	0 / 0	0 / 0	0 / 0	406 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 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-P, I-J, B-O, C-N, D-M, F-M, F-L.
2 LATERAL BRACE(S) AT 1/ 3 LENGTH OF 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
P- A	-1426 / 0	0.0	0.0	0.67 (1)	5.47
A- B	-631 / 0	-78.0	-78.0	0.26 (1)	6.25
B- C	-988 / 0	-78.0	-78.0	0.27 (1)	5.91
C- D	-1257 / 0	-78.0	-78.0	0.11 (1)	5.62
D- E	-1259 / 0	-78.0	-78.0	0.27 (1)	5.41
E- F	-1259 / 0	-78.0	-78.0	0.27 (1)	5.41
F- G	-1200 / 0	-78.0	-78.0	0.26 (1)	5.52
G- H	-1200 / 0	-78.0	-78.0	0.72 (1)	4.46
H- I	-971 / 0	-78.0	-78.0	0.82 (1)	4.88
J- I	-1384 / 0	0.0	0.0	0.65 (1)	5.53
P- O	0 / 0	-18.5	-18.5	0.11 (4)	10.00
O- N	0 / 631	-18.5	-18.5	0.17 (4)	10.00
N- M	0 / 1169	-18.5	-18.5	0.20 (1)	10.00
M- L	0 / 1340	-18.5	-18.5	0.55 (4)	10.00
L- K	0 / 1146	-18.5	-18.5	0.20 (1)	10.00
K- J	0 / 0	-18.5	-18.5	0.37 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- O	0 / 1428	0.23 (1)
O- B	-1178 / 0	0.77 (1)
B- N	0 / 837	0.13 (1)
N- C	-1354 / 0	0.89 (1)
C- M	0 / 1146	0.26 (1)
M- D	-212 / 0	0.10 (1)
M- F	-170 / 0	0.10 (1)
F- L	-297 / 0	0.18 (1)
L- G	0 / 32	0.01 (1)
L- H	0 / 996	0.22 (1)
K- H	-1672 / 0	1.00 (1)
K- I	0 / 1491	0.24 (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, 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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 794 (0.46")

CSI: TC=0.82/1.00 (H-I:1) , BC=0.55/1.00 (L-M:4) , WB=1.00/1.00 (H-K:1) , SSI=0.30/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

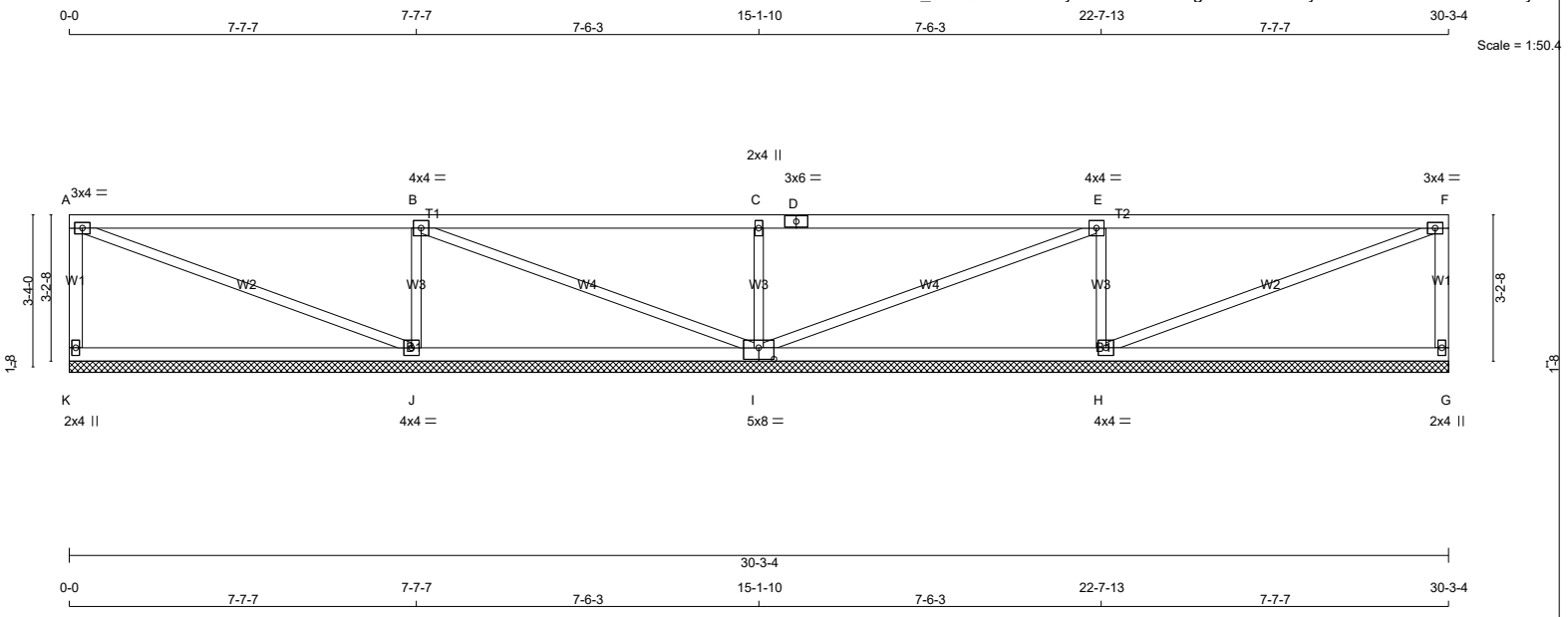
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.43 (I) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H214P		1	TRUSS DESC. JT 45147	E21104456

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-rvYSb9Pg3?u4H6YVfwy3vPKCYkBzc3EF7BbmUsyTDal



TOTAL WEIGHT = 2 X 107 = 213 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
K - A	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
K - 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
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-t	MT20	4.0	4.0		
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	3.0	4.0		
G	BMV1+p	MT20	2.0	4.0		
H	BMWW1-t	MT20	4.0	4.0		
I	BSWWW1-l	MT20	5.0	8.0	3.00	4.00
J	BMWW1-t	MT20	4.0	4.0		
K	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
K	288	0	288	0	0	30-3-4 (15-1-10)	3.00
G	288	0	288	0	0	30-3-4 (15-1-10)	3.00
J	829	0	829	0	0	30-3-4 (15-1-10)	3.00
I	685	0	685	0	0	30-3-4 (15-1-10)	3.00
H	829	0	829	0	0	30-3-4 (15-1-10)	3.00

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	205	127 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
G	205	127 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
J	593	352 / 0	0 / 0	0 / 0	0 / 0	241 / 0	0 / 0
I	485	313 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
H	593	352 / 0	0 / 0	0 / 0	0 / 0	241 / 0	0 / 0

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

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. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- A	-235 / 0	0.0	0.0	0.04 (1)	7.81	A- J	0 / 4	0.00 (1)
A- B	-4 / 0	-78.0	-78.0	0.65 (1)	10.00	J- B	-656 / 0	0.12 (1)
B- C	0 / 48	-78.0	-78.0	0.66 (1)	10.00	B- I	-56 / 0	0.08 (1)
C- D	0 / 48	-78.0	-78.0	0.66 (1)	10.00	I- C	-541 / 0	0.10 (1)
D- E	0 / 48	-78.0	-78.0	0.66 (1)	10.00	I- E	-56 / 0	0.08 (1)
E- F	-4 / 0	-78.0	-78.0	0.65 (1)	10.00	H- E	-656 / 0	0.12 (1)
G- F	-235 / 0	0.0	0.0	0.04 (1)	7.81	H- F	0 / 4	0.00 (1)
K- J	0 / 0	-18.5	-18.5	0.31 (4)	10.00			
J- I	0 / 4	-18.5	-18.5	0.31 (4)	10.00			
I- H	0 / 4	-18.5	-18.5	0.31 (4)	10.00			
H- G	0 / 0	-18.5	-18.5	0.31 (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=0.66/1.00 (B-C:1) , BC=0.31/1.00 (J-K:4) , WB=0.12/1.00 (B-J:1) , SSI=0.28/1.00 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

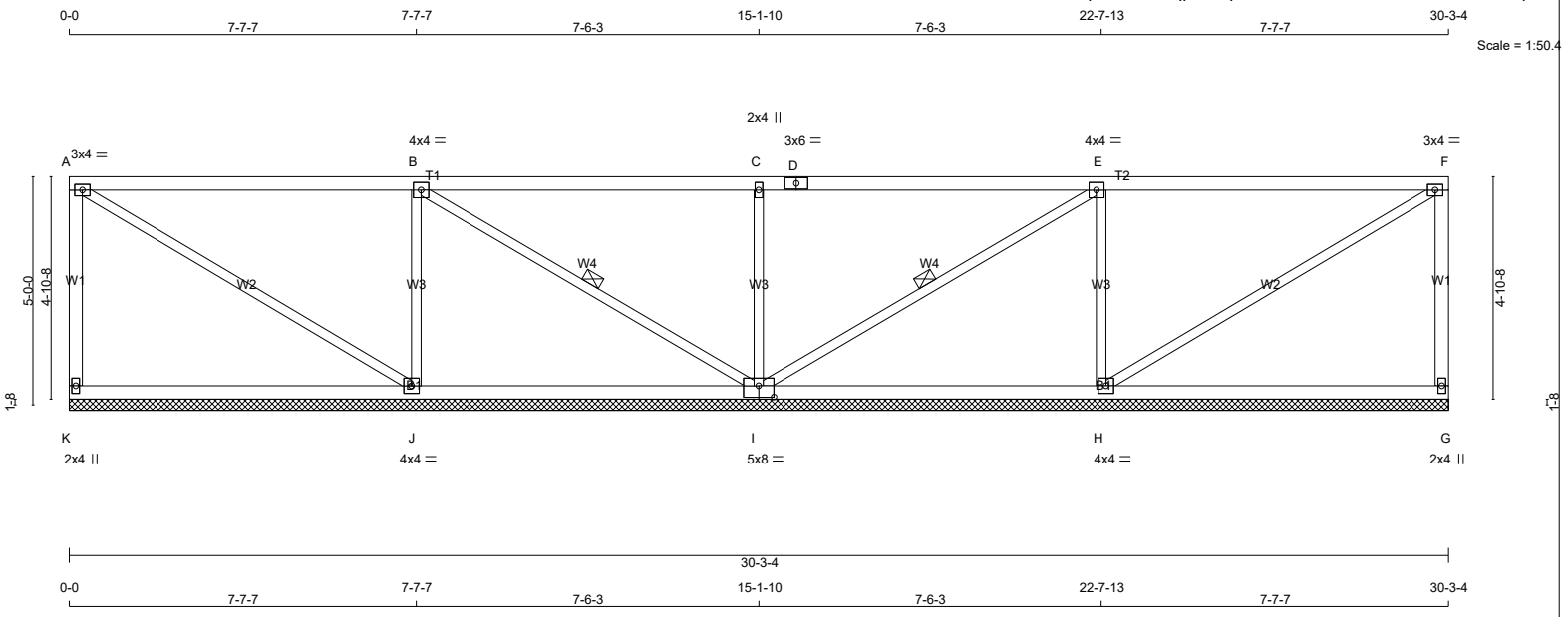
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (F) (INPUT = 0.90)
JSI METAL= 0.32 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H215P		1	TRUSS DESC. JT 45147	E21104457

Alpa Roof Truss, Maple

ID:hd511hZTz bdeQoS817GKByhVxV-J56qpVQIqJ0xvG7iDeTlSdtNA8XCLT3PLrLK0lyTDak



TOTAL WEIGHT = 3 X 117 = 350 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
K - A	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
K - 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
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-t	MT20	4.0	4.0		
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	3.0	4.0		
G	BMV1+p	MT20	2.0	4.0		
H	BMWW1-t	MT20	4.0	4.0		
I	BSWWW1-I	MT20	5.0	8.0	3.00	4.00
J	BMWW1-t	MT20	4.0	4.0		
K	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	289	0	289	0	0	30-3-4 (15-1-10)	198
G	289	0	289	0	0	30-3-4 (15-1-10)	198
J	789	0	789	0	0	30-3-4 (15-1-10)	198
I	766	0	766	0	0	30-3-4 (15-1-10)	198
H	789	0	789	0	0	30-3-4 (15-1-10)	198

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	205	127 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
G	205	127 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
J	565	330 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0
I	541	356 / 0	0 / 0	0 / 0	0 / 0	185 / 0	0 / 0
H	565	330 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0

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

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-I, E-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- A	-235 / 0	0.0	0.0	0.09 (1)	7.81	A- J	0 / 3	0.00 (1)
A- B	-2 / 0	-78.0	-78.0	0.65 (1)	10.00	J- B	-615 / 0	0.21 (1)
B- C	0 / 97	-78.0	-78.0	0.67 (1)	10.00	B- I	-116 / 0	0.06 (1)
C- D	0 / 97	-78.0	-78.0	0.67 (1)	10.00	I- C	-541 / 0	0.19 (1)
D- E	0 / 97	-78.0	-78.0	0.67 (1)	10.00	I- E	-116 / 0	0.06 (1)
E- F	-2 / 0	-78.0	-78.0	0.65 (1)	10.00	H- E	-615 / 0	0.21 (1)
G- F	-235 / 0	0.0	0.0	0.09 (1)	7.81	H- F	0 / 3	0.00 (1)
K- J	0 / 0	-18.5	-18.5	0.31 (4)	10.00			
J- I	0 / 2	-18.5	-18.5	0.31 (4)	10.00			
I- H	0 / 2	-18.5	-18.5	0.31 (4)	10.00			
H- G	0 / 0	-18.5	-18.5	0.31 (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=0.67/1.00 (C-E:1) , BC=0.31/1.00 (G-H:4) , WB=0.21/1.00 (E-H:1) , SSI=0.28/1.00 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

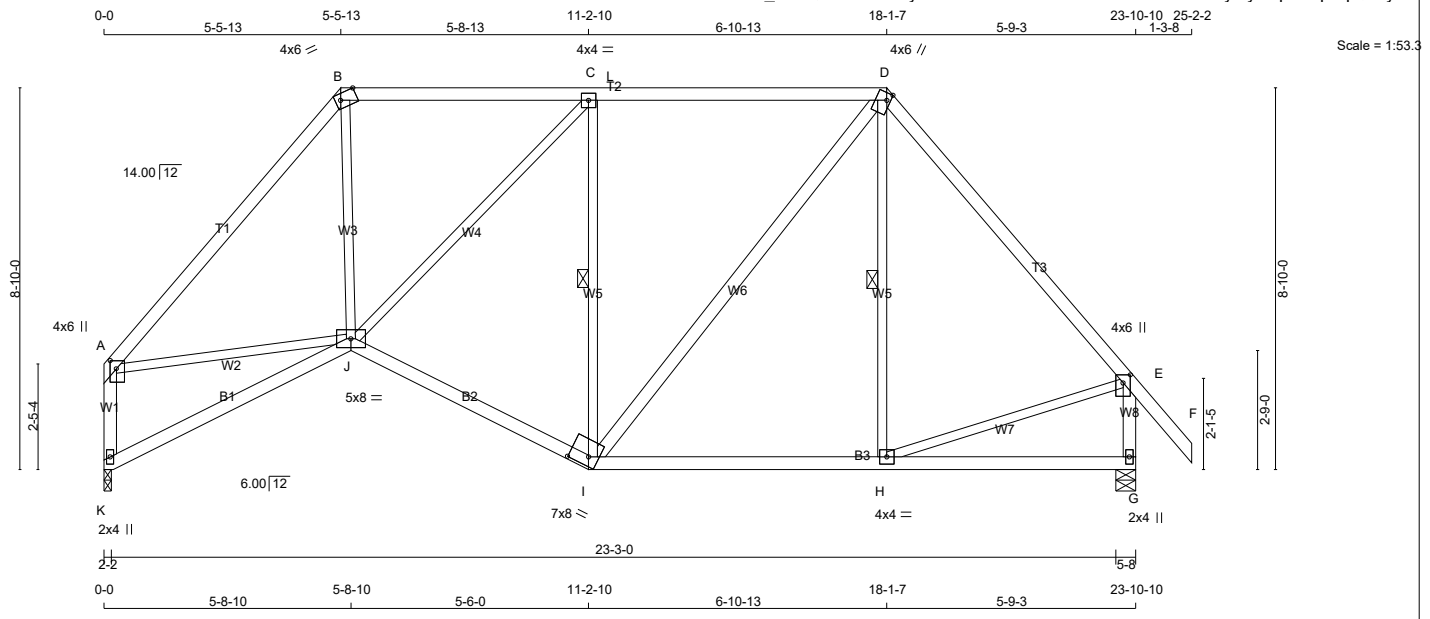
JSI GRIP= 0.76 (F) (INPUT = 0.90)
JSI METAL= 0.34 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H216		1	TRUSS DESC. JT 45147	E21104458

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:09 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-FUEaDBSYMwGf8aG4K3WnX2yi1yD2pLZhp9qQ4ByTDai



TOTAL WEIGHT = 116 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
I - D	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	1.75
B	TTW-m	MT20	4.0	6.0	Edge	4.50
C	TMWW-t	MT20	4.0	4.0		
D	TTWW+m	MT20	4.0	6.0	2.00	1.00
E	TMVW+p	MT20	4.0	6.0	2.25	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	4.0	4.0		
I	BBWW-h	MT20	7.0	8.0	2.50	5.25
J	BBWWW-p	MT20	5.0	8.0		
K	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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	1200	0	1200	0	0	2-2	1-8
G	1308	0	1308	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	860	501 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
G	935	560 / 0	0 / 0	0 / 0	0 / 0	374 / 0	0 / 0

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

BRACING

FOR SECTION B-D, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.96 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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-1369 / 0	-78.0	-78.0	0.56 (1)	4.96	B- J	0 / 646	0.15 (1)
B- C	-914 / 0	-85.5	-85.5	0.63 (1)	2.00	J- C	0 / 24	0.01 (4)
C- L	-906 / 0	-85.5	-85.5	0.65 (1)	2.00	I- C	-682 / 0	0.34 (1)
L- D	-906 / 0	-85.5	-85.5	0.65 (1)	2.00	I- D	0 / 428	0.07 (1)
D- E	-981 / 0	-78.0	-78.0	0.56 (1)	5.57	H- D	-44 / 81	0.03 (4)
E- F	0 / 42	-78.0	-78.0	0.11 (1)	10.00	A- J	0 / 894	0.20 (1)
K- A	-1147 / 0	0.0	0.0	0.15 (1)	7.42	H- E	0 / 664	0.15 (1)
G- E	-1269 / 0	0.0	0.0	0.15 (1)	7.14			
K- J	0 / 0	-18.5	-18.5	0.18 (4)	10.00			
J- I	0 / 1004	-18.5	-18.5	0.27 (4)	10.00			
I- H	0 / 636	-18.5	-18.5	0.29 (4)	10.00			
H- G	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/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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.65/1.00 (C-D:1) , BC=0.29/1.00 (H-I:4) , WB=0.34/1.00 (C-I:1) , SSI=0.28/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

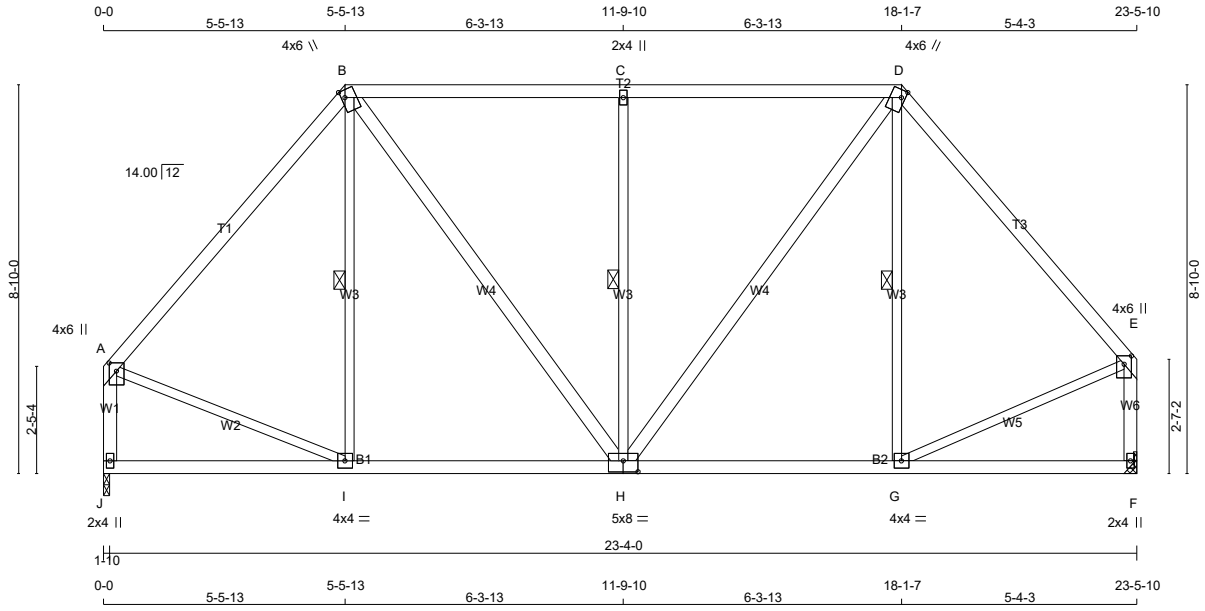
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (H) (INPUT = 0.90)
JSI METAL= 0.49 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H217		1	TRUSS DESC. JT 45147	E21104459

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:11 2021 Page 1
ID:hd511hZTz bdeQoS817GKByhVxV-BsMLetTouXWNNtQTSTYFcT13vlv2HFD GTJX93yTDag



TOTAL WEIGHT = 3 X 118 = 355 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
J - A	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
H - D	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	2.00	1.00
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	4.0	6.0	2.00	1.00
E	TMVW+p	MT20	4.0	6.0	2.25	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	4.0	4.0		
H	BSWWW-l	MT20	5.0	8.0	3.00	4.00
I	BMWW-t	MT20	4.0	4.0		
J	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
J	1179	0	1179	0	0	1-10	1-8
F	1180	0	1180	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	845	493 / 0	0 / 0	0 / 0	0 / 0	352 / 0	0 / 0
F	845	493 / 0	0 / 0	0 / 0	0 / 0	353 / 0	0 / 0

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

BRACING

FOR SECTION B-D, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.79 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 B-I, C-H, D-G.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-927 / 0	-78.0	-78.0	0.49 (1)	5.79
B- C	-874 / 0	-85.5	-85.5	0.62 (1)	2.00
C- D	-874 / 0	-85.5	-85.5	0.62 (1)	2.00
D- E	-911 / 0	-78.0	-78.0	0.46 (1)	5.86
J- A	-1141 / 0	0.0	0.0	0.15 (1)	7.44
F- E	-1143 / 0	0.0	0.0	0.16 (1)	7.43
J- I	0 / 0	-18.5	-18.5	0.19 (4)	10.00
I- H	0 / 600	-18.5	-18.5	0.25 (4)	10.00
H- G	0 / 590	-18.5	-18.5	0.25 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.18 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- B	-87 / 55	0.04 (1)
B- H	0 / 459	0.07 (1)
H- C	-661 / 0	0.33 (1)
H- D	0 / 477	0.08 (1)
G- D	-107 / 46	0.05 (1)
A- I	0 / 641	0.14 (1)
G- E	0 / 638	0.14 (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 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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.62/1.00 (B-C:1) , BC=0.25/1.00 (H-I:4) , WB=0.33/1.00 (C-H:1) , SSI=0.26/1.00 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

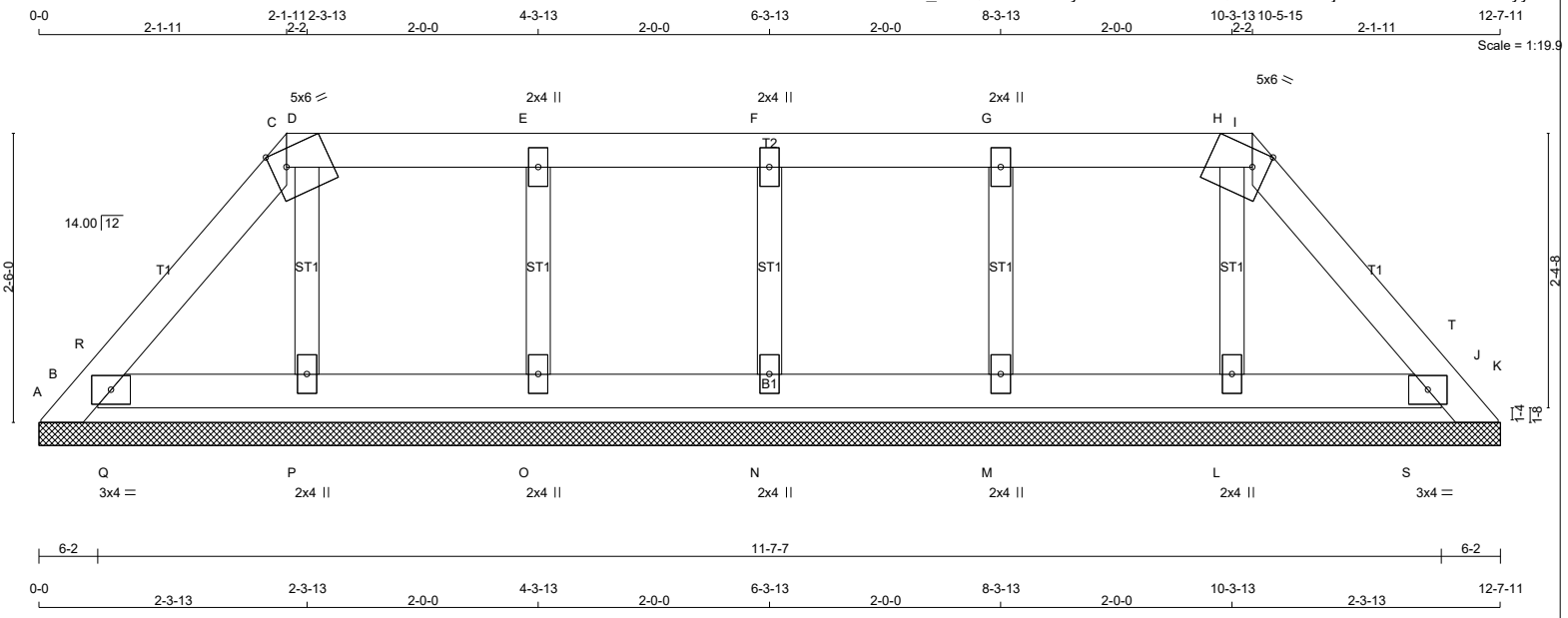
JSI GRIP= 0.73 (B) (INPUT = 0.90)
JSI METAL= 0.36 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H218G		1	TRUSS DESC. JT 45147	E21104460

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:13 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-8FT53YV3Q9m5dBarZuajiu7YTZeClEUHknoeDyyTDae



TOTAL WEIGHT = 38 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
B - 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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C, D, H, I						
C						
C	TTW-m	MT20	5.0	6.0	Edge	1.50
E, F, G						
E	TMW+w	MT20	2.0	4.0		
I	TTW-m	MT20	5.0	6.0	Edge	1.50
J	TMB1-I	MT20	3.0	4.0		
L, M, N, O, P						
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

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 , O , P , M , L

PROVIDE ANCHORAGE AT BEARING JOINT A FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT K FOR 150 LBS FACTORED UPLIFT
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. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 27	-96.5	-96.5	0.03 (1)	10.00	N- F	-150 / 0	0.02 (1)
B- R	-47 / 0	-78.0	-78.0	0.02 (1)	6.25	O- E	-170 / 0	0.03 (1)
R- C	-23 / 0	-78.0	-78.0	0.02 (1)	6.25	P- D	-117 / 0	0.02 (1)
C- D	-2 / 0	-78.0	-78.0	0.01 (1)	10.00	M- G	-170 / 0	0.03 (1)
D- E	-11 / 0	-78.0	-78.0	0.04 (1)	6.25	L- H	-117 / 0	0.02 (1)
E- F	-11 / 0	-78.0	-78.0	0.04 (1)	6.25	Q- R	-37 / 10	0.00 (1)
F- G	-11 / 0	-78.0	-78.0	0.04 (1)	6.25	S- T	-37 / 10	0.00 (1)
G- H	-11 / 0	-78.0	-78.0	0.04 (1)	6.25			
H- I	-2 / 0	-78.0	-78.0	0.01 (1)	10.00			
I- T	-23 / 0	-78.0	-78.0	0.02 (1)	6.25			
T- J	-47 / 0	-78.0	-78.0	0.02 (1)	6.25			
J- K	0 / 27	-96.5	-96.5	0.03 (1)	10.00			
B- Q	0 / 11	-18.5	-18.5	0.01 (1)	10.00			
Q- P	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
P- O	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
O- N	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
N- M	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
M- L	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
L- S	0 / 11	-18.5	-18.5	0.02 (4)	10.00			
S- J	0 / 11	-18.5	-18.5	0.01 (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 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=0.04/1.00 (E-F:1) , BC=0.02/1.00 (P-Q:4) , WB=0.03/1.00 (E-O:1) , SSI=0.07/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

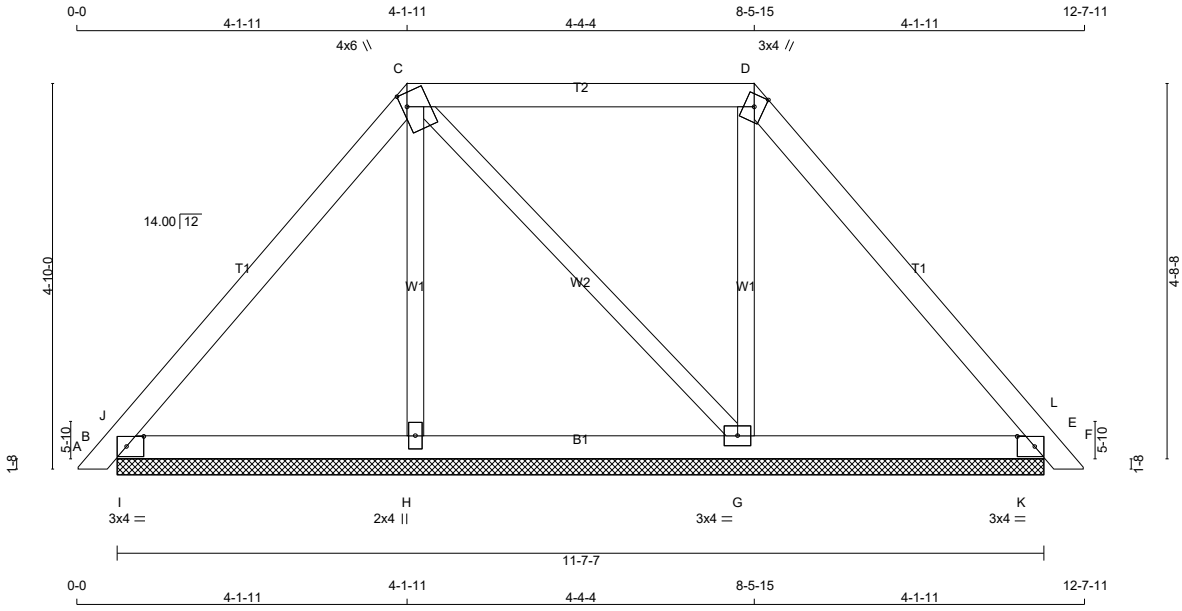
JSI GRIP= 0.11 (B) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H218P		1	TRUSS DESC. JT 45147	E21104461

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:14 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-cR1THuWhBSuyEL927c5yE5fgwzzsUhIQyRXBmOyTDad



TOTAL WEIGHT = 44 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
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	2.00	0.75
D	TTW+m	MT20	3.0	4.0	Edge	
E	TMB1-I	MT20	3.0	4.0	1.50	2.50
G	BMWW1-t	MT20	3.0	4.0		
H	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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	344	0	344	0	0	11-7-7	1-8
E	320	0	320	0	0	11-7-7	1-8
H	224	0	224	0	0	11-7-7	1-8
G	294	0	294	0	0	11-7-7	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	242	167 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0
E	225	153 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
H	163	81 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
G	211	120 / 0	0 / 0	0 / 0	0 / 0	92 / 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	H- C	-122 / 0	0.04 (1)
B- J	-37 / 26	-78.0	-78.0	0.08 (1)	6.25	C- G	-31 / 0	0.02 (1)
J- C	-202 / 0	-78.0	-78.0	0.13 (1)	6.25	G- D	-168 / 0	0.05 (1)
C- D	-99 / 0	-78.0	-78.0	0.25 (1)	6.25	I- J	-403 / 0	0.00 (1)
D- L	-170 / 0	-78.0	-78.0	0.13 (1)	6.25	K- L	-411 / 0	0.00 (1)
L- E	-30 / 64	-78.0	-78.0	0.08 (1)	6.25			
E- F	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- I	0 / 123	-18.5	-18.5	0.12 (1)	10.00			
I- H	0 / 123	-18.5	-18.5	0.12 (1)	10.00			
H- G	0 / 120	-18.5	-18.5	0.08 (4)	10.00			
G- K	0 / 103	-18.5	-18.5	0.11 (1)	10.00			
K- E	0 / 103	-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/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=0.25/1.00 (C-D:1) , BC=0.12/1.00 (H-I:1) , WB=0.05/1.00 (D-G:1) , SSI=0.32/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

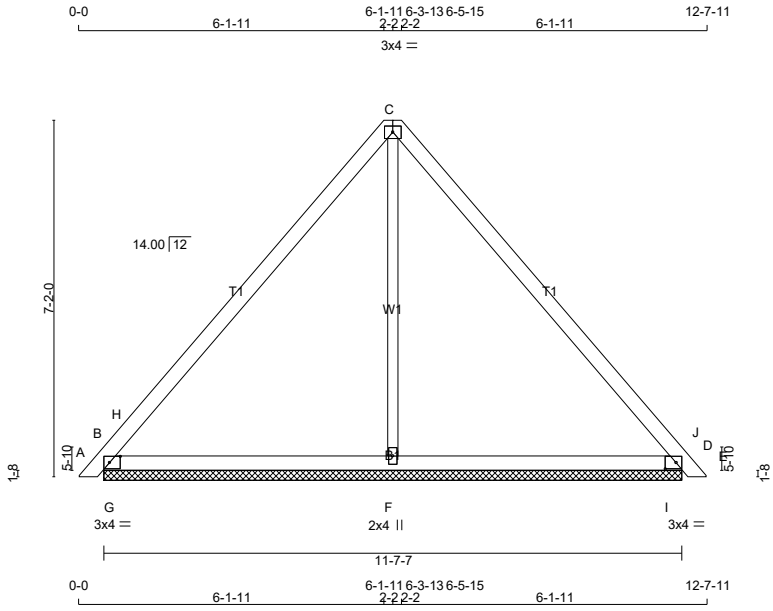
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (D) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H219P		1	TRUSS DESC. JT 45147	E21104462

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-Yq9EhaXxj48gUeJQE18QJWl_CmbWybUjQk0IqHyTDab



TOTAL WEIGHT = 40 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.50
C	TTW-p	MT20	3.0	4.0		
D	TMB1-I	MT20	3.0	4.0	1.50	2.50
F	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	489	0	489	0	0	11-7-7	1-8
D	489	0	489	0	0	11-7-7	1-8
F	203	0	203	0	0	11-7-7	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	345	232 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
D	345	232 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
F	151	56 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	F- C	0 / 34	0.01 (4)
B- H	0 / 503	-78.0	-78.0	0.32 (1)	10.00	G- H	-1146 / 0	0.00 (1)
H- C	-295 / 0	-78.0	-78.0	0.33 (1)	6.25	I- J	-1146 / 0	0.00 (1)
C- J	-295 / 0	-78.0	-78.0	0.33 (1)	6.25			
J- D	0 / 503	-78.0	-78.0	0.32 (1)	10.00			
D- E	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- G	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
G- F	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
F- I	0 / 177	-18.5	-18.5	0.30 (1)	10.00			
I- D	0 / 177	-18.5	-18.5	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/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=0.33/1.00 (C-H:1) , BC=0.30/1.00 (B-G:1) , WB=0.01/1.00 (C-F:4) , SSI=0.89/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

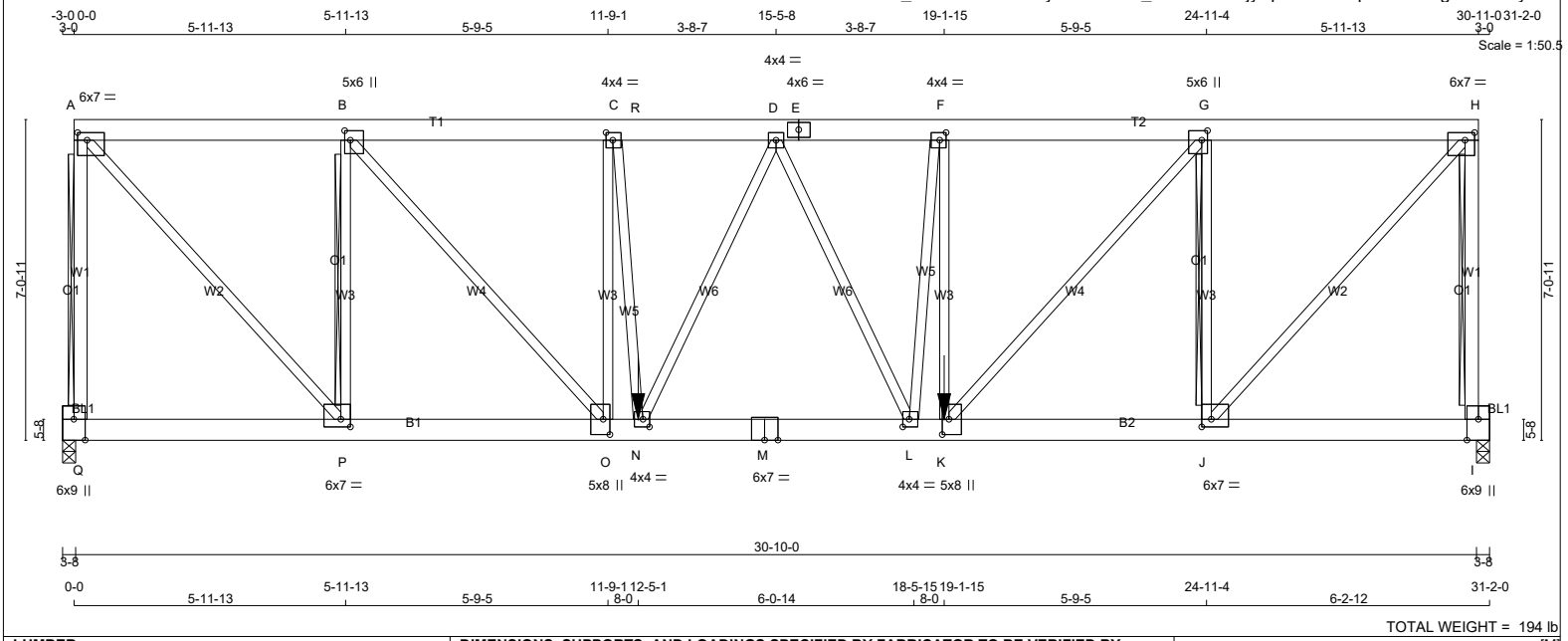
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.59 (D) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H220		1	TRUSS DESC. JT 45147	E21104463

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:18 2021 Page 1
ID:hd511hZTz_bdeQoS817GKByhVxV-UCH_6GZBFhONjySpMRAuPxqEsa9hQGg0t2VPv9yTDaZ



TOTAL WEIGHT = 194 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
Q - A	2x4	DRY	No.2	SPF
A - E	2x6	DRY	No.2	SPF
E - H	2x6	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
Q - M	2x6	DRY	No.2	SPF
M - I	2x6	DRY	No.2	SPF
BEARING BLOCKS				
BL1	2 - 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
A	TMVW-t	MT20	6.0	7.0	2.00	2.50
B	TMWW+t	MT20	5.0	6.0	2.50	1.50
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	4.0	6.0		
F	TMWW-t	MT20	4.0	4.0	2.00	1.75
G	TMWW+t	MT20	5.0	6.0	2.50	1.50
H	TMVW-t	MT20	6.0	7.0	2.00	2.50
I	BMVK1+t	MT20	6.0	9.0	Edge	3.00
J	BMWW-t	MT20	6.0	7.0	2.00	2.50
K	BMWW+t	MT20	5.0	8.0	4.00	1.75
L	BMWW-t	MT20	4.0	4.0	2.00	1.75
M	BS-t	MT20	6.0	7.0		
N	BMWW-t	MT20	4.0	4.0	2.00	1.75
O	BMWW+t	MT20	5.0	8.0	4.00	1.75
P	BMWW-t	MT20	6.0	7.0	2.00	2.50
Q	BMVK1+t	MT20	6.0	9.0	Edge	3.00

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
Q	2984	0	2984	0	0	3-8	3-8
I	3029	0	3029	0	0	3-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	2128	1297 / 0	0 / 0	0 / 0	0 / 0	830 / 0	0 / 0
I	2160	1316 / 0	0 / 0	0 / 0	0 / 0	845 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 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 A-Q, H-I, B-P, G-J

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
Q- A	-2928 / 0	0.0	0.0	0.75 (1)	7.81
A- B	-2417 / 0	-78.0	-78.0	0.25 (1)	5.04
B- C	-4297 / 0	-78.0	-78.0	0.35 (1)	3.89
C- R	-4396 / 0	-78.0	-78.0	0.24 (1)	3.96
R- D	-4396 / 0	-167.5	-167.5	0.24 (1)	3.96
D- E	-4451 / 0	-167.5	-167.5	0.27 (1)	3.91
E- F	-4451 / 0	-167.5	-167.5	0.27 (1)	3.91
F- G	-4414 / 0	-78.0	-78.0	0.35 (1)	3.85
G- H	-2528 / 0	-78.0	-78.0	0.24 (1)	4.96
I- H	-2979 / 0	0.0	0.0	0.77 (1)	7.81
Q- P	-65 / 0	-18.5	-18.5	0.08 (4)	6.25
P- O	0 / 2417	-18.5	-18.5	0.51 (1)	10.00
O- N	0 / 4334	-18.5	-18.5	0.76 (1)	10.00
N- M	0 / 4562	-41.0	-41.0	0.83 (1)	10.00
M- L	0 / 4562	-41.0	-41.0	0.83 (1)	10.00
L- K	0 / 4414	-41.0	-41.0	0.63 (1)	10.00
K- J	0 / 2528	-18.5	-18.5	0.38 (1)	10.00
J- I	0 / 0	-18.5	-18.5	0.07 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- P	0 / 3696	0.91 (1)
P- B	-2684 / 0	0.88 (1)
O- C	-1291 / 0	0.99 (1)
C- N	0 / 833	0.21 (1)
N- D	-400 / 0	0.39 (1)
D- L	-267 / 0	0.26 (1)
L- F	0 / 364	0.09 (1)
K- F	-869 / 0	0.67 (1)
K- G	0 / 2864	0.71 (1)
J- G	-2682 / 0	0.88 (1)
J- H	0 / 3764	0.93 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	19-1-15	-1149	-1149	---	FRONT	VERT	TOTAL	---	C1
N	12-5-1	-1130	-1130	---	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

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.21")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 875 (0.42")

CSI: TC=0.77/1.00 (H-I:1) , BC=0.83/1.00 (L-N:1) , WB=0.99/1.00 (C-O:1) , SSI=0.50/1.00 (N-O: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

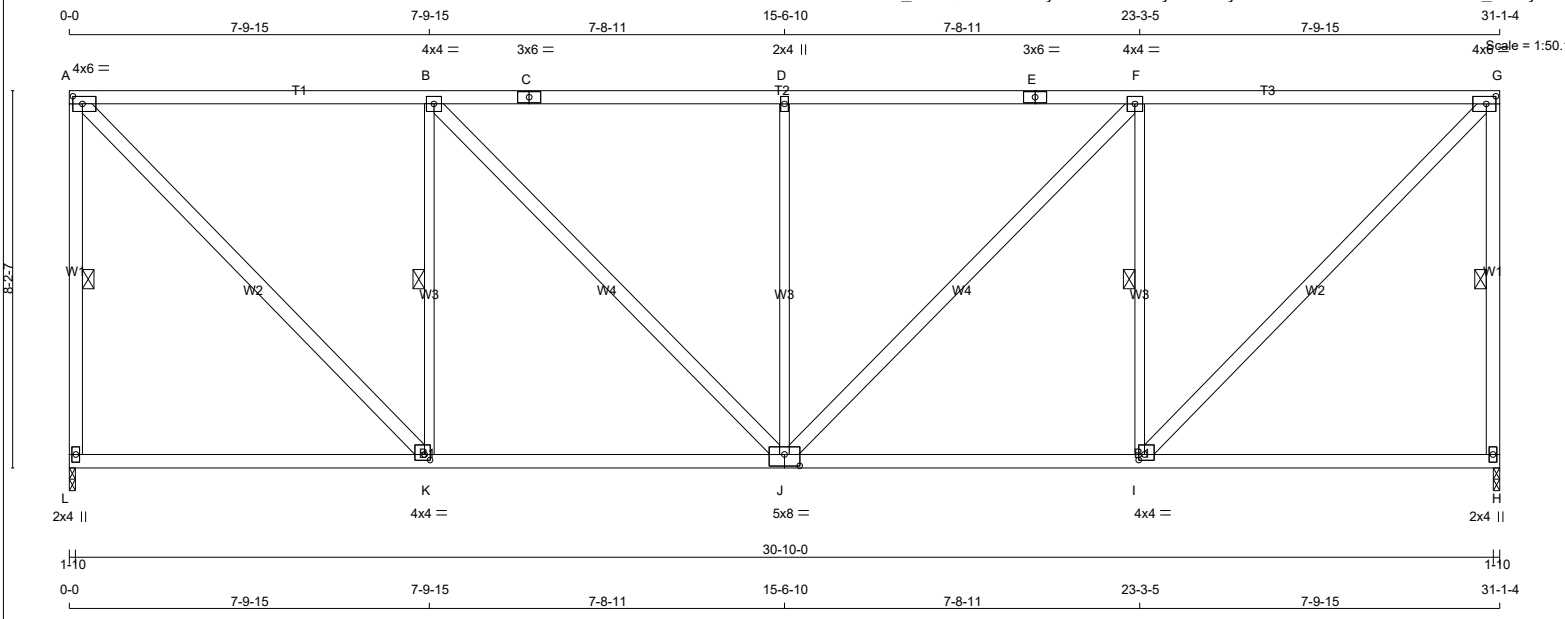
JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL= 0.86 (M) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H222		1	TRUSS DESC. JT 45147	E21104464

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:20 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-RbOkXyaSmIf5yGcBTsCMUMvYNNxFuEFJLM_Wz2yTDaX



TOTAL WEIGHT = 156 lb [M]

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	TMVW-t	MT20	4.0	6.0	2.00	2.50
B	TMWW-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	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	4.0	6.0	2.00	2.50
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BSWWW-I	MT20	5.0	8.0	3.00	4.00
K	BMWW-t	MT20	4.0	4.0	1.50	1.50
L	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1500	0	1500	0	0	1-10	1-10
H	1500	0	1500	0	0	1-10	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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 = 4.04 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 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- A	-1445 / 0	0.0	0.0	0.44 (1)	5.44	A- K	0 / 1694	0.27 (1)
A- B	-1191 / 0	-78.0	-78.0	0.84 (1)	4.50	K- B	-1026 / 0	0.44 (1)
B- C	-1515 / 0	-78.0	-78.0	0.89 (1)	4.04	B- J	0 / 464	0.07 (1)
C- D	-1515 / 0	-78.0	-78.0	0.89 (1)	4.04	J- D	-555 / 0	0.73 (1)
D- E	-1515 / 0	-78.0	-78.0	0.89 (1)	4.04	J- F	0 / 464	0.07 (1)
E- F	-1515 / 0	-78.0	-78.0	0.89 (1)	4.04	I- F	-1026 / 0	0.44 (1)
F- G	-1191 / 0	-78.0	-78.0	0.84 (1)	4.50	I- G	0 / 1694	0.27 (1)
H- G	-1445 / 0	0.0	0.0	0.44 (1)	5.44			
L- K	0 / 0	-18.5	-18.5	0.32 (4)	10.00			
K- J	0 / 1191	-18.5	-18.5	0.44 (4)	10.00			
J- I	0 / 1191	-18.5	-18.5	0.44 (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 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 (0.19")

CSI: TC=0.89/1.00 (D-F:1) , BC=0.44/1.00 (I-J:4) , WB=0.73/1.00 (D-J:1) , SSI=0.29/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

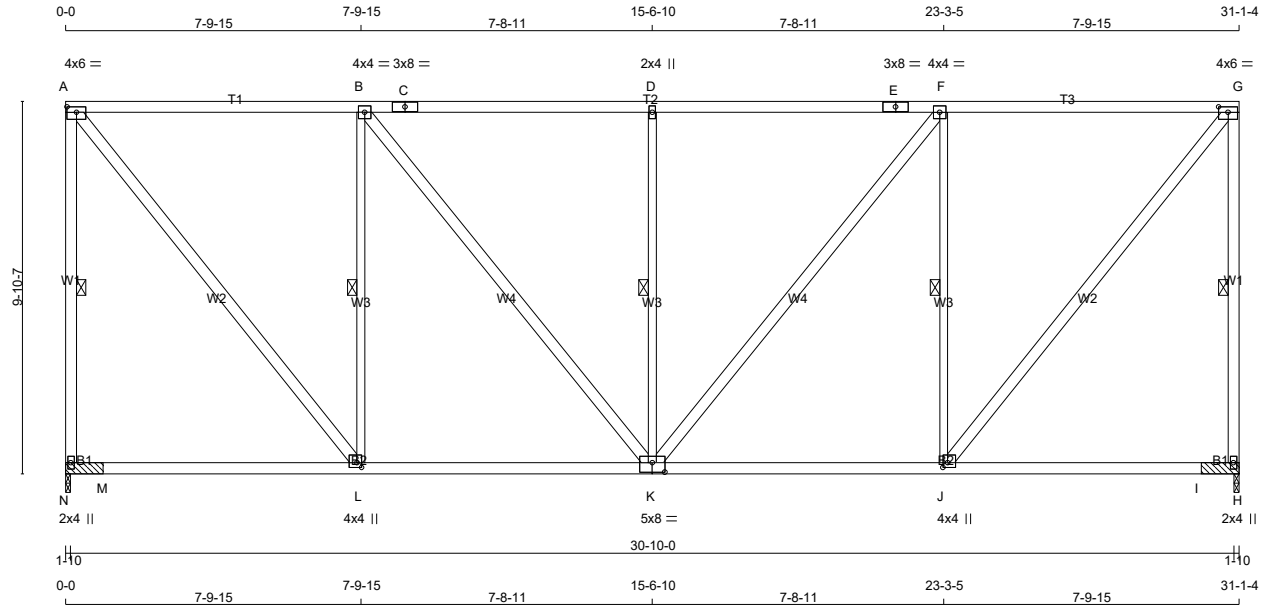
JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.41 (K) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H223		1	TRUSS DESC. JT 45147	E21104465

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:24 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-3p0anovJz5b2FfKRB6CDCYbynpq8mvH3SfQY0HyTDbP



TOTAL WEIGHT = 4 X 171 = 686 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
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 EXCEPT	2x4	DRY	No.2	SPF
L - B	2x3	DRY	No.2	SPF
K - D	2x3	DRY	No.2	SPF
J - F	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	3.00
B	TMWW-t	MT20	4.0	4.0		
C	TS-t	MT20	3.0	8.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	4.0	6.0	1.75	3.00
H	BMV1+p	MT20	2.0	4.0		
J	BMWW+t	MT20	4.0	4.0	1.50	1.50
K	BSWWW-l	MT20	5.0	8.0	3.00	4.00
L	BMWW+t	MT20	4.0	4.0	1.50	1.50
N	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1617	0	1617	0	0	1-10	1-10 & BLOCK
H	1617	0	1617	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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, D-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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
N- A	-1562 / 0	0.0	0.0	0.73 (1)	5.27
A- B	-1060 / 0	-85.5	-85.5	0.89 (1)	2.00
B- C	-1350 / 0	-85.5	-85.5	0.94 (1)	2.00
C- D	-1350 / 0	-85.5	-85.5	0.94 (1)	2.00
D- E	-1350 / 0	-85.5	-85.5	0.94 (1)	2.00
E- F	-1350 / 0	-85.5	-85.5	0.94 (1)	2.00
F- G	-1060 / 0	-85.5	-85.5	0.89 (1)	2.00
H- G	-1562 / 0	0.0	0.0	0.73 (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 / 1060	-18.5	-18.5	0.44 (4)	10.00
K- J	0 / 1060	-18.5	-18.5	0.44 (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

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- L	0 / 1676	0.27 (1)
L- B	-1119 / 0	0.74 (1)
B- K	0 / 461	0.07 (1)
K- D	-609 / 0	0.40 (1)
K- F	0 / 461	0.07 (1)
J- F	-1119 / 0	0.74 (1)
J- G	0 / 1676	0.27 (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 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 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.94/1.00 (B-D:1) , BC=0.44/1.00 (J-K:4) , WB=0.74/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

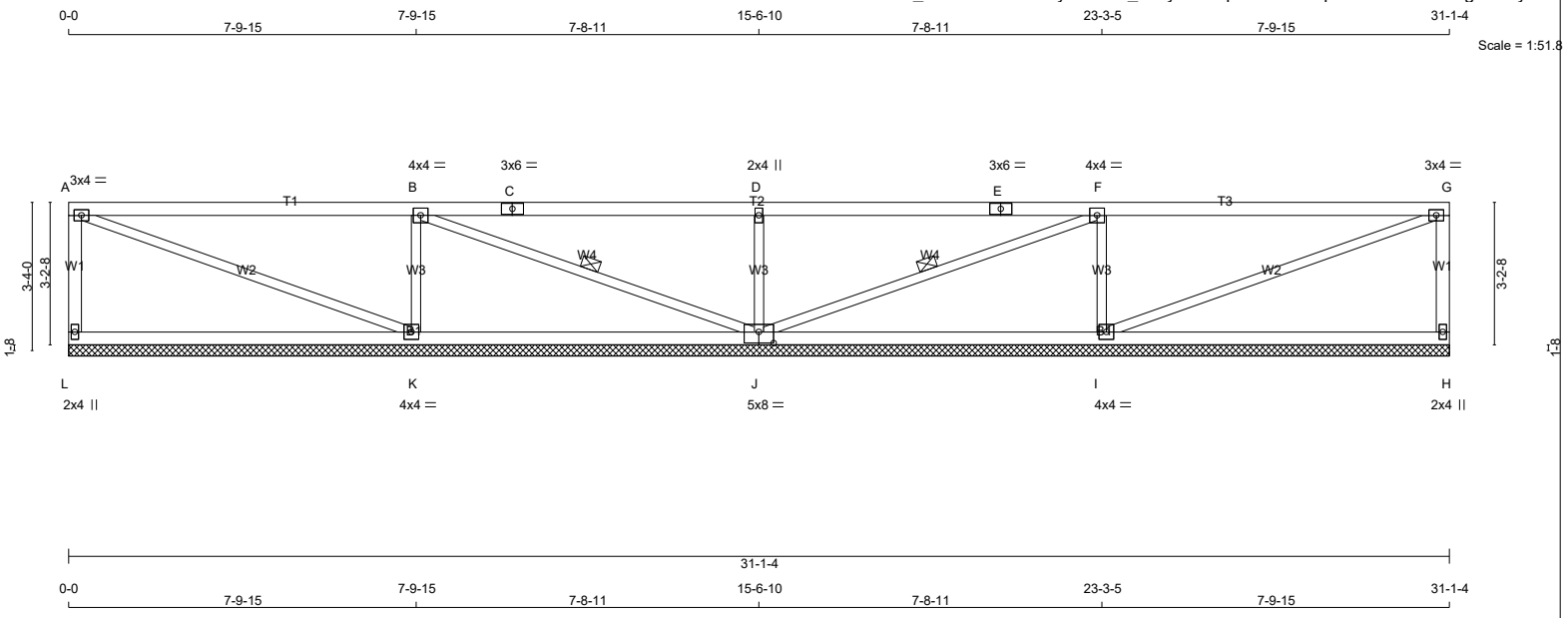
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)
JSI METAL= 0.47 (L) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H224P		1	TRUSS DESC. JT 45147	E21104466

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-N_WVydciIwvpCamabHFqZn?xwBdRMI9cogTc2wyTDaV



TOTAL WEIGHT = 109 lb [M]

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	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-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	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	BSWWW1-I	MT20	5.0	8.0	3.00	4.00
K	BMWW1-t	MT20	4.0	4.0		
L	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	296	0	296	0	0	31-1-4 (15-6-10)	1.00
H	296	0	296	0	0	31-1-4 (15-6-10)	1.00
K	854	0	854	0	0	31-1-4 (15-6-10)	1.00
J	701	0	701	0	0	31-1-4 (15-6-10)	1.00
I	854	0	854	0	0	31-1-4 (15-6-10)	1.00

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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	610	363 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
J	497	320 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
I	610	363 / 0	0 / 0	0 / 0	0 / 0	248 / 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.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-J, 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- A	-242 / 0	0.0	0.0	0.04 (1)	7.81	A- K	0 / 4	0.00 (1)
A- B	-4 / 0	-78.0	-78.0	0.69 (1)	10.00	K- B	-675 / 0	0.13 (1)
B- C	0 / 47	-78.0	-78.0	0.70 (1)	10.00	B- J	-55 / 0	0.03 (1)
C- D	0 / 47	-78.0	-78.0	0.70 (1)	10.00	J- D	-556 / 0	0.10 (1)
D- E	0 / 47	-78.0	-78.0	0.70 (1)	10.00	J- F	-55 / 0	0.03 (1)
E- F	0 / 47	-78.0	-78.0	0.70 (1)	10.00	I- F	-675 / 0	0.13 (1)
F- G	-4 / 0	-78.0	-78.0	0.69 (1)	10.00	I- G	0 / 4	0.00 (1)
H- G	-242 / 0	0.0	0.0	0.04 (1)	7.81			
L- K	0 / 0	-18.5	-18.5	0.33 (4)	10.00			
K- J	0 / 4	-18.5	-18.5	0.33 (4)	10.00			
J- I	0 / 4	-18.5	-18.5	0.33 (4)	10.00			
I- H	0 / 0	-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

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=0.70/1.00 (B-D:1) , BC=0.33/1.00 (K-L:4) , WB=0.13/1.00 (B-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

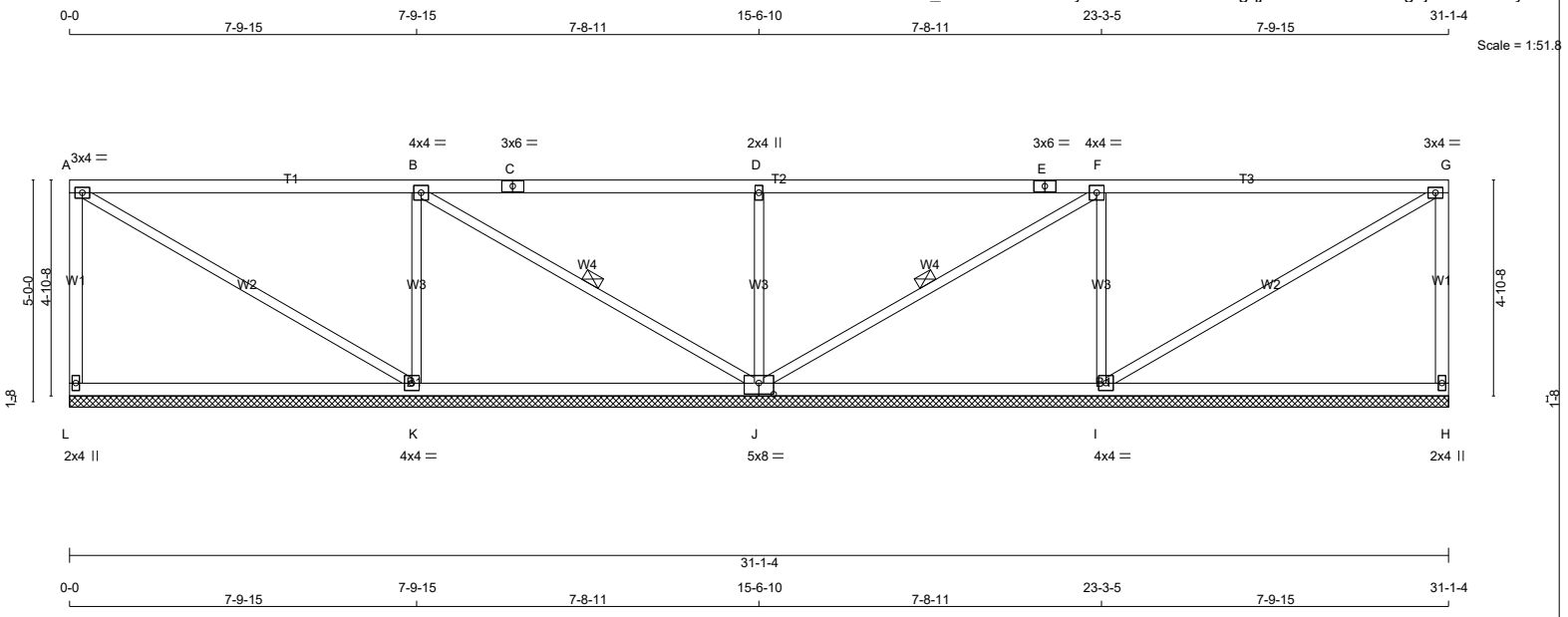
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (G) (INPUT = 0.90)
JSI METAL= 0.30 (J) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H225P		1	TRUSS DESC. JT 45147	E21104467

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-rA4t9zdK3D1gqjLm8?m36?X5Zbzg5jwI1KDAaNyTDaU



TOTAL WEIGHT = 119 lb [M]

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	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0		
B	TMWW-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	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	BSWWW1-I	MT20	5.0	8.0	3.00	4.00
K	BMWW1-t	MT20	4.0	4.0		
L	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	297	0	297	0	0	31-1-4 (15-6-10	3.00
H	297	0	297	0	0	31-1-4 (15-6-10	3.00
K	814	0	814	0	0	31-1-4 (15-6-10	3.00
J	780	0	780	0	0	31-1-4 (15-6-10	3.00
I	814	0	814	0	0	31-1-4 (15-6-10	3.00

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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	583	341 / 0	0 / 0	0 / 0	0 / 0	241 / 0	0 / 0
J	551	362 / 0	0 / 0	0 / 0	0 / 0	189 / 0	0 / 0
I	583	341 / 0	0 / 0	0 / 0	0 / 0	241 / 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.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-J, 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)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- A	-242 / 0	0.0	0.0	0.09 (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	-636 / 0	0.22 (1)
B- C	0 / 96	-78.0	-78.0	0.71 (1)	10.00	B- J	-115 / 0	0.06 (1)
C- D	0 / 96	-78.0	-78.0	0.71 (1)	10.00	J- D	-556 / 0	0.19 (1)
D- E	0 / 96	-78.0	-78.0	0.71 (1)	10.00	J- F	-115 / 0	0.06 (1)
E- F	0 / 96	-78.0	-78.0	0.71 (1)	10.00	I- F	-636 / 0	0.22 (1)
F- G	-3 / 0	-78.0	-78.0	0.69 (1)	10.00	I- G	0 / 3	0.00 (1)
H- G	-242 / 0	0.0	0.0	0.09 (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			

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=0.71/1.00 (B-D:1) , BC=0.33/1.00 (K-L:4) , WB=0.22/1.00 (B-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

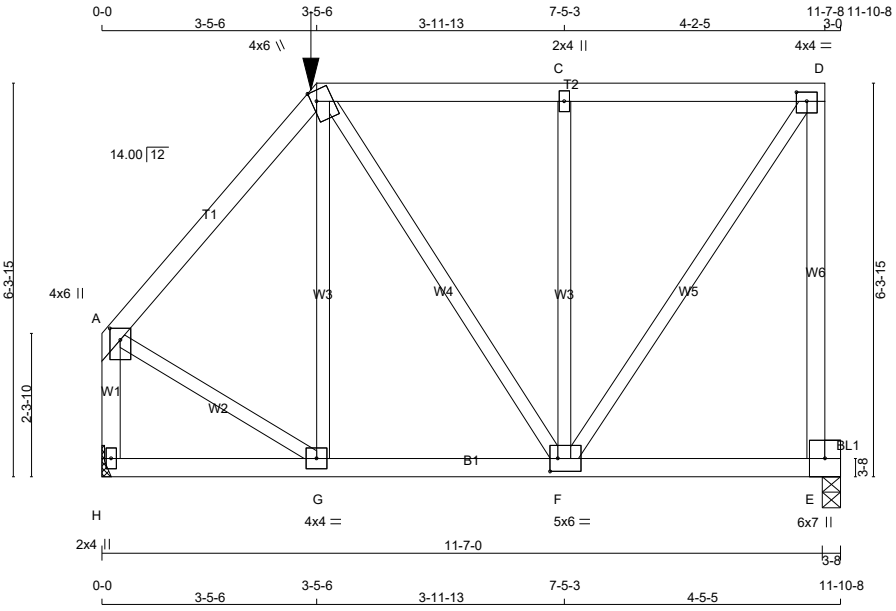
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (E) (INPUT = 0.90)
JSI METAL= 0.45 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H228		1	TRUSS DESC. JT 45147	E21104468

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-nZCdafeabrHO31V9GQoXBQdOYOhEZZ_2UeiHfFyTDaS



Scale = 1:37.1

TOTAL WEIGHT = 62 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - A	2x4	DRY	No.2	SPF
H - E	2x4	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	4.0	6.0	2.25	2.00
B	TTWW+m	MT20	4.0	6.0	2.00	1.00
C	TMW+w	MT20	2.0	4.0		
D	TMVW-t	MT20	4.0	4.0	1.75	2.00
E	BMVK1+p	MT20	6.0	7.0		
F	BMWWW-t	MT20	5.0	6.0	2.50	1.50
G	BMWW-t	MT20	4.0	4.0		
H	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
E	1132	0	1132	0	0	3-8	2-8
H	1006	0	1006	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	806	497 / 0	0 / 0	0 / 0	0 / 0	309 / 0	0 / 0
H	719	429 / 0	0 / 0	0 / 0	0 / 0	290 / 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 = 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-736 / 0	-78.0	-78.0	0.19 (1)	6.25	G- B	-109 / 63		0.07 (1)
B- C	-543 / 0	-153.5	-153.5	0.46 (1)	6.25	B- F	0 / 125		0.03 (1)
C- D	-544 / 0	-153.5	-153.5	0.46 (1)	6.25	F- C	-770 / 0		0.51 (1)
E- D	-1070 / 0	0.0	0.0	0.87 (1)	7.59	F- D	0 / 998		0.25 (1)
H- A	-954 / 0	0.0	0.0	0.13 (1)	7.81	A- G	0 / 542		0.13 (1)
H- G	0 / 0	-36.4	-36.4	0.12 (4)	10.00				
G- F	0 / 474	-36.4	-36.4	0.19 (4)	10.00				
F- E	-26 / 0	-36.4	-36.4	0.14 (4)	6.25				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	3-5-6	-196	-196	---	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 = 3-5-6
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.

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

CSI: TC=0.87/1.00 (D-E:1) , BC=0.19/1.00 (F-G:4) , WB=0.51/1.00 (C-F:1) , SSI=0.34/1.00 (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 .

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

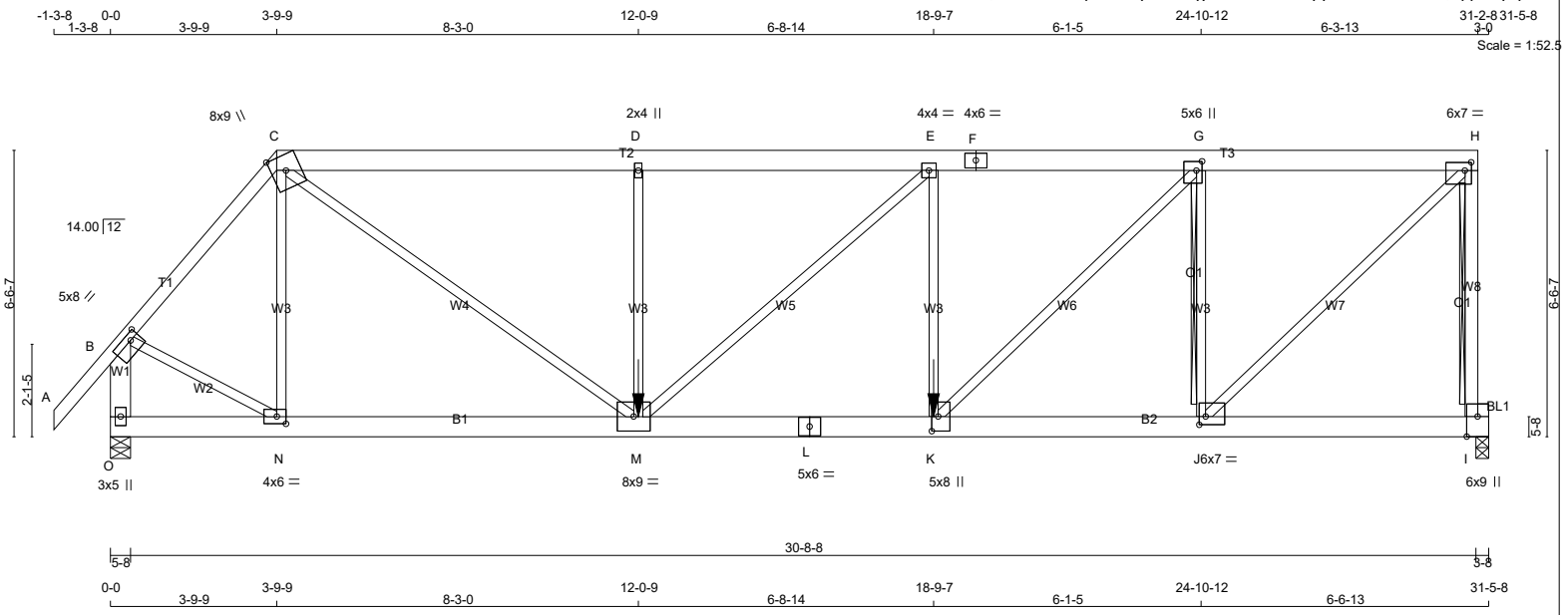
JSI GRIP= 0.86 (D) (INPUT = 0.90)
JSI METAL= 0.28 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H231		1	TRUSS DESC. JT 45147	E21104469

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:27 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-jxJO?Lqr7SX6lLeYNqq?GrimTCFt1LQLyyBNj8yTDaQ



TOTAL WEIGHT = 174 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
O - B	2x6	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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	2.50
C	TTWW+m	MT20	8.0	9.0	Edge	
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	4.0	6.0		
G	TMWW+t	MT20	5.0	6.0	2.50	1.50
H	TMVW-t	MT20	6.0	7.0	2.25	1.75
I	BMVK1+t	MT20	6.0	9.0	Edge	3.00
J	BMWW-t	MT20	6.0	7.0	2.25	1.75
K	BMWW+t	MT20	5.0	8.0	4.00	1.75
L	BS-t	MT20	5.0	6.0		
M	BMWWW-t	MT20	8.0	9.0		
N	BMWW-t	MT20	4.0	6.0	2.00	2.50
O	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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	2939	0	2939	0	0	3-8	3-8
O	3109	0	3109	0	0	5-8	4-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	2095	1280 / 0	0 / 0	0 / 0	0 / 0	816 / 0	0 / 0
O	2215	1364 / 0	0 / 0	0 / 0	0 / 0	851 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 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 H-I, G-J

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00	N- C	-599 / 0	0.37 (1)
B- C	-2754 / 0	-78.0	-78.0	0.40 (1)	3.83	C- M	0 / 3860	0.96 (1)
C- D	-4891 / 0	-78.0	-78.0	0.71 (1)	3.30	M- D	-951 / 0	0.59 (1)
D- E	-4891 / 0	-156.0	-156.0	0.65 (1)	3.30	M- E	0 / 151	0.04 (1)
E- F	-4778 / 0	-78.0	-78.0	0.45 (1)	3.61	K- E	-849 / 0	0.53 (1)
F- G	-4778 / 0	-78.0	-78.0	0.45 (1)	3.61	K- G	0 / 2911	0.72 (1)
G- H	-2715 / 0	-78.0	-78.0	0.27 (1)	4.79	J- G	-2558 / 0	0.74 (1)
I- H	-2889 / 0	0.0	0.0	0.64 (1)	7.81	J- H	0 / 3864	0.96 (1)
O- B	-3110 / 0	0.0	0.0	0.26 (1)	5.94	B- N	0 / 1948	0.48 (1)
O- N	0 / 0	-18.5	-18.5	0.12 (4)	10.00			
N- M	0 / 1783	-18.5	-18.5	0.34 (1)	10.00			
M- L	0 / 4778	-37.3	-37.3	0.76 (1)	10.00			
L- K	0 / 4778	-37.3	-37.3	0.76 (1)	10.00			
K- J	0 / 2715	-18.5	-18.5	0.39 (1)	10.00			
J- I	-69 / 0	-18.5	-18.5	0.08 (4)	6.25			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	18-9-7	-1022	-1022	---	FRONT	VERT	TOTAL	---	C1
M	12-0-9	-1257	-1257	---	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

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 972 (0.38")

CSI: TC=0.71/1.00 (C-D:1) , BC=0.76/1.00 (K-M:1) , WB=0.96/1.00 (H-J:1) , SSI=0.37/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

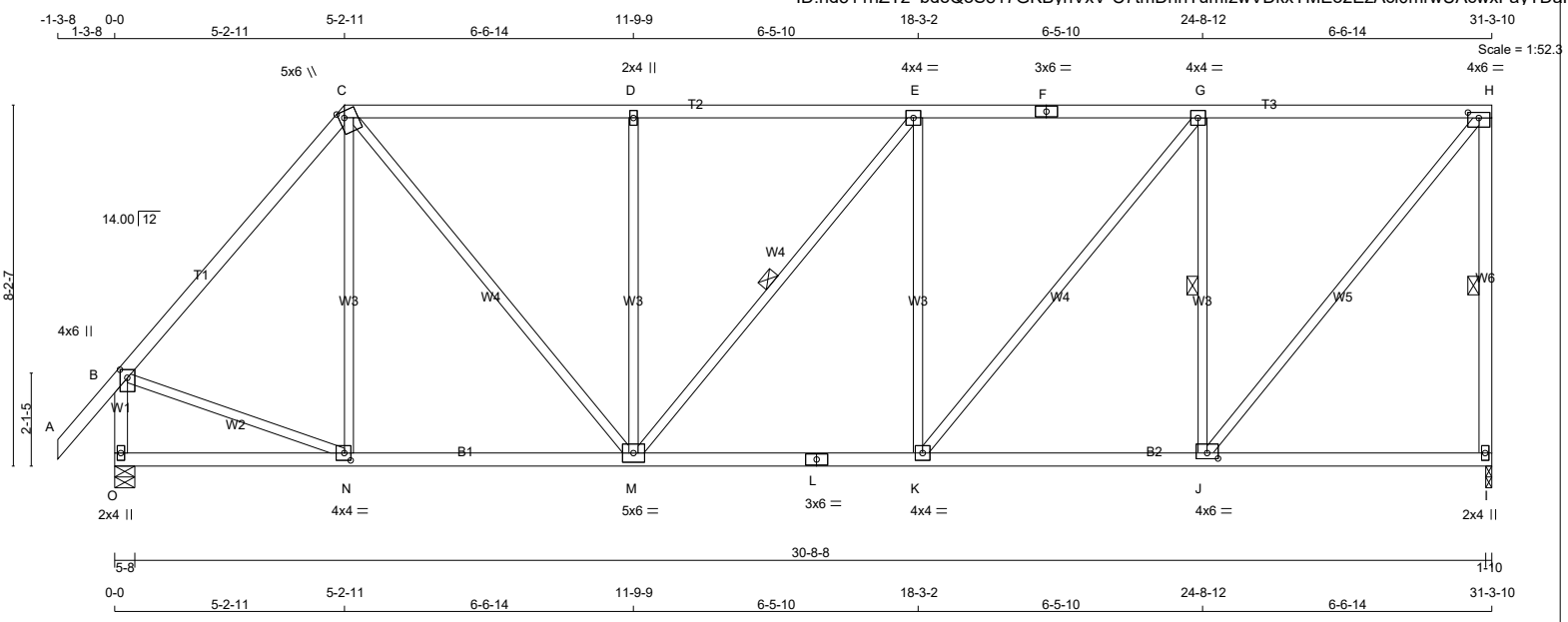
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.98 (L) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H232		1	TRUSS DESC. JT 45147	E21104470

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:28 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-C7tmDhhTumfzwVDkxYMEo2EzAci0mrwUAcwxFayTDaP



TOTAL WEIGHT = 149 lb [M]

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

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	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	1.50	3.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	6.0	1.50	3.00
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		

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS 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 = 4.63 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-M, 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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	N- C	-154 / 27	0.20 (1)
B- C	-1304 / 0	-78.0	-78.0	0.48 (1)	5.12	C- M	0 / 952	0.21 (1)
C- D	-1454 / 0	-78.0	-78.0	0.58 (1)	4.69	M- D	-571 / 0	0.75 (1)
D- E	-1454 / 0	-78.0	-78.0	0.58 (1)	4.69	M- E	-53 / 0	0.04 (1)
E- F	-1487 / 0	-78.0	-78.0	0.59 (1)	4.63	K- E	-426 / 0	0.56 (1)
F- G	-1487 / 0	-78.0	-78.0	0.59 (1)	4.63	K- G	0 / 699	0.16 (1)
G- H	-1045 / 0	-78.0	-78.0	0.54 (1)	5.36	J- G	-1122 / 0	0.48 (1)
I- H	-1461 / 0	0.0	0.0	0.44 (1)	5.41	J- H	0 / 1635	0.37 (1)
O- B	-1582 / 0	0.0	0.0	0.19 (1)	6.56	B- N	0 / 890	0.20 (1)
O- N	0 / 0	-18.5	-18.5	0.15 (4)	10.00			
N- M	0 / 844	-18.5	-18.5	0.23 (4)	10.00			
M- L	0 / 1487	-18.5	-18.5	0.32 (1)	10.00			
L- K	0 / 1487	-18.5	-18.5	0.32 (1)	10.00			
K- J	0 / 1045	-18.5	-18.5	0.29 (4)	10.00			
J- I	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

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 (0.15")

CSI: TC=0.59/1.00 (E-G:1) , BC=0.32/1.00 (K-M:1) , WB=0.75/1.00 (D-M: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

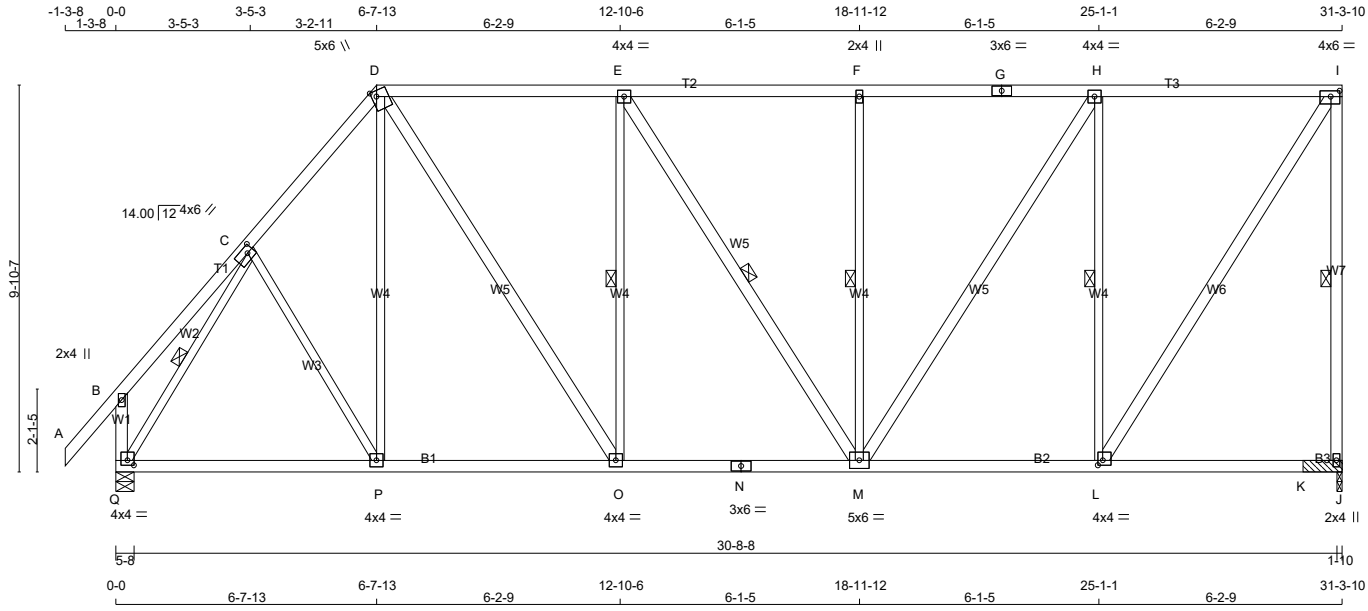
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.51 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H233		1	TRUSS DESC. JT 45147	E21104471

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:25 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-Y0ay_8wyjPjvspvdlpjSlm7AfCBjVLKDhJ95YkyTDbO



TOTAL WEIGHT = 4 X 182 = 729 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
Q - B	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
D - O	2x4	DRY	No.2	SPF
E - M	2x4	DRY	No.2	SPF
M - H	2x4	DRY	No.2	SPF
L - I	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		
C	TMWW-t	MT20	4.0	6.0	2.00	2.00
D	TTWW+m	MT20	5.0	6.0	1.75	1.50
E	TMWW-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMWW-t	MT20	4.0	4.0		
I	TMVW-t	MT20	4.0	6.0	1.75	2.75
J	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BMWWW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	4.0	4.0		
P	BMWW-t	MT20	4.0	4.0		
Q	BMVW1-t	MT20	4.0	4.0	1.50	2.00

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
J	1622	0	1622	0	0	1-10	1-10 & BLOCK
Q	1692	0	1692	0	0	5-8	1-13

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1166	657 / 0	0 / 0	0 / 0	0 / 0	509 / 0	0 / 0
Q	1210	716 / 0	0 / 0	0 / 0	0 / 0	495 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. J ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION D-I, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.36 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 I-J, E-O, E-M, F-M, H-L, 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 MEMB.	FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO			
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C- P	0 / 84	0.03 (4)
B- C	0 / 21	-78.0	-78.0	0.13 (1)	10.00	P- D	0 / 86	0.03 (4)
C- D	-1393 / 0	-78.0	-78.0	0.16 (1)	5.36	D- O	0 / 788	0.13 (1)
D- E	-1318 / 0	-85.5	-85.5	0.55 (1)	2.00	O- E	-550 / 0	0.36 (1)
E- F	-1290 / 0	-85.5	-85.5	0.55 (1)	2.00	E- M	-54 / 0	0.04 (1)
F- G	-1290 / 0	-85.5	-85.5	0.55 (1)	2.00	M- F	-481 / 0	0.32 (1)
G- H	-1290 / 0	-85.5	-85.5	0.55 (1)	2.00	M- H	0 / 750	0.12 (1)
H- I	-886 / 0	-85.5	-85.5	0.52 (1)	2.00	L- H	-1235 / 0	0.81 (1)
J- I	-1576 / 0	0.0	0.0	0.74 (1)	5.26	L- I	0 / 1628	0.26 (1)
Q- B	-209 / 0	0.0	0.0	0.02 (1)	7.81	Q- C	-1662 / 0	0.48 (1)
Q- P	0 / 843	-18.5	-18.5	0.28 (4)	10.00			
P- O	0 / 889	-18.5	-18.5	0.29 (4)	10.00			
O- N	0 / 1319	-18.5	-18.5	0.28 (1)	10.00			
N- M	0 / 1319	-18.5	-18.5	0.28 (1)	10.00			
M- L	0 / 886	-18.5	-18.5	0.27 (4)	10.00			
L- K	0 / 0	-18.5	-18.5	0.17 (4)	10.00			
K- J	0 / 0	-18.5	-18.5	0.17 (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 (0.13")

CSI: TC=0.74/1.00 (I-J:1) , BC=0.29/1.00 (O-P:4) , WB=0.81/1.00 (H-L:1) , SSI=0.25/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

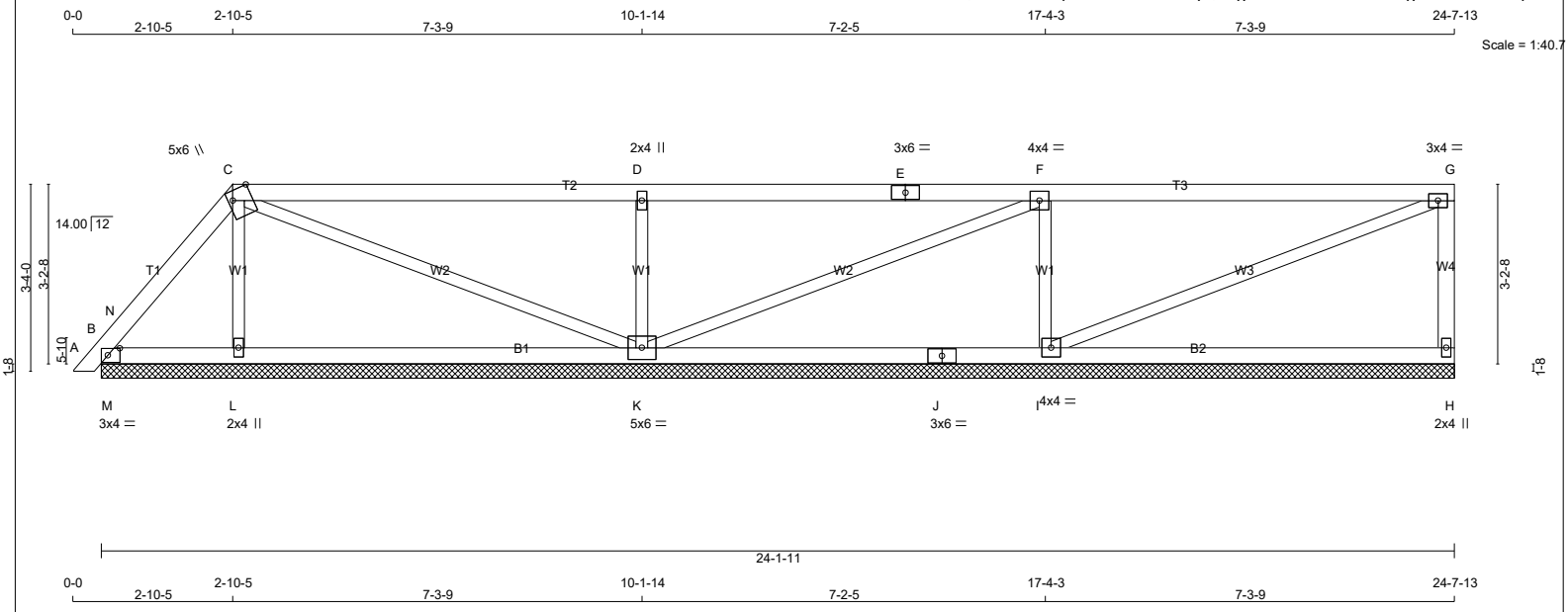
JSI GRIP= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.47 (N) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H234P		1	TRUSS DESC. JT 45147	E21104472

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:30 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-8W?WeNijQNvq9oN63zOiuTKK3POqEvInewP2KTyTDaN



TOTAL WEIGHT = 85 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	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	6.0		
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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	287	0	287	0	0	24-1-11 (9-1-11)	
B	178	0	178	0	0	24-1-11 (9-1-11)	
L	353	0	353	0	0	24-1-11 (9-1-11)	
K	786	0	786	0	0	24-1-11 (9-1-11)	
I	756	0	756	0	0	24-1-11 (9-1-11)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	205	126 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
B	122	100 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
L	257	126 / 0	0 / 0	0 / 0	0 / 0	131 / 0	0 / 0
K	559	353 / 0	0 / 0	0 / 0	0 / 0	206 / 0	0 / 0
I	539	325 / 0	0 / 0	0 / 0	0 / 0	214 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- N	0 / 49	-78.0	-78.0	0.05 (1)	10.00
N- C	-87 / 0	-78.0	-78.0	0.04 (1)	6.25
C- D	0 / 16	-78.0	-78.0	0.56 (1)	10.00
D- E	0 / 16	-78.0	-78.0	0.56 (1)	10.00
E- F	0 / 16	-78.0	-78.0	0.56 (1)	10.00
F- G	-13 / 0	-78.0	-78.0	0.56 (1)	6.25
H- G	-234 / 0	0.0	0.0	0.04 (1)	7.81
B- M	0 / 49	-18.5	-18.5	0.06 (1)	10.00
M- L	0 / 49	-18.5	-18.5	0.16 (4)	10.00
L- K	0 / 41	-18.5	-18.5	0.18 (4)	10.00
K- J	0 / 13	-18.5	-18.5	0.24 (4)	10.00
J- I	0 / 13	-18.5	-18.5	0.24 (4)	10.00
I- H	0 / 0	-18.5	-18.5	0.24 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- C	-219 / 0	0.04 (1)
K- C	-62 / 0	0.08 (1)
K- D	-621 / 0	0.12 (1)
K- F	-32 / 0	0.04 (1)
I- F	-609 / 0	0.11 (1)
I- G	0 / 14	0.00 (1)
M- N	-245 / 0	0.00 (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, 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=0.56/1.00 (C-D:1) , BC=0.24/1.00 (I-K:4) , WB=0.12/1.00 (D-K: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

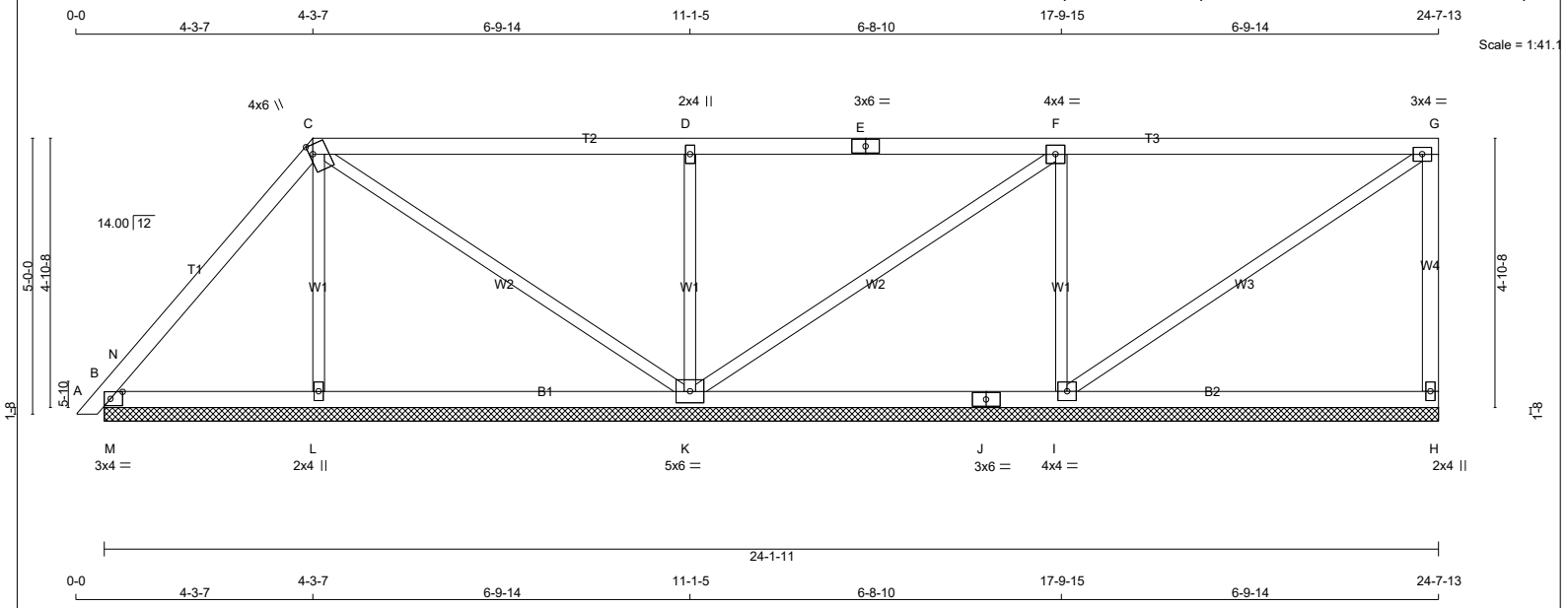
JSI GRIP= 0.85 (K) (INPUT = 0.90)
JSI METAL= 0.13 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H235P		1	TRUSS DESC. JT 45147	E21104473

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:32 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-4v7H22kzy 9OP6XVAOQAzuPheD4cinR45Eu8OLyTDaL



TOTAL WEIGHT = 93 lb [M]

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
H - G	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - H	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	2.00	0.75
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	6.0		
L	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	279	0	279	0	0	24-1-11 (8-2-3)	8
B	285	0	285	0	0	24-1-11 (8-2-3)	8
L	320	0	320	0	0	24-1-11 (8-2-3)	8
K	806	0	806	0	0	24-1-11 (8-2-3)	8
I	668	0	668	0	0	24-1-11 (8-2-3)	8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	199	123 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0
B	200	141 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0
L	234	114 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
K	571	368 / 0	0 / 0	0 / 0	0 / 0	204 / 0	0 / 0
I	478	284 / 0	0 / 0	0 / 0	0 / 0	194 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	L- C	-180 / 0	0.06 (1)
B- N	0 / 167	-78.0	-78.0	0.11 (1)	10.00	C- K	-124 / 0	0.17 (1)
N- C	-129 / 0	-78.0	-78.0	0.13 (1)	6.25	K- D	-580 / 0	0.20 (1)
C- D	0 / 33	-78.0	-78.0	0.49 (1)	10.00	K- F	-68 / 0	0.10 (1)
D- E	0 / 33	-78.0	-78.0	0.49 (1)	10.00	I- F	-542 / 0	0.19 (1)
E- F	0 / 33	-78.0	-78.0	0.49 (1)	10.00	I- G	0 / 29	0.01 (1)
F- G	-24 / 0	-78.0	-78.0	0.49 (1)	6.25	M- N	-489 / 0	0.00 (1)
H- G	-230 / 0	0.0	0.0	0.09 (1)	7.81			
B- M	0 / 75	-18.5	-18.5	0.13 (1)	10.00			
M- L	0 / 75	-18.5	-18.5	0.15 (4)	10.00			
L- K	0 / 71	-18.5	-18.5	0.16 (4)	10.00			
K- J	0 / 24	-18.5	-18.5	0.21 (4)	10.00			
J- I	0 / 24	-18.5	-18.5	0.21 (4)	10.00			
I- H	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

CSI: TC=0.49/1.00 (D-F:1) , BC=0.21/1.00 (I-K:4) , WB=0.20/1.00 (D-K:1) , SSI=0.38/1.00 (B-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

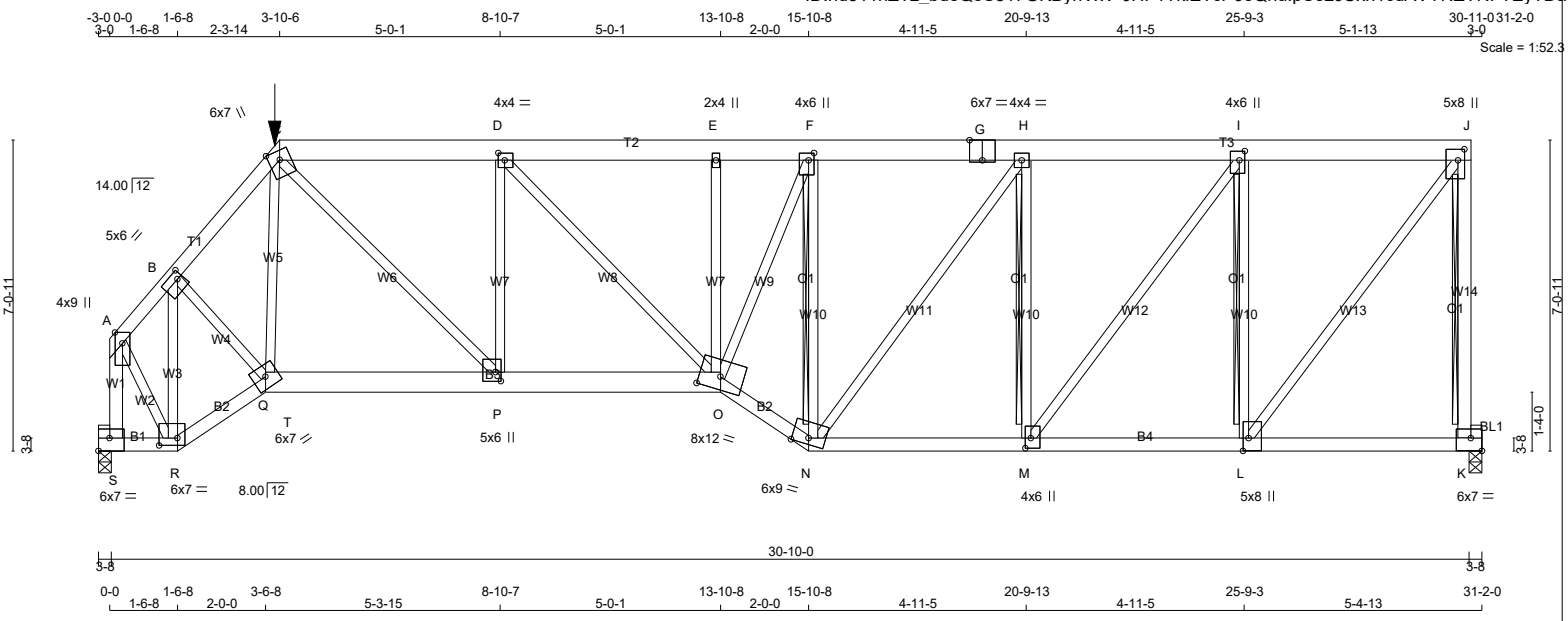
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.23 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H240		1	TRUSS DESC. JT 45147	E21104474

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:34 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-0HF1TklETcP6eQhuIpSe2JUxh1cdAVYNZYNFTEyTDaJ



TOTAL WEIGHT = 179 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - G	2x6	DRY	No.2	SPF
G - J	2x6	DRY	No.2	SPF
K - 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	2x6	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
BEARING BLOCKS				
BL1	2 - 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	9.0	3.00	Edge
B	TMWW-t	MT20	5.0	6.0	2.00	1.50
C	TTWW+m	MT20	6.0	7.0	Edge	
D	TMWW-t	MT20	4.0	4.0	2.00	1.75
E	TMW+w	MT20	2.0	4.0		
F	TMWW+t	MT20	4.0	6.0	2.00	1.50
G	TS-t	MT20	6.0	7.0	Edge	3.50
H	TMWW-t	MT20	4.0	4.0		
I	TMWW+t	MT20	4.0	6.0	2.50	1.50
J	TMVW+p	MT20	5.0	8.0	3.00	1.75
K	BMVK1-t	MT20	6.0	7.0	3.50	Edge
L	BMWW+t	MT20	5.0	8.0	Edge	1.50
M	BMWW+t	MT20	4.0	6.0	2.75	1.50
N	BBWW-m	MT20	6.0	9.0	Edge	
O	BBWWW-m	MT20	8.0	12.0	3.50	5.75
P	BMWW+t	MT20	5.0	6.0	2.50	1.50
Q	BBWW-h	MT20	6.0	7.0		
R	BBWW-l	MT20	6.0	7.0	2.00	5.00
S	BMVK1-t	MT20	6.0	7.0	3.50	Edge

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	3193	0	3193	0	0	3-8	3-8
S	3310	0	3310	0	0	3-8	3-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	2276	1392 / 0	0 / 0	0 / 0	0 / 0	883 / 0	0 / 0
S	2362	1432 / 0	0 / 0	0 / 0	0 / 0	930 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 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 J-K, F-N, I-L
2x3 DRY SPF No.2 T-BRACE AT H-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-1744 / 0	-78.0	-78.0	0.07 (1)	4.97	R- B	-2460 / 0	0.68 (1)
B- C	-3208 / 0	-78.0	-78.0	0.24 (1)	3.69	B- Q	0 / 1577	0.39 (1)
C- D	-3956 / 0	-78.0	-78.0	0.24 (1)	4.14	Q- C	-48 / 55	0.02 (1)
D- E	-4574 / 0	-78.0	-78.0	0.32 (1)	3.81	C- P	0 / 2705	0.67 (1)
E- F	-4572 / 0	-78.0	-78.0	0.27 (1)	3.85	P- D	-1131 / 0	0.51 (1)
F- G	-3701 / 0	-165.7	-165.7	0.34 (1)	4.13	D- O	0 / 899	0.22 (1)
G- H	-3701 / 0	-165.7	-165.7	0.34 (1)	4.13	O- E	-93 / 0	0.04 (1)
H- I	-3258 / 0	-165.7	-165.7	0.37 (1)	4.32	O- F	0 / 2480	0.61 (1)
I- J	-2060 / 0	-165.7	-165.7	0.32 (1)	5.25	N- F	-2892 / 0	1.00 (1)
K- J	-3113 / 0	0.0	0.0	0.84 (1)	7.81	N- H	0 / 743	0.18 (1)
S- A	-3288 / 0	0.0	0.0	0.48 (1)	4.69	M- H	-1422 / 0	0.93 (1)
						M- I	0 / 2015	0.50 (1)
S- R	-220 / 0	-39.3	-39.3	0.02 (4)	6.25	L- I	-2543 / 0	0.88 (1)
R- Q	0 / 1294	-147.8	-147.8	0.34 (1)	10.00	L- J	0 / 3484	0.86 (1)
Q- T	0 / 2093	-147.8	-147.8	0.54 (1)	10.00	A- R	0 / 2331	0.58 (1)
T- P	0 / 2093	-127.0	-127.0	0.54 (1)	10.00			
P- O	0 / 3956	-127.0	-127.0	0.78 (1)	10.00			
O- N	0 / 4436	-127.0	-127.0	0.88 (1)	10.00			
N- M	0 / 3258	-39.3	-39.3	0.70 (1)	10.00			
M- L	0 / 2060	-39.3	-39.3	0.50 (1)	10.00			
L- K	-68 / 0	-39.3	-39.3	0.24 (4)	6.25			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-10-6	-267	-267	---	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 = 4-1-6
RIGHT 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
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 4-1-6 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 1-6-8
START SPAN CARRIED = 6-6-0
END DISTANCE = 15-10-8
END SPAN CARRIED = 6-6-0
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 = 0-0
RIGHT 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
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 15-3-8 OF SPAN MEASURED FROM THE RIGHT.

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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.21")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/ 917 (0.40")

CSI: TC=0.84/1.00 (J-K:1) , BC=0.88/1.00 (N-O:1) , WB=1.00/1.00 (F-N:1) , SSI=0.33/1.00 (I-J: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

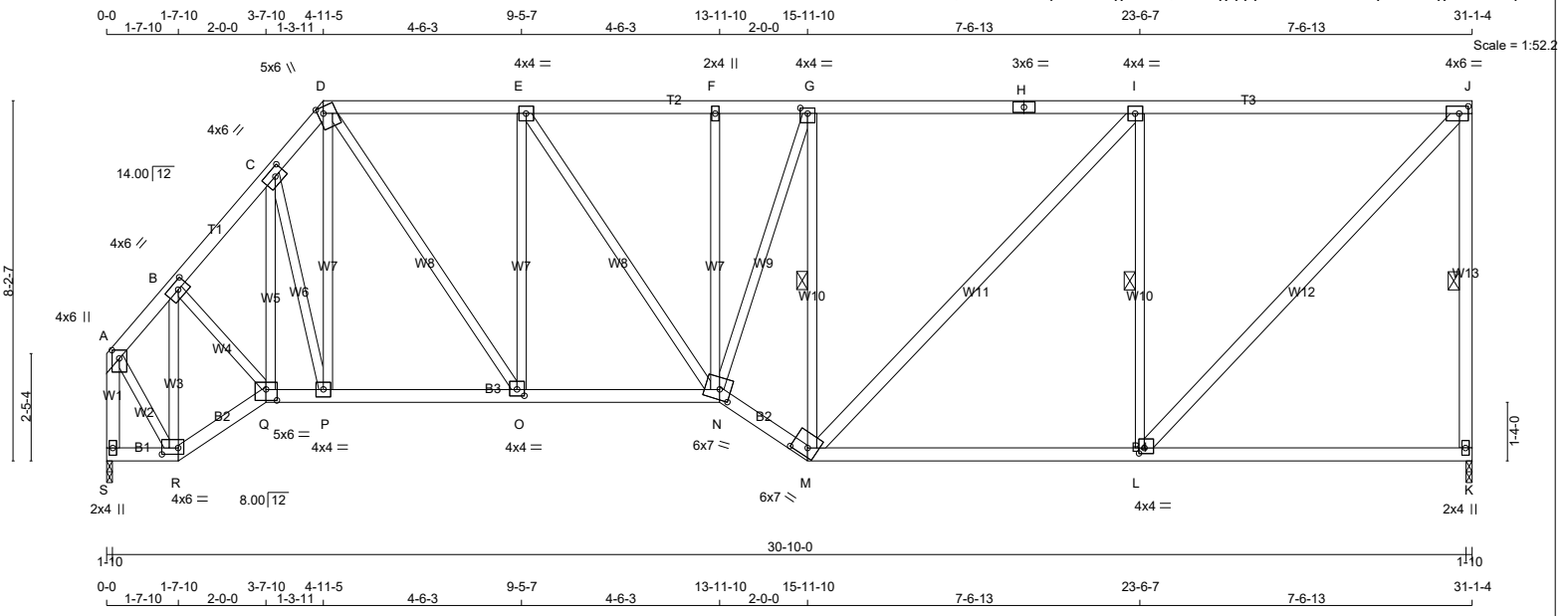
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H242T		1	TRUSS DESC. JT 45147	E21104475

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:36 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-zqMouQnU?DqqtjqGPDV67kaH1qOKeVJq0ssMX6yTDaH



LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
K - 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 - 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
M - I	2x4	DRY	No.2	SPF
L - J	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	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TMWW-t	MT20	4.0	6.0	2.00	2.75
D	TTWW+m	MT20	5.0	6.0	1.75	1.50
E	TMWW-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0	1.50	2.00
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	4.0		
J	TMVW-t	MT20	4.0	6.0	2.00	2.50
K	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BBWW-h	MT20	6.0	7.0	2.25	4.25
N	BBWWW-m	MT20	6.0	7.0	2.75	3.00
O	BMWW-t	MT20	4.0	4.0	1.75	2.00
P	BMWW-t	MT20	4.0	4.0		
Q	BBWW-l	MT20	5.0	6.0	3.00	3.00
R	BBWW-l	MT20	4.0	6.0	1.75	4.50
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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
K	1500	0	1500	0	0	1-10	1-10
S	1500	0	1500	0	0	1-10	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	1070	653 / 0	0 / 0	0 / 0	0 / 0	417 / 0	0 / 0
S	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) K, S

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.12 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-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-903 / 0	-78.0	-78.0	0.03 (1)	6.25
B- C	-1493 / 0	-78.0	-78.0	0.07 (1)	5.32
C- D	-1502 / 0	-78.0	-78.0	0.04 (1)	5.33
D- E	-1533 / 0	-78.0	-78.0	0.29 (1)	4.99
E- F	-1764 / 0	-78.0	-78.0	0.30 (1)	4.71
F- G	-1762 / 0	-78.0	-78.0	0.36 (1)	4.59
G- H	-1509 / 0	-78.0	-78.0	0.85 (1)	4.12
H- I	-1509 / 0	-78.0	-78.0	0.85 (1)	4.12
I- J	-1163 / 0	-78.0	-78.0	0.80 (1)	4.63
K- J	-1447 / 0	0.0	0.0	0.44 (1)	5.43
S- A	-1485 / 0	0.0	0.0	0.19 (1)	6.73
S- R	0 / 0	-18.5	-18.5	0.01 (4)	10.00
R- Q	0 / 676	-18.5	-18.5	0.12 (1)	10.00
Q- P	0 / 973	-18.5	-18.5	0.19 (1)	10.00
P- O	0 / 958	-18.5	-18.5	0.20 (1)	10.00
O- N	0 / 1533	-18.5	-18.5	0.29 (1)	10.00
N- M	0 / 1794	-18.5	-18.5	0.30 (1)	10.00
M- L	0 / 1163	-18.5	-18.5	0.42 (4)	10.00
L- K	0 / 0	-18.5	-18.5	0.30 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
R- B	-1086 / 0	0.29 (1)
B- Q	0 / 636	0.14 (1)
Q- C	-89 / 0	0.04 (1)
C- P	-71 / 0	0.03 (1)
P- D	0 / 129	0.03 (4)
D- O	0 / 1012	0.23 (1)
O- E	-746 / 0	0.59 (1)
E- N	0 / 408	0.09 (1)
N- F	-124 / 0	0.10 (1)
N- G	0 / 883	0.20 (1)
M- G	-1282 / 0	0.55 (1)
M- I	0 / 500	0.08 (1)
L- I	-1045 / 0	0.45 (1)
L- J	0 / 1683	0.27 (1)
A- R	0 / 951	0.21 (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, 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 (0.20")

CSI: TC=0.85/1.00 (G-I:1) , BC=0.42/1.00 (L-M:4) , WB=0.59/1.00 (E-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

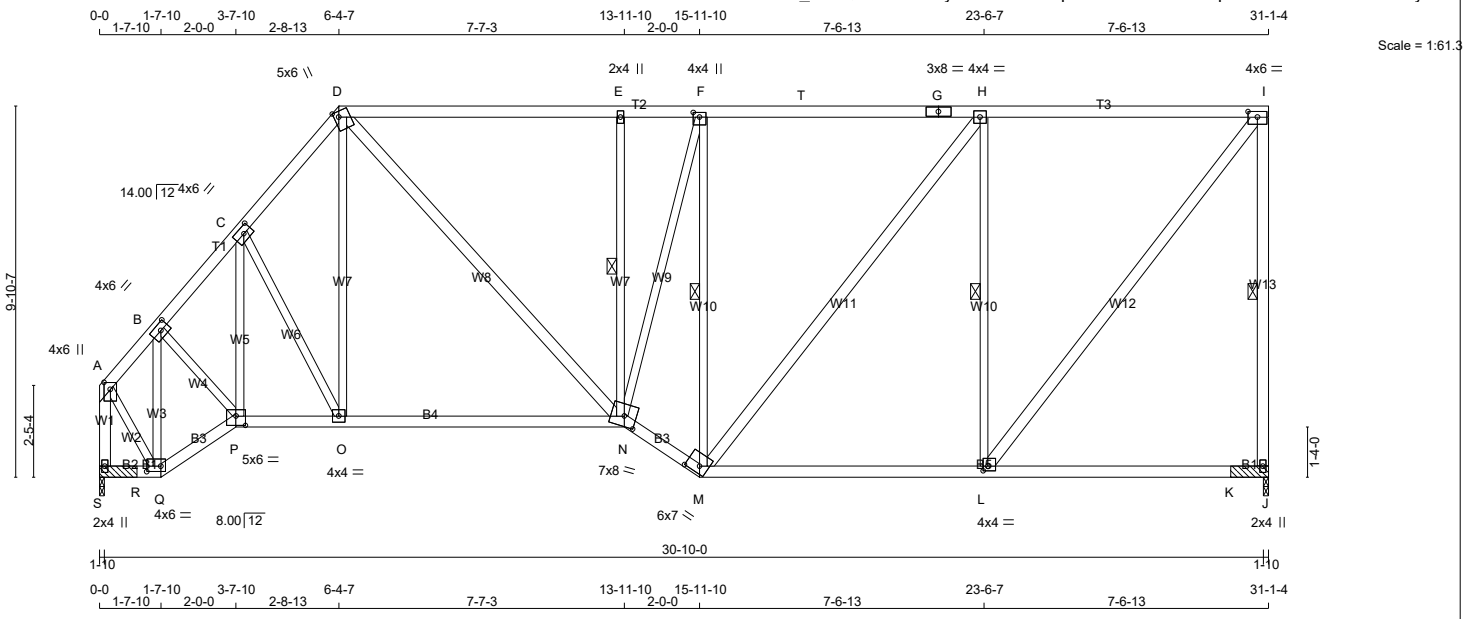
JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.40 (L) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H243T		1	TRUSS DESC. JT 45147	E21104476

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:27 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-UOhiPqxCF0zd6730tEmwqBDTW0rAzFNW9deCccyTDbM



TOTAL WEIGHT = 3 X 181 = 544 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
S - A	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
D - N	2x4	DRY	No.2	SPF
M - H	2x4	DRY	No.2	SPF
L - 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	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TMWW-t	MT20	4.0	6.0	2.00	2.75
D	TTWW+m	MT20	5.0	6.0	1.75	1.50
E	TMW+w	MT20	2.0	4.0		
F	TMWW+t	MT20	4.0	4.0	1.50	2.00
G	TS-t	MT20	3.0	8.0		
H	TMWW-t	MT20	4.0	4.0		
I	TMVW-t	MT20	4.0	6.0	1.75	3.00
J	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BBWW-h	MT20	6.0	7.0	2.25	4.25
N	BBWWW-m	MT20	7.0	8.0	3.25	3.75
O	BMWW-t	MT20	4.0	4.0		
P	BBWW-l	MT20	5.0	6.0	3.00	3.00
Q	BBWW-l	MT20	4.0	6.0	1.75	4.50
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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
J	1612	0	1612	0	0	1-10	1-10 & BLOCK
S	1574	0	1574	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1159	653 / 0	0 / 0	0 / 0	0 / 0	506 / 0	0 / 0
S	1129	653 / 0	0 / 0	0 / 0	0 / 0	476 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. J 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. S ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION D-I, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.19 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, E-N, F-M, H-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-950 / 0	-78.0	-78.0	0.04 (1)	6.25
B- C	-1571 / 0	-78.0	-78.0	0.09 (1)	5.19
C- D	-1551 / 0	-78.0	-78.0	0.10 (1)	5.21
D- E	-1558 / 0	-85.5	-85.5	0.76 (1)	2.00
E- F	-1551 / 0	-85.5	-85.5	0.61 (1)	2.00
F- T	-1332 / 0	-85.5	-85.5	0.91 (1)	2.00
T- G	-1332 / 0	-85.5	-85.5	0.91 (1)	2.00
G- H	-1332 / 0	-85.5	-85.5	0.91 (1)	2.00
H- I	-1033 / 0	-85.5	-85.5	0.86 (1)	2.00
J- I	-1559 / 0	0.0	0.0	0.73 (1)	5.28
S- A	-1559 / 0	0.0	0.0	0.20 (1)	6.60
S- R	0 / 0	-18.5	-18.5	0.01 (4)	10.00
R- Q	0 / 0	-18.5	-18.5	0.01 (4)	10.00
Q- P	0 / 708	-18.5	-18.5	0.13 (1)	10.00
P- O	0 / 1034	-18.5	-18.5	0.34 (4)	10.00
O- N	0 / 996	-18.5	-18.5	0.34 (4)	10.00
N- M	0 / 1585	-18.5	-18.5	0.27 (1)	10.00
M- L	0 / 1033	-18.5	-18.5	0.42 (4)	10.00
L- K	0 / 0	-18.5	-18.5	0.30 (4)	10.00
K- J	0 / 0	-18.5	-18.5	0.30 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
Q- B	-1138 / 0	0.30 (1)
B- P	0 / 688	0.15 (1)
P- C	-119 / 0	0.05 (1)
C- O	-86 / 0	0.05 (1)
O- D	0 / 211	0.06 (4)
D- N	0 / 826	0.13 (1)
N- E	-557 / 0	0.26 (1)
N- F	0 / 937	0.21 (1)
M- F	-1183 / 0	0.78 (1)
M- H	0 / 481	0.08 (1)
L- H	-1136 / 0	0.75 (1)
L- I	0 / 1666	0.27 (1)
A- Q	0 / 995	0.22 (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 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 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.91/1.00 (F-H:1) , BC=0.42/1.00 (L-M:4) , WB=0.78/1.00 (F-M:1) , SSI=0.31/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

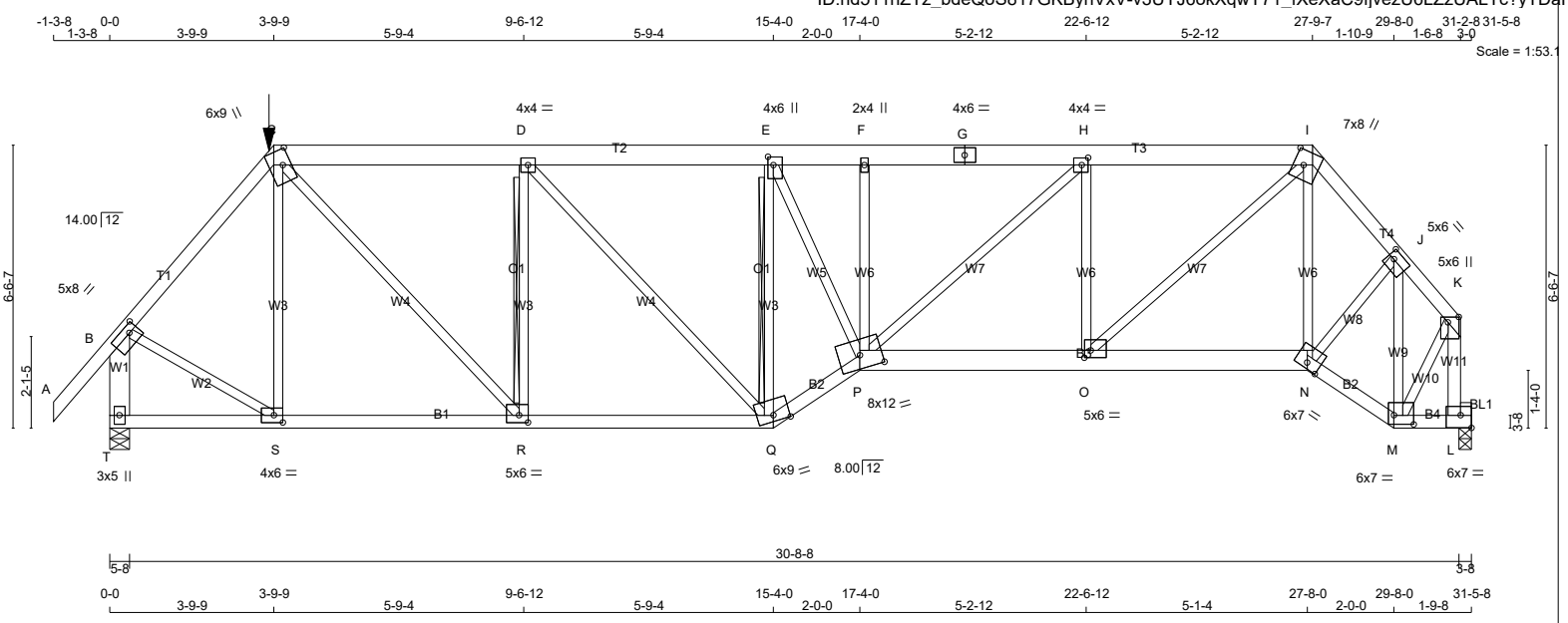
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.37 (L) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H251T		1	TRUSS DESC. JT 45147	E21104477

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:38 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-v3UYJ6okXqwY71_fXeXaC9fjvezU6LZzUALTc?yTDaF



TOTAL WEIGHT = 171 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
T - B	2x6	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
T - Q	2x4	DRY	No.2	SPF
Q - P	2x4	DRY	No.2	SPF
P - N	2x6	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - L	2x4	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
B	TMVW-t	MT20	5.0	8.0	2.00	2.50
C	TTWW+m	MT20	6.0	9.0	4.25	2.25
D	TMWW-t	MT20	4.0	4.0		
E	TMWW+t	MT20	4.0	6.0	2.25	1.50
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	4.0	6.0		
H	TMWW-t	MT20	4.0	4.0	2.00	1.75
I	TTWW+m	MT20	7.0	8.0	4.00	2.75
J	TMWW-t	MT20	5.0	6.0	2.25	1.75
K	TMVW+p	MT20	5.0	6.0	1.50	3.00
L	BMVK1-t	MT20	6.0	7.0	3.50	Edge
M	BBWW-l	MT20	6.0	7.0	2.50	5.50
N	BBWW-h	MT20	6.0	7.0	1.50	3.50
O	BMWW-t	MT20	5.0	6.0	2.00	1.75
P	BBWWW-m	MT20	8.0	12.0	3.75	6.00
Q	BBWW-m	MT20	6.0	9.0	Edge	
R	BMWW-t	MT20	5.0	6.0	2.00	2.50
S	BMWW-t	MT20	4.0	6.0	2.00	2.50
T	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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
T	2976	0	2976	0	0	5-8	4-3
L	2896	0	2896	0	0	3-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	2121	1296 / 0	0 / 0	0 / 0	0 / 0	825 / 0	0 / 0
L	2070	1237 / 0	0 / 0	0 / 0	0 / 0	833 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L
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 = 3.74 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 D-R
2x4 DRY SPF No.2 T-BRACE AT E-Q

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 42	-78.0	-78.0	0.12 (1)	10.00
B- C	-2543 / 0	-78.0	-78.0	0.38 (1)	3.99
C- D	-3297 / 0	-153.5	-153.5	0.48 (1)	4.14
D- E	-3781 / 0	-153.5	-153.5	0.51 (1)	3.87
E- F	-4732 / 0	-78.0	-78.0	0.30 (1)	3.75
F- G	-4734 / 0	-78.0	-78.0	0.33 (1)	3.74
G- H	-4734 / 0	-78.0	-78.0	0.33 (1)	3.74
H- I	-3952 / 0	-78.0	-78.0	0.26 (1)	4.12
I- J	-2794 / 0	-78.0	-78.0	0.17 (1)	3.99
J- K	-1522 / 0	-78.0	-78.0	0.07 (1)	5.25
T- B	-2926 / 0	0.0	0.0	0.25 (1)	6.10
L- K	-2875 / 0	0.0	0.0	0.42 (1)	5.02
T- S	0 / 0	-36.4	-36.4	0.20 (4)	10.00
S- R	0 / 1646	-36.4	-36.4	0.50 (4)	10.00
R- Q	0 / 3297	-36.4	-36.4	0.75 (1)	10.00
Q- P	0 / 4529	-112.0	-112.0	0.88 (1)	10.00
P- O	0 / 3953	-112.0	-112.0	0.73 (1)	10.00
O- N	0 / 1821	-112.0	-112.0	0.46 (1)	10.00
N- M	0 / 1127	-129.9	-129.9	0.30 (1)	10.00
M- L	-192 / 0	-36.4	-36.4	0.02 (4)	6.25

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
S- C	-548 / 0	0.37 (1)
C- R	0 / 2415	0.60 (1)
R- D	-1539 / 0	0.83 (1)
D- Q	0 / 708	0.18 (1)
Q- E	-2877 / 0	0.87 (1)
E- P	0 / 2479	0.61 (1)
P- F	-89 / 0	0.03 (1)
P- H	0 / 1059	0.26 (1)
O- H	-1212 / 0	0.44 (1)
O- I	0 / 2879	0.71 (1)
N- I	-61 / 32	0.02 (1)
N- J	0 / 1377	0.34 (1)
M- J	-2139 / 0	0.59 (1)
B- S	0 / 1813	0.45 (1)
M- K	0 / 2030	0.50 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-9-9	-216	-216	---	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 = 3-9-9
RIGHT SETBACK = 3-8-1
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 15-4-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 15-4-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 29-8-0
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 = 3-9-9
RIGHT SETBACK = 3-8-1
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 3-8-1 OF SPAN MEASURED FROM THE RIGHT.

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 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 977 (0.38")

CSI: TC=0.51/1.00 (D-E:1) , BC=0.88/1.00 (P-Q:1) , WB=0.87/1.00 (E-Q:1) , SSI=0.35/1.00 (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

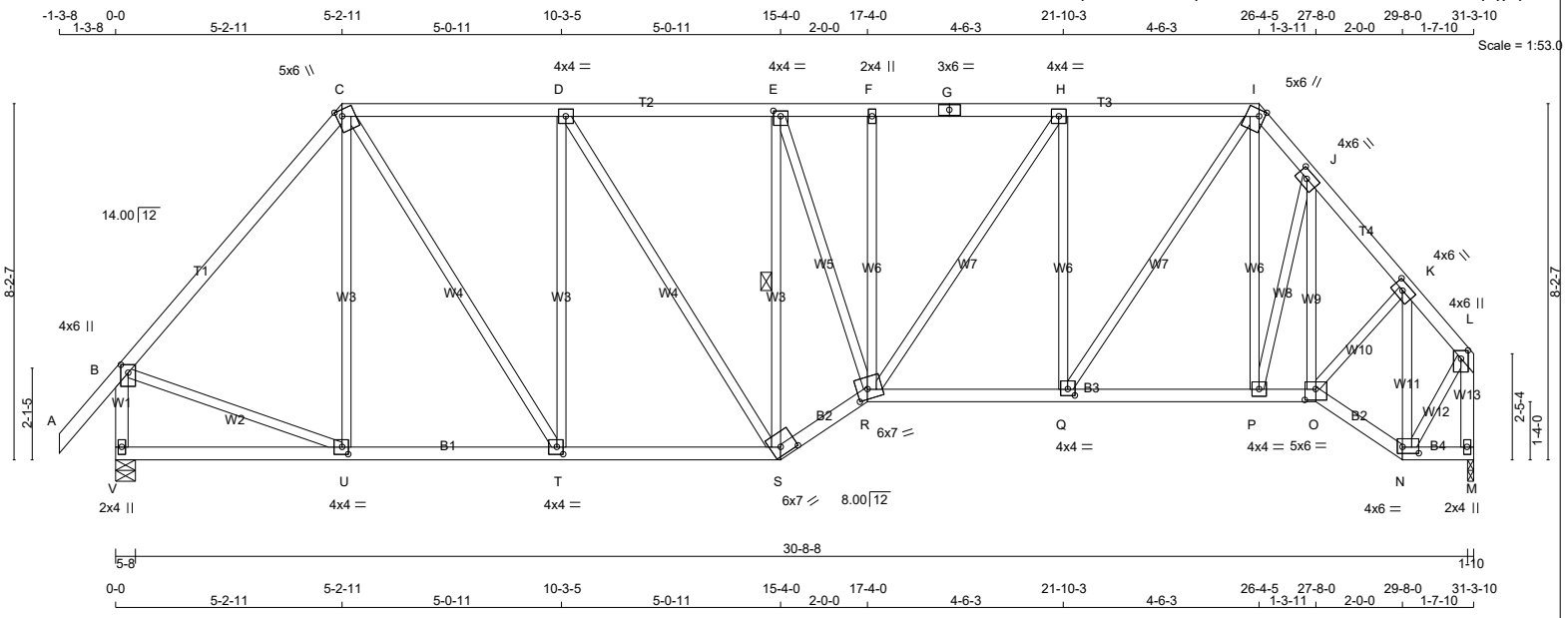
CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H252T		1	TRUSS DESC. JT 45147	E21104478

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:40 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-rRcIknq 3SAGML81e3Z2lak3lRo3aEJFxTqZquyTDaD



TOTAL WEIGHT = 172 lb [M]

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 - I	2x4	DRY	No.2	SPF
I - L	2x4	DRY	No.2	SPF
V - B	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
V - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	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
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	TMWW-t	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0	1.50	2.00
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMWW-t	MT20	4.0	4.0		
I	TTWW+m	MT20	5.0	6.0	1.75	1.50
J	TMWW-t	MT20	4.0	6.0	2.00	2.75
K	TMWW-t	MT20	4.0	6.0	2.00	2.75
L	TMVW+p	MT20	4.0	6.0	2.25	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BBWW-l	MT20	4.0	6.0	1.75	4.50
O	BBWW-l	MT20	5.0	6.0	3.00	3.00
P	BMWW-t	MT20	4.0	4.0		
Q	BMWW-t	MT20	4.0	4.0	1.75	2.00
R	BBWWW-m	MT20	6.0	7.0	2.75	3.00
S	BBWW-h	MT20	6.0	7.0	2.25	4.25
T	BMWW-t	MT20	4.0	4.0	2.00	1.75
U	BMWW-t	MT20	4.0	4.0	2.00	1.75
V	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	1619	0	1619	0	0	5-8	1-12
M	1510	0	1510	0	0	1-10	1-10

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.69 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-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	U- C	-169 / 10	0.22 (1)
B- C	-1302 / 0	-78.0	-78.0	0.48 (1)	5.13	C- T	0 / 940	0.21 (1)
C- D	-1349 / 0	-78.0	-78.0	0.34 (1)	5.17	T- D	-697 / 0	0.91 (1)
D- E	-1510 / 0	-78.0	-78.0	0.35 (1)	4.94	D- S	0 / 297	0.07 (1)
E- F	-1785 / 0	-78.0	-78.0	0.17 (1)	4.85	S- E	-1185 / 0	0.50 (1)
F- G	-1788 / 0	-78.0	-78.0	0.30 (1)	4.69	E- R	0 / 952	0.21 (1)
G- H	-1788 / 0	-78.0	-78.0	0.30 (1)	4.69	R- F	-205 / 0	0.16 (1)
H- I	-1546 / 0	-78.0	-78.0	0.28 (1)	4.99	R- H	0 / 427	0.10 (1)
I- J	-1514 / 0	-78.0	-78.0	0.04 (1)	5.32	Q- H	-754 / 0	0.60 (1)
J- K	-1504 / 0	-78.0	-78.0	0.07 (1)	5.30	Q- I	0 / 1022	0.23 (1)
K- L	-909 / 0	-78.0	-78.0	0.03 (1)	6.25	P- I	0 / 128	0.03 (4)
V- B	-1579 / 0	0.0	0.0	0.19 (1)	6.56	P- J	-70 / 0	0.03 (1)
M- L	-1495 / 0	0.0	0.0	0.20 (1)	6.71	O- J	-90 / 0	0.04 (1)
						O- K	0 / 641	0.14 (1)
V- U	0 / 0	-18.5	-18.5	0.12 (4)	10.00	N- K	-1093 / 0	0.29 (1)
U- T	0 / 842	-18.5	-18.5	0.20 (1)	10.00	B- U	0 / 888	0.20 (1)
T- S	0 / 1350	-18.5	-18.5	0.27 (1)	10.00	N- L	0 / 957	0.22 (1)
S- R	0 / 1796	-18.5	-18.5	0.30 (1)	10.00			
R- Q	0 / 1546	-18.5	-18.5	0.30 (1)	10.00			
Q- P	0 / 966	-18.5	-18.5	0.20 (1)	10.00			
P- O	0 / 981	-18.5	-18.5	0.19 (1)	10.00			
O- N	0 / 681	-18.5	-18.5	0.12 (1)	10.00			
N- M	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, 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 (0.17")

CSI: TC=0.48/1.00 (B-C:1) , BC=0.30/1.00 (R-S:1) , WB=0.91/1.00 (D-T:1) , SSI=0.19/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

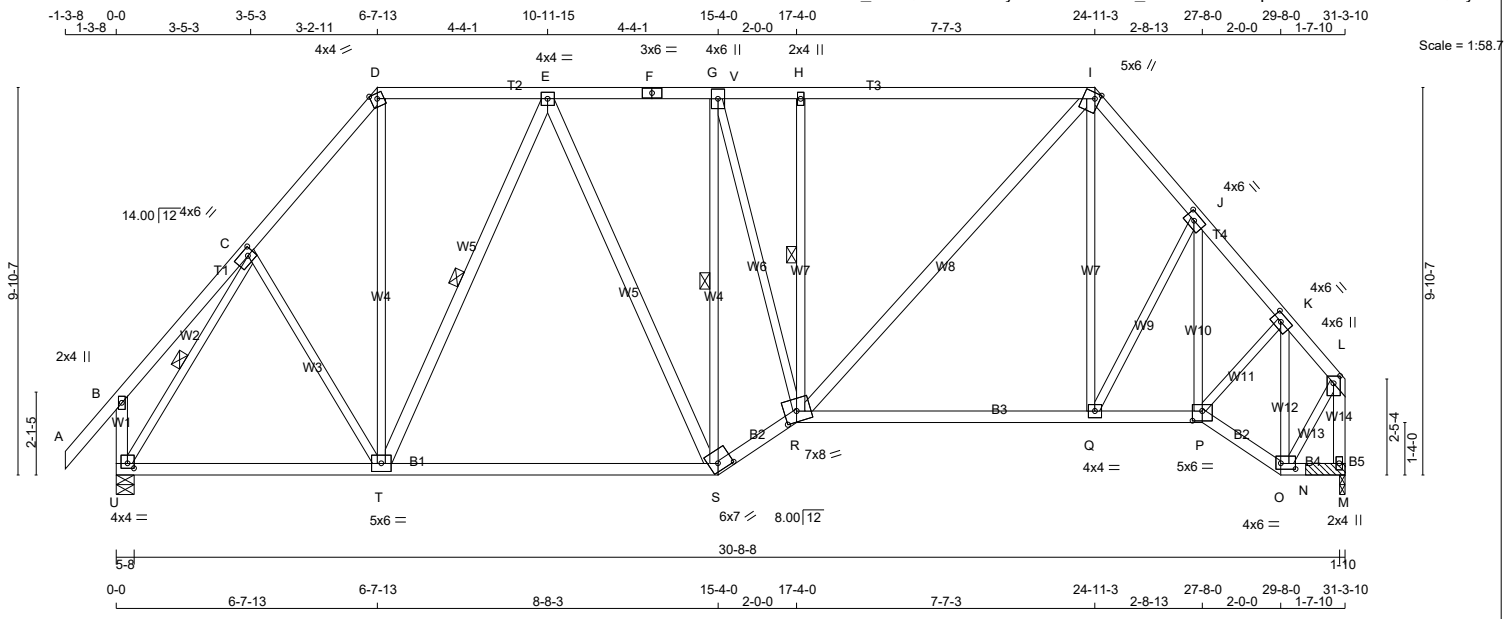
JSI GRIP= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.51 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H253T		1	TRUSS DESC. JT 45147	E21104479

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:31 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-MAxDFB_iJFT2akMn64qs?1NBNdBZv4u53EcQlNyTDbI



TOTAL WEIGHT = 3 X 185 = 556 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
I - L	2x4	DRY	No.2	SPF
U - B	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	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
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
T - E	2x4	DRY	No.2	SPF
E - S	2x4	DRY	No.2	SPF
R - I	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		
C	TMWW-t	MT20	4.0	6.0	2.00	2.00
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	6.0		
H	TMW+w	MT20	2.0	4.0		
I	TTWW+m	MT20	5.0	6.0	1.75	1.50
J	TMWW-t	MT20	4.0	6.0	2.00	2.75
K	TMWW-t	MT20	4.0	6.0	2.00	2.75
L	TMVW+p	MT20	4.0	6.0	2.25	2.00
M	BMV1+p	MT20	2.0	4.0		
O	BBWW-l	MT20	4.0	6.0	1.75	4.50
P	BBWW-l	MT20	5.0	6.0	3.00	3.00
Q	BMWW-t	MT20	4.0	4.0		
R	BBWWW-m	MT20	7.0	8.0	3.25	3.75
S	BBWW-h	MT20	6.0	7.0	2.25	4.25
T	BMWWW-t	MT20	5.0	6.0		
U	BMVW1-t	MT20	4.0	4.0	1.50	2.00

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
M	1579	0	1579	0	0	1-10	1-10 & BLOCK
U	1687	0	1687	0	0	5-8	1-13

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1132	657 / 0	0 / 0	0 / 0	0 / 0	475 / 0	0 / 0
U	1207	716 / 0	0 / 0	0 / 0	0 / 0	491 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. M ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION D-I, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO						FR-TO		
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C- T	0 / 87	0.03 (4)
B- C	0 / 20	-78.0	-78.0	0.12 (1)	10.00	T- D	0 / 793	0.18 (1)
C- D	-1396 / 0	-78.0	-78.0	0.15 (1)	5.36	T- E	-756 / 0	0.44 (1)
D- E	-899 / 0	-85.5	-85.5	0.28 (1)	2.00	E- S	0 / 272	0.04 (1)
E- F	-1317 / 0	-85.5	-85.5	0.29 (1)	2.00	S- G	-1034 / 0	0.68 (1)
F- G	-1317 / 0	-85.5	-85.5	0.29 (1)	2.00	G- R	0 / 1027	0.23 (1)
G- V	-1560 / 0	-85.5	-85.5	0.64 (1)	2.00	R- H	-661 / 0	0.31 (1)
V- H	-1560 / 0	-85.5	-85.5	0.64 (1)	2.00	R- I	0 / 836	0.13 (1)
H- I	-1568 / 0	-85.5	-85.5	0.79 (1)	2.00	Q- I	0 / 211	0.06 (4)
I- J	-1557 / 0	-78.0	-78.0	0.10 (1)	5.21	Q- J	-86 / 0	0.05 (1)
J- K	-1577 / 0	-78.0	-78.0	0.09 (1)	5.18	P- J	-119 / 0	0.05 (1)
K- L	-954 / 0	-78.0	-78.0	0.04 (1)	6.25	P- K	0 / 691	0.16 (1)
U- B	-211 / 0	0.0	0.0	0.02 (1)	7.81	O- K	-1142 / 0	0.30 (1)
M- L	-1564 / 0	0.0	0.0	0.21 (1)	6.59	U- C	-1664 / 0	0.48 (1)
						O- L	0 / 999	0.22 (1)
U- T	0 / 844	-18.5	-18.5	0.41 (4)	10.00			
T- S	0 / 1205	-18.5	-18.5	0.45 (4)	10.00			
S- R	0 / 1570	-18.5	-18.5	0.26 (1)	10.00			
R- Q	0 / 1000	-18.5	-18.5	0.34 (4)	10.00			
Q- P	0 / 1038	-18.5	-18.5	0.34 (4)	10.00			
P- O	0 / 711	-18.5	-18.5	0.13 (1)	10.00			
O- N	0 / 0	-18.5	-18.5	0.01 (4)	10.00			
N- M	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 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 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.79/1.00 (H-I:1) , BC=0.45/1.00 (S-T:4) , WB=0.68/1.00 (G-S:1) , SSI=0.30/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

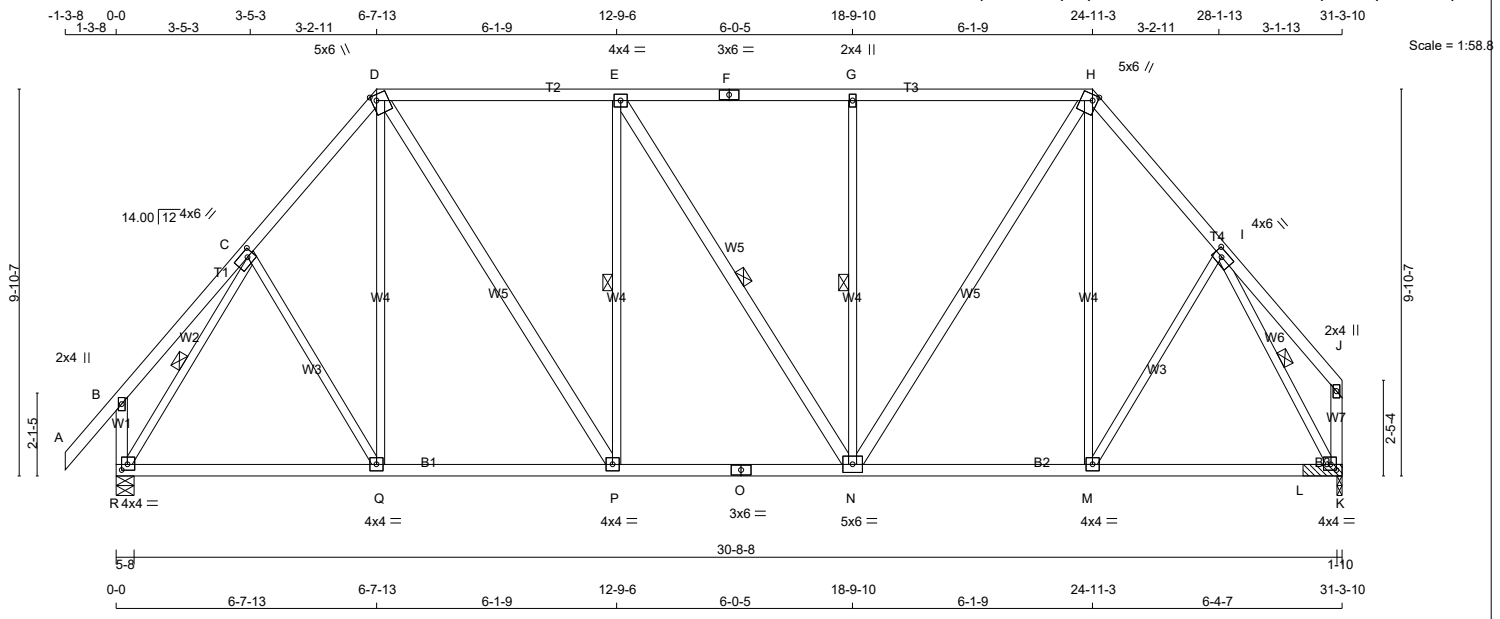
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.37 (I) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H253		1	TRUSS DESC. JT 45147	E21104480

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:33:29 2021 Page 1

ID:hd511hZTz bdeQoS817GKByhVxV-QnpTqWzSneDKLQDO foOvclwOqZiREZpcw7JhVyTDbK



TOTAL WEIGHT = 3 X 176 = 527 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
D - P	2x4	DRY	No.2	SPF
E - N	2x4	DRY	No.2	SPF
N - H	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		
C	TMWW-t	MT20	4.0	6.0	2.00	2.00
D	TTWW+m	MT20	5.0	6.0	1.75	1.50
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW+m	MT20	5.0	6.0	1.75	1.50
I	TMWW-t	MT20	4.0	6.0	2.00	2.50
J	TMV+p	MT20	2.0	4.0		
K	BMVW1-t	MT20	4.0	4.0	1.75	1.75
M, P, Q						
M	BMWW-t	MT20	4.0	4.0		
N	BMWWW-t	MT20	5.0	6.0		
O	BS-t	MT20	3.0	6.0		
R	BMVW1-t	MT20	4.0	4.0	1.75	1.75

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
R	1687	0	1687	0	0	5-8	1-13
K	1579	0	1579	0	0	1-10	1-10 & BLOCK

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1207	716 / 0	0 / 0	0 / 0	0 / 0	491 / 0	0 / 0
K	1132	657 / 0	0 / 0	0 / 0	0 / 0	475 / 0	0 / 0

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

2x4 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. K ATTACHED TO FRONT SIDE WITH 2 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 3" C.C. 8 NAILS TOTAL.

BRACING

FOR SECTION D-H, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.36 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 E-P, E-N, G-N, C-R, I-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)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO						FR-TO		
A- B	0 / 42	-78.0	-78.0	0.11 (1)	10.00	C- Q	0 / 83	0.03 (4)
B- C	0 / 21	-78.0	-78.0	0.13 (1)	10.00	Q- D	0 / 87	0.03 (4)
C- D	-1388 / 0	-78.0	-78.0	0.16 (1)	5.36	D- P	0 / 778	0.13 (1)
D- E	-1305 / 0	-85.5	-85.5	0.50 (1)	2.00	P- E	-547 / 0	0.36 (1)
E- F	-1296 / 0	-85.5	-85.5	0.50 (1)	2.00	E- N	-19 / 0	0.01 (1)
F- G	-1296 / 0	-85.5	-85.5	0.50 (1)	2.00	N- G	-560 / 0	0.37 (1)
G- H	-1295 / 0	-85.5	-85.5	0.49 (1)	2.00	N- H	0 / 810	0.13 (1)
H- I	-1345 / 0	-78.0	-78.0	0.15 (1)	5.44	M- H	0 / 60	0.02 (4)
I- J	0 / 21	-78.0	-78.0	0.12 (1)	10.00	M- I	0 / 148	0.04 (4)
R- B	-209 / 0	0.0	0.0	0.02 (1)	7.81	R- C	-1656 / 0	0.48 (1)
K- J	-93 / 0	0.0	0.0	0.01 (1)	7.81	I- K	-1637 / 0	0.45 (1)
R- Q	0 / 840	-18.5	-18.5	0.28 (4)	10.00			
Q- P	0 / 885	-18.5	-18.5	0.29 (4)	10.00			
P- O	0 / 1306	-18.5	-18.5	0.28 (1)	10.00			
O- N	0 / 1306	-18.5	-18.5	0.28 (1)	10.00			
N- M	0 / 858	-18.5	-18.5	0.27 (4)	10.00			
M- L	0 / 782	-18.5	-18.5	0.26 (4)	10.00			
L- K	0 / 782	-18.5	-18.5	0.26 (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 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.50/1.00 (D-E:1) , BC=0.29/1.00 (P-Q:4) , WB=0.48/1.00 (C-R:1) , SSI=0.24/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

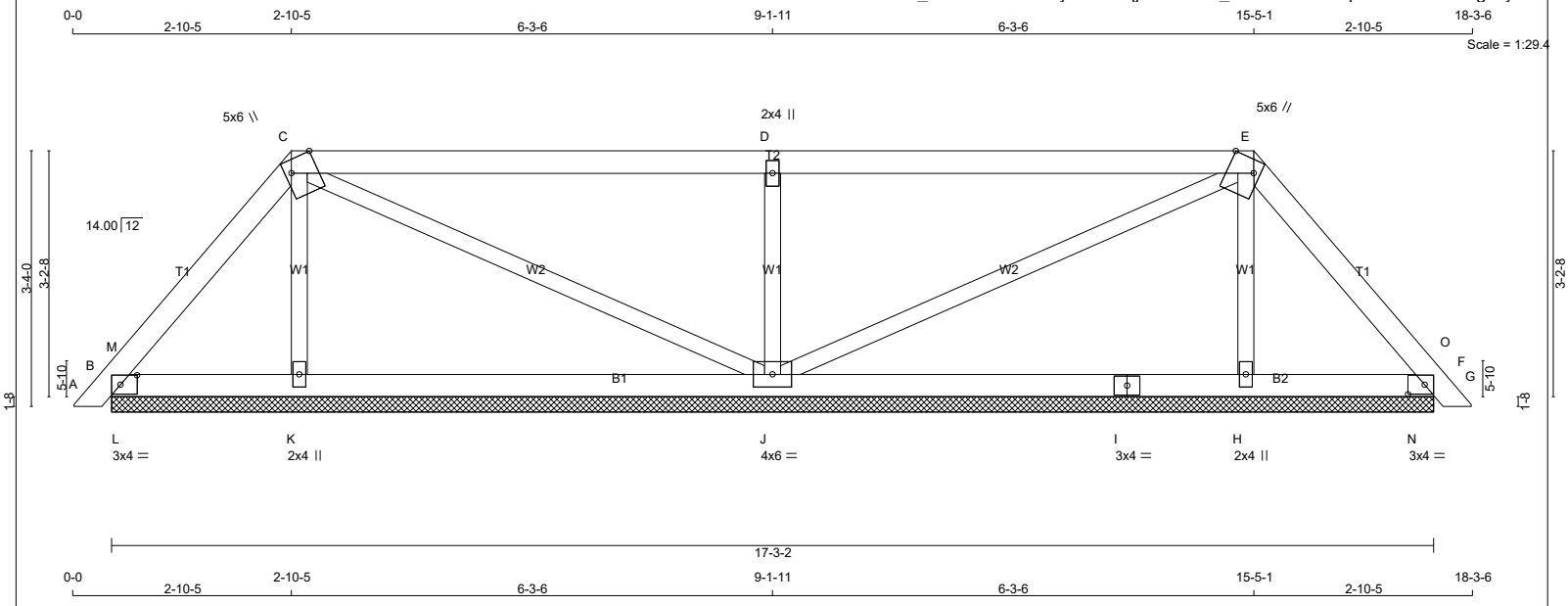
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.46 (O) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H254P		1	TRUSS DESC. JT 45147	E21104481

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:42 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-nqj39TrFb3Q_beIQmUcWN?qNdFVo2LIYOnJglmyTDaB



TOTAL WEIGHT = 61 lb [M]

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 - I	2x4	DRY	No.2	SPF
I - 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	5.0	6.0	Edge	4.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	Edge	4.00
F	TMB1-I	MT20	3.0	4.0	1.50	2.50
H	BMW1+w	MT20	2.0	4.0		
I	BS-t	MT20	3.0	4.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	197	0	197	0	0	17-3-2 (4-0-0)	1-8
K	285	0	285	0	0	17-3-2 (4-0-0)	1-8
J	762	0	762	0	0	17-3-2 (4-0-0)	1-8
H	285	0	285	0	0	17-3-2 (4-0-0)	1-8
F	197	0	197	0	0	17-3-2 (4-0-0)	1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	137	105 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0
K	208	102 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
J	541	345 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
H	208	102 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
F	137	105 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	K- C	-172 / 0	0.03 (1)
B- M	0 / 19	-78.0	-78.0	0.04 (1)	10.00	C- J	-38 / 0	0.03 (1)
M- C	-100 / 0	-78.0	-78.0	0.05 (1)	6.25	J- D	-612 / 0	0.11 (1)
C- D	-17 / 0	-78.0	-78.0	0.52 (1)	6.25	J- E	-38 / 0	0.03 (1)
D- E	-17 / 0	-78.0	-78.0	0.52 (1)	6.25	H- E	-172 / 0	0.03 (1)
E- O	-100 / 0	-78.0	-78.0	0.05 (1)	6.25	L- M	-216 / 0	0.00 (1)
O- F	0 / 19	-78.0	-78.0	0.04 (1)	10.00	N- O	-216 / 0	0.00 (1)
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- L	0 / 58	-18.5	-18.5	0.06 (1)	10.00			
L- K	0 / 58	-18.5	-18.5	0.11 (4)	10.00			
K- J	0 / 52	-18.5	-18.5	0.16 (4)	10.00			
J- I	0 / 52	-18.5	-18.5	0.16 (4)	10.00			
I- H	0 / 52	-18.5	-18.5	0.16 (4)	10.00			
H- N	0 / 58	-18.5	-18.5	0.11 (4)	10.00			
N- F	0 / 58	-18.5	-18.5	0.06 (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 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=0.52/1.00 (C-D:1) , BC=0.16/1.00 (H-J:4) , WB=0.11/1.00 (D-J:1) , SSI=0.24/1.00 (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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

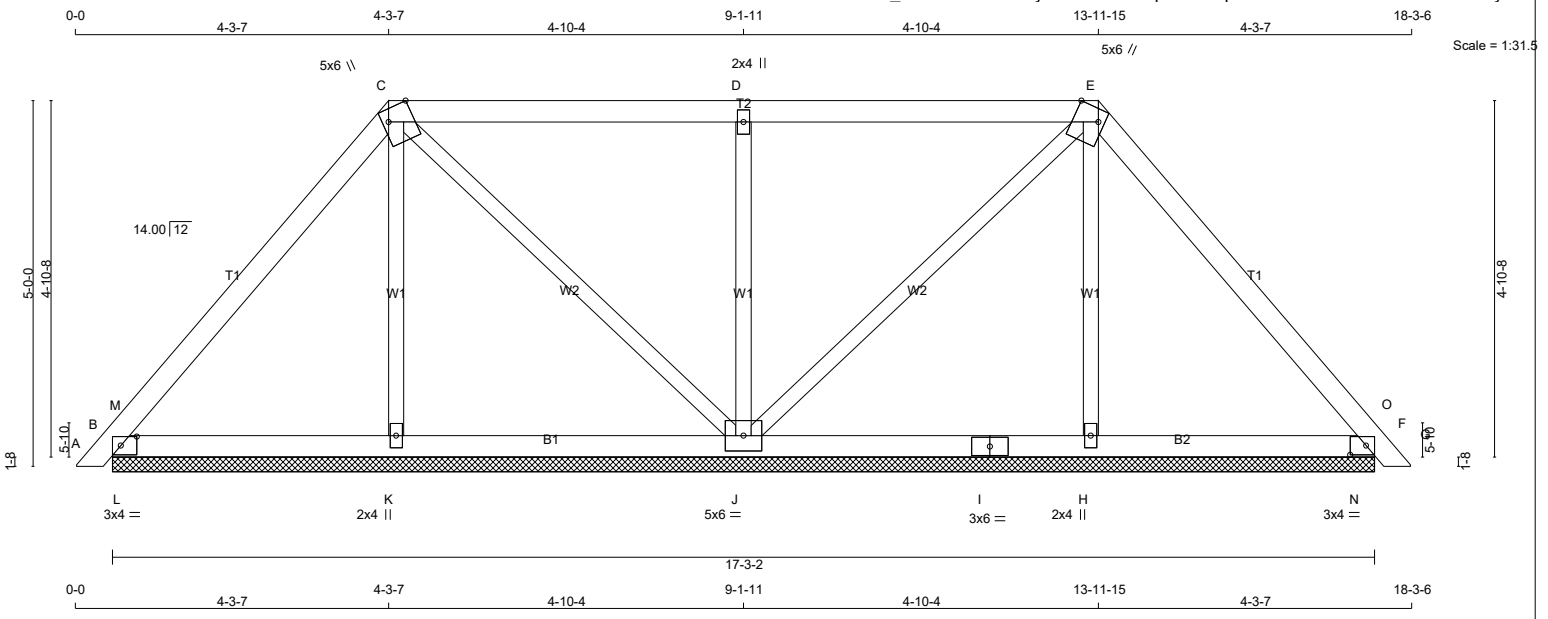
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.77 (J) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H255P		1	TRUSS DESC. JT 45147	E21104482

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-F0HRMpstMNYqDotcJC7lvDMchfsYnnmidR3EHCyTDaA



TOTAL WEIGHT = 66 lb [M]

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 - I	2x4	DRY	No.2	SPF
I - 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	5.0	6.0	Edge	4.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	Edge	4.00
F	TMB1-I	MT20	3.0	4.0	1.50	2.50
H	BMW1+w	MT20	2.0	4.0		
I	BS-t	MT20	3.0	6.0		
J	BMWWW1-t	MT20	5.0	6.0		
K	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

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
B	314	0	314	0	0	17-3-2 (5-3-2)	1-8
K	231	0	231	0	0	17-3-2 (5-3-2)	1-8
J	636	0	636	0	0	17-3-2 (5-3-2)	1-8
H	231	0	231	0	0	17-3-2 (5-3-2)	1-8
F	314	0	314	0	0	17-3-2 (5-3-2)	1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	221	151 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0
K	169	80 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
J	450	294 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
H	169	80 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
F	221	151 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00		K- C	-110 / 0	0.04 (1)
B- M	-17 / 111	-78.0	-78.0	0.10 (1)	6.25		C- J	-66 / 0	0.05 (1)
M- C	-160 / 0	-78.0	-78.0	0.14 (1)	6.25		J- D	-471 / 0	0.16 (1)
C- D	-44 / 0	-78.0	-78.0	0.31 (1)	6.25		J- E	-66 / 0	0.05 (1)
D- E	-44 / 0	-78.0	-78.0	0.31 (1)	6.25		H- E	-110 / 0	0.04 (1)
E- O	-160 / 0	-78.0	-78.0	0.14 (1)	6.25		L- M	-458 / 0	0.00 (1)
O- F	-17 / 111	-78.0	-78.0	0.10 (1)	6.25		N- O	-458 / 0	0.00 (1)
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00				
B- L	0 / 95	-18.5	-18.5	0.12 (1)	10.00				
L- K	0 / 95	-18.5	-18.5	0.12 (1)	10.00				
K- J	0 / 92	-18.5	-18.5	0.09 (4)	10.00				
J- I	0 / 92	-18.5	-18.5	0.09 (4)	10.00				
I- H	0 / 92	-18.5	-18.5	0.09 (4)	10.00				
H- N	0 / 95	-18.5	-18.5	0.12 (1)	10.00				
N- F	0 / 95	-18.5	-18.5	0.12 (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 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=0.31/1.00 (C-D:1) , BC=0.12/1.00 (H-N:1) , WB=0.16/1.00 (D-J:1) , SSI=0.36/1.00 (B-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

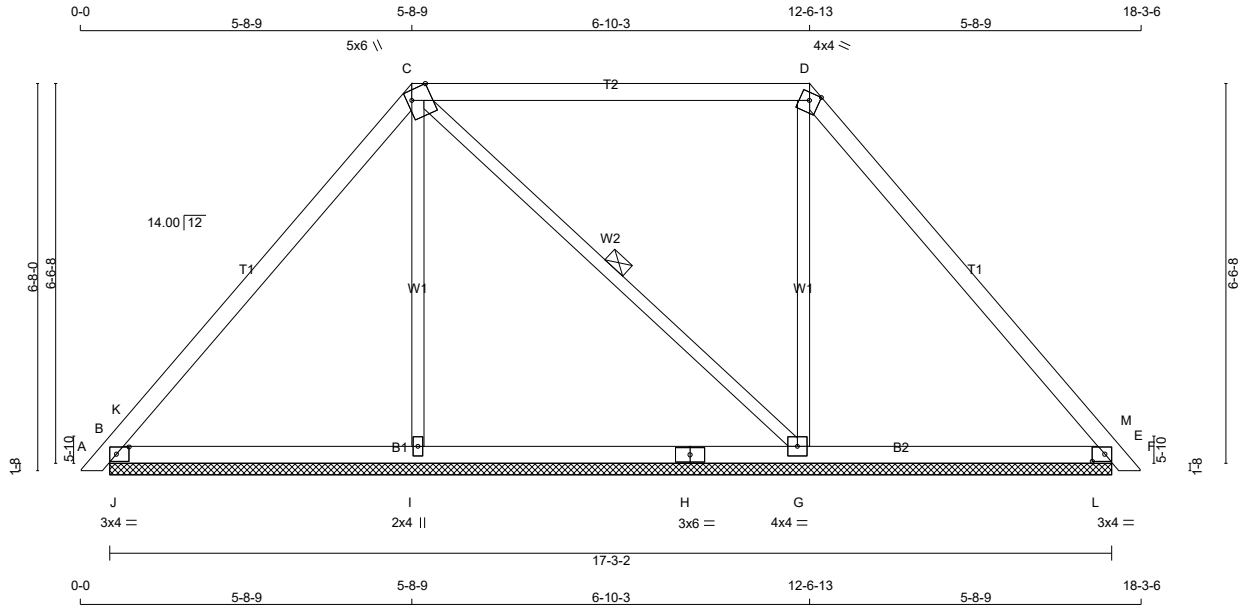
JSI GRIP= 0.55 (C) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	H256P		1	TRUSS DESC. JT 45147	E21104483

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:45 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-CPPBnVu7u_oYS60?Rc9D?eSt9SWKFgL?5lYKM5yTDa8



TOTAL WEIGHT = 2 X 64 = 129 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
D - F	2x4	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
H - 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	5.0	6.0	Edge	4.00
D	TTW-m	MT20	4.0	4.0	Edge	
E	TMB1-I	MT20	3.0	4.0	1.50	2.50
G	BMWW1-t	MT20	4.0	4.0		
H	BS-t	MT20	3.0	6.0		
I	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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	512	0	512	0	0	17-3-2 (7-3-2)	1-8
I	325	0	325	0	0	17-3-2 (7-3-2)	1-8
G	408	0	408	0	0	17-3-2 (7-3-2)	1-8
E	481	0	481	0	0	17-3-2 (7-3-2)	1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	360	250 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
I	237	115 / 0	0 / 0	0 / 0	0 / 0	122 / 0	0 / 0
G	294	161 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0
E	338	232 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	I- C	-170 / 0	0.12 (1)
B- K	-29 / 212	-78.0	-78.0	0.21 (1)	6.25	C- G	-37 / 0	0.02 (1)
K- C	-338 / 0	-78.0	-78.0	0.27 (1)	6.25	G- D	-227 / 0	0.16 (1)
C- D	-176 / 0	-78.0	-78.0	0.63 (1)	6.25	J- K	-835 / 0	0.00 (1)
D- M	-297 / 0	-78.0	-78.0	0.27 (1)	6.25	L- M	-845 / 0	0.00 (1)
M- E	-21 / 262	-78.0	-78.0	0.21 (1)	6.25			
E- F	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- J	0 / 207	-18.5	-18.5	0.23 (1)	10.00			
J- I	0 / 207	-18.5	-18.5	0.23 (1)	10.00			
I- H	0 / 204	-18.5	-18.5	0.18 (4)	10.00			
H- G	0 / 204	-18.5	-18.5	0.18 (4)	10.00			
G- L	0 / 180	-18.5	-18.5	0.23 (1)	10.00			
L- E	0 / 180	-18.5	-18.5	0.23 (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 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=0.63/1.00 (C-D:1) , BC=0.23/1.00 (I-J:1) , WB=0.16/1.00 (D-G:1) , SSI=0.66/1.00 (E-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

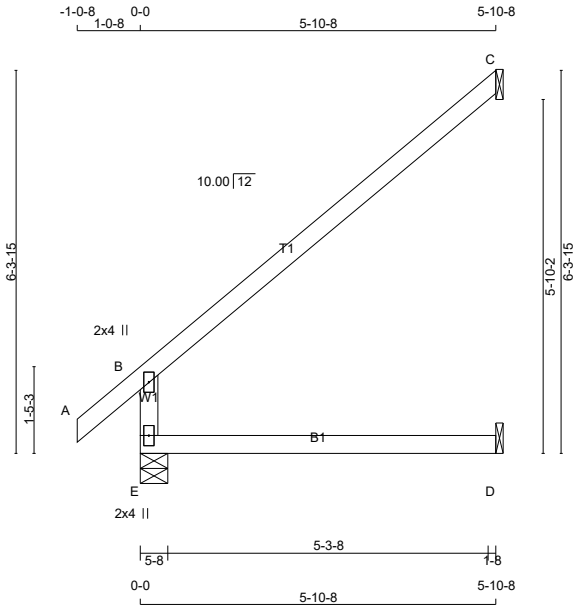
JSI GRIP= 0.72 (D) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	J06		1	TRUSS DESC. JT 45147	E21104484

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-gbzZ_rulflwP4GbB?KgSXr_6Fst6_938JPHuuXyTDa7

Scale = 1:38.1



TOTAL WEIGHT = 6 X 18 = 110 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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	438	0	438	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

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	310	202 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0
C	119	93 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	37	0 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)		MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO					
E- B	-375 / 0	0.0	0.0	0.10 (4)	7.81			
A- B	0 / 28	-78.0	-78.0	0.07 (1)	10.00			
B- C	-37 / 0	-78.0	-78.0	0.35 (1)	6.25			
E- D	0 / 0	-18.5	-18.5	0.13 (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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.35/1.00 (B-C:1) , BC=0.13/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

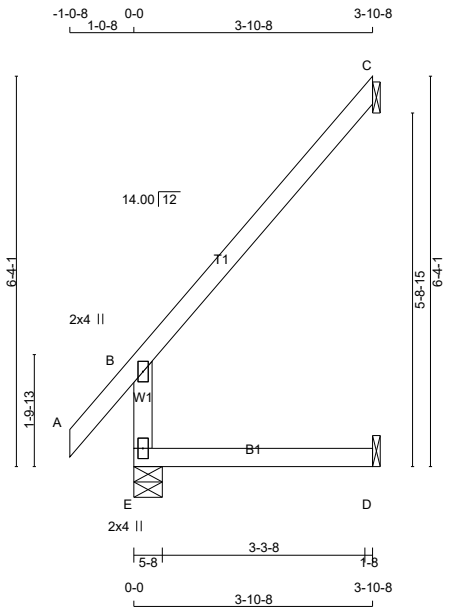
JSI GRIP= 0.26 (B) (INPUT = 0.90)
JSI METAL= 0.20 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	J07		1	TRUSS DESC. JT 45147	E21104485

Alpa Roof Truss, Maple

ID:hd511hZTz bdeQoS817GKByhVxV-c 5KPWw0AvA7JZla6ljwcG3UAqaeS3ZRnjm?zQyTDa5

Scale = 1:37.4



TOTAL WEIGHT = 4 X 15 = 60 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		

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	319	0	319	0	0	5-8	1-8
C	113	0	113	0	0	1-8	1-8
D	32	0	35	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	225	150 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0
C	79	61 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	25	0 / 0	0 / 0	0 / 0	0 / 0	25 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	-279 / 0	0.0	0.0	0.04 (4)	7.81			
A- B	0 / 34	-78.0	-78.0	0.08 (1)	10.00			
B- C	-29 / 0	-78.0	-78.0	0.20 (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/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=0.06/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

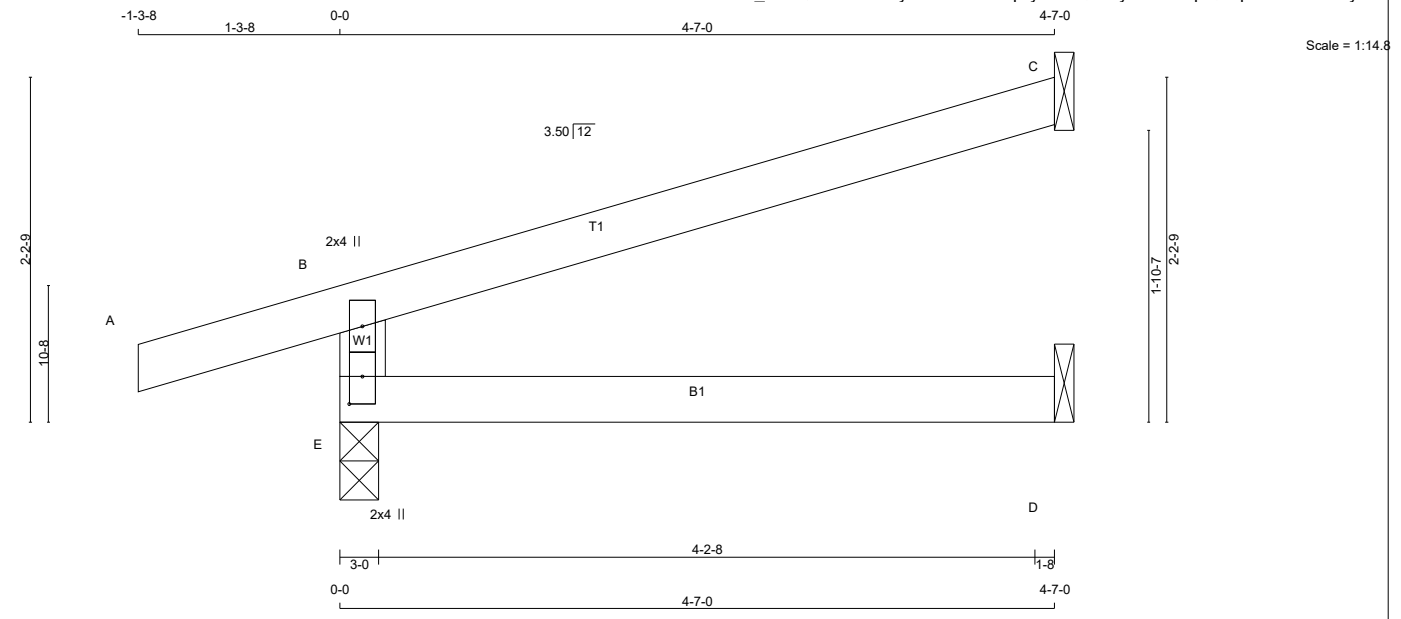
JSI GRIP= 0.22 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	P05		1	TRUSS DESC. JT 45147	E21104486

Alpa Roof Truss, Maple

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Oct 15 09:34:50 2021 Page 1

ID:hd511hZTz_bdeQoS817GKByhVxV-YMC4qCyGiWQrZtvyEAlOih9pQTFpwz3kE1F51lyTDa3



TOTAL WEIGHT = 8 X 13 = 102 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	2.00	1.00

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	REQRD 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	35	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	267	176 / 0	0 / 0	0 / 0	0 / 0	90 / 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.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO			FR-TO		
E- B	-327 / 0	0.0	0.0	0.08 (4)	7.81			
A- B	0 / 15	-78.0	-78.0	0.10 (1)	10.00			
B- C	-12 / 0	-78.0	-78.0	0.28 (1)	6.25			
E- D	0 / 0	-18.5	-18.5	0.08 (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=0.28/1.00 (B-C:1) , BC=0.08/1.00 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

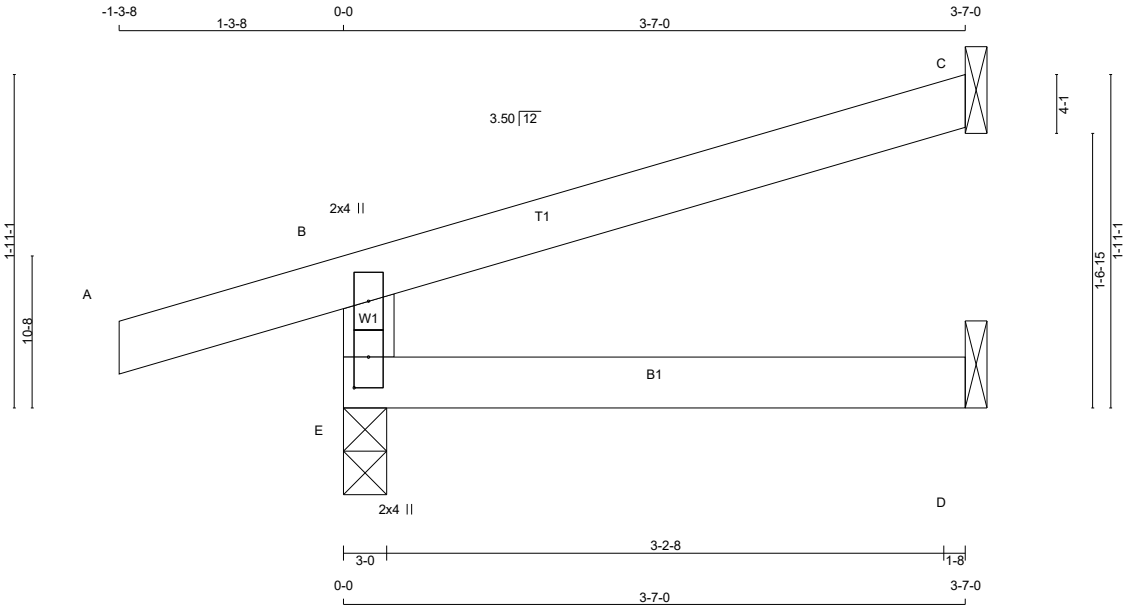
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
336325	P06		1	TRUSS DESC. JT 45147	E21104487

Alpa Roof Truss, Maple

ID:hd511hZTz_bdeQoS817GKByhVxV-0ZmS2YyuTqYiB1U9ntGdEvh0stcafQltTh?fZlyTDa2



TOTAL WEIGHT = 8 X 10 = 83 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	2.00	1.00

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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	317	0	317	0	0	3-0	1-8
C	105	0	105	0	0	1-8	1-8
D	28	0	31	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	224	150 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0
C	73	56 / 0	0 / 0	0 / 0	0 / 0	16 / 0	0 / 0
D	22	0 / 0	0 / 0	0 / 0	0 / 0	22 / 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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (7)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO					
E- B	-278 / 0	0.0 0.0	0.05 (4)	7.81			
A- B	0 / 15	-78.0 -78.0	0.11 (5)	10.00			
B- C	-10 / 0	-78.0 -78.0	0.17 (6)	10.00			
E- D	0 / 0	-18.5 -18.5	0.05 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	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 (0.00")

CSI: TC=0.17/1.00 (B-C:6) , BC=0.05/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.13/1.00 (B-C:6)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

TECHNICAL BULLETIN

LUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

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

Material: 18 gauge

Finish: G90 galvanized

Design:

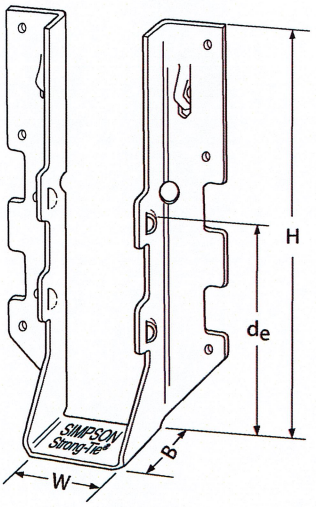
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

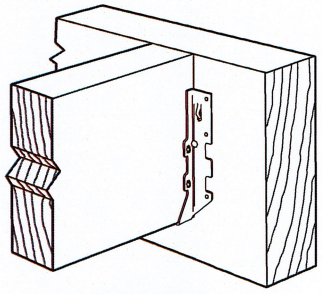
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



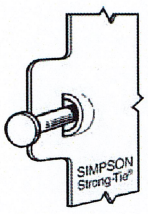
LUS28



Typical LUS Installation

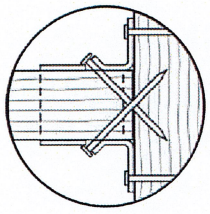
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
LUS24	18	1 9/16	3 1/8	1 3/4	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 9/16	4 3/4	1 3/4	3 5/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 5/8	4 3/16	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 9/16	6 5/8	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 5/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 9/16	7 13/16	1 3/4	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 5/8	8 3/16	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

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



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

U.S. Patent 5,603,580



Double Shear Nailing Top View.

LIMIT STATES DESIGN

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

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HUS/LJS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

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

Material: See table

Finish: G90 galvanized

Design:

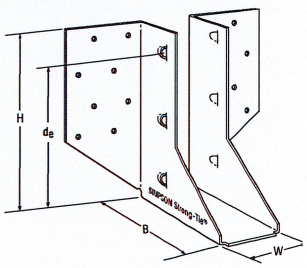
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

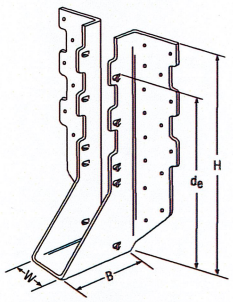
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

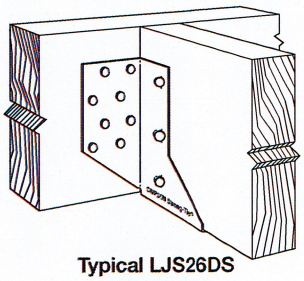
- See current catalogue for options



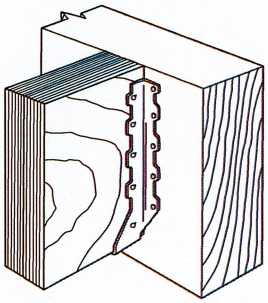
LJS26DS



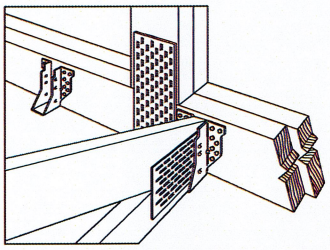
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



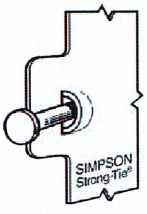
Typical HUS Installation



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

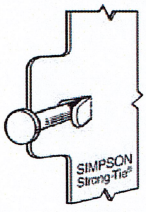
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15) lb.	Normal (K_D=1.00) lb.	Uplift (K_D=1.15) lb.	Normal (K_D=1.00) lb.
LJS26DS	18	1 9/16	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅜	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7 3/32	3	6 3/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9 3/32	3	7 31/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	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.

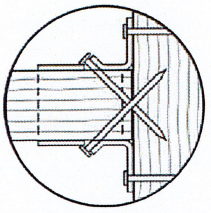


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



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



Double Shear Nailing Top View.

LIMIT STATES DESIGN

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

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HHUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

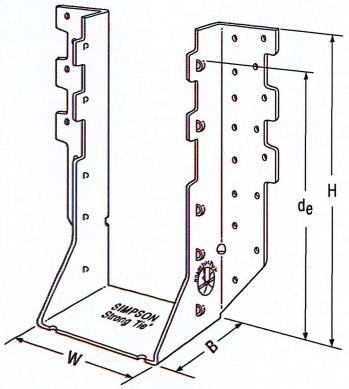
All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

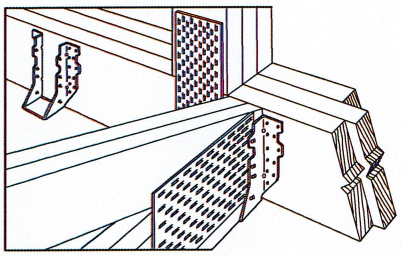
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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



HHUS410

Installation:

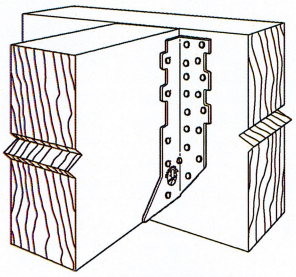
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications



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

Options:

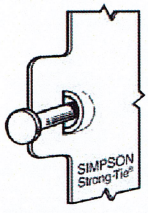
- See current catalogue for options



Typical HHUS Installation

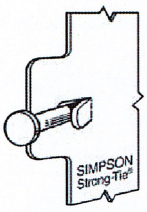
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HHUS26-2	14	3 5/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 7/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 3/32	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4 11/16	9	3	7 15/16	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3 5/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 5/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3 5/8	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7 1/4	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4670	10155	3370	7210

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

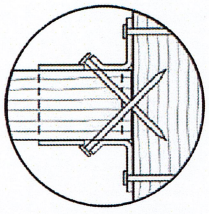


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



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



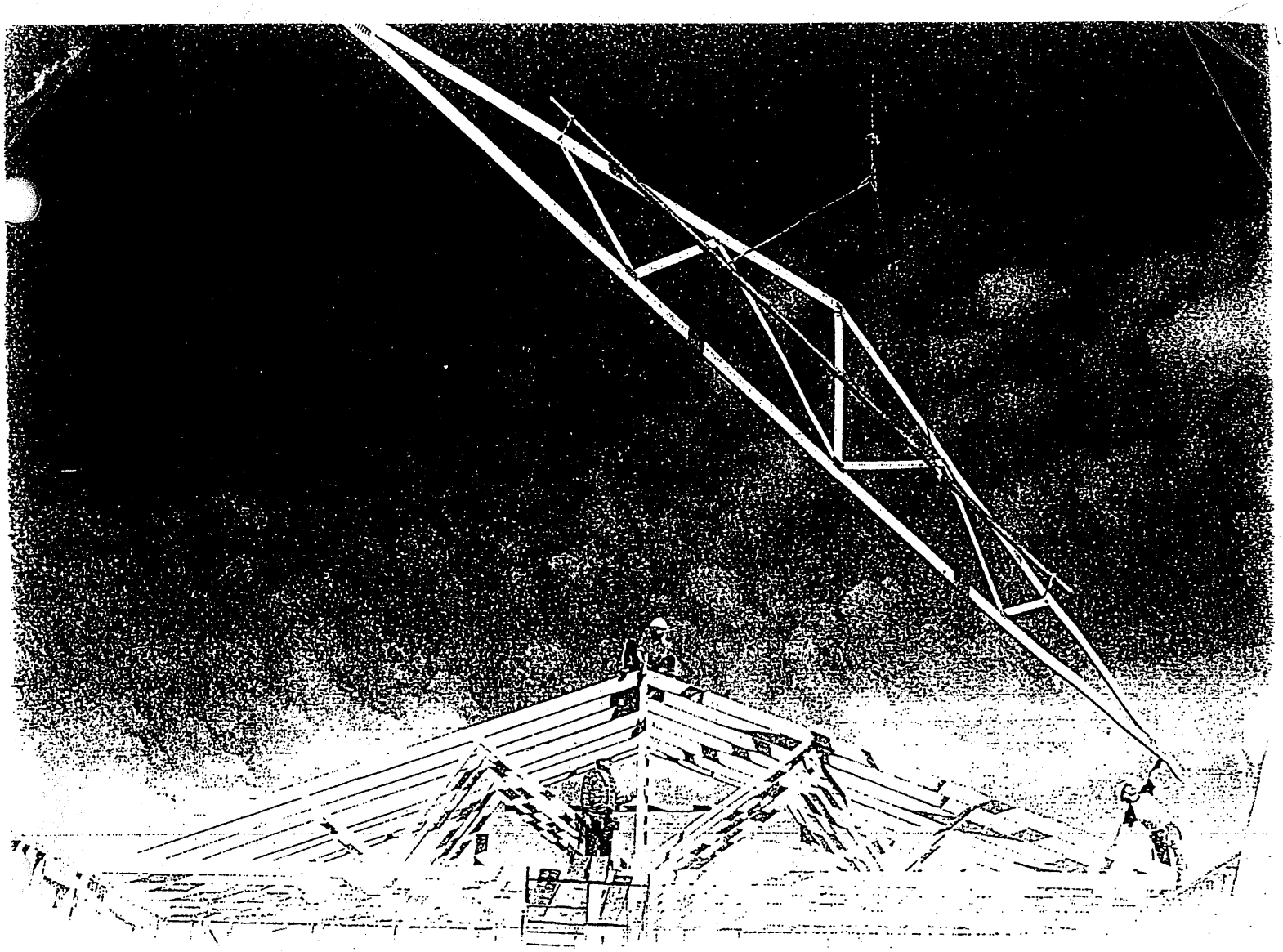
Double Shear Nailing Top View.

LIMIT STATES DESIGN

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

T-SPECHHUS20 3/20 exp. 6/22

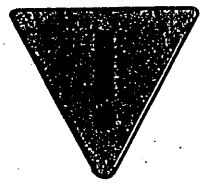
(800) 999-5099
strongtie.com



Wood Truss Installation

A Guide to proper handling, erecting and bracing metal plate connected wood trusses

Table of Content

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.

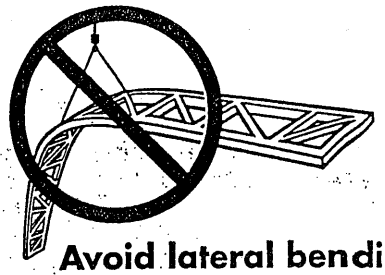
Special Design Requirements

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

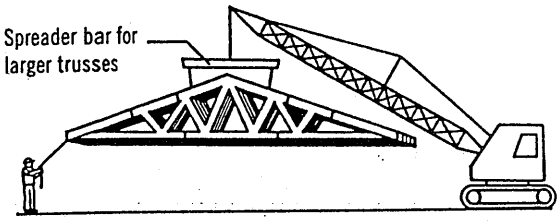
Beginning with the unloading process, and throughout all phases of construction, care must be taken to avoid **lateral bending** of trusses, which can cause damage to the lumber and metal connector plates at the joints.

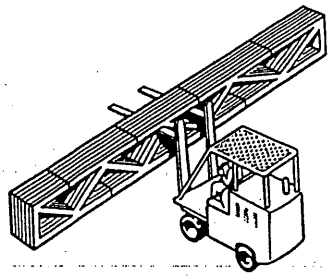


Avoid lateral bending

- **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.**

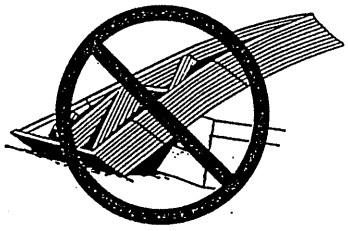
2 Job Site Handling





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.

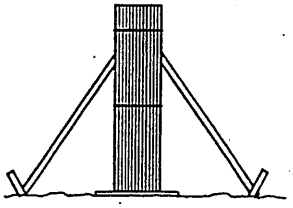


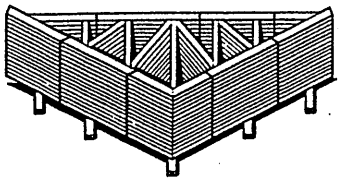
Do not store unbraced bundles upright

If trusses are stored vertically they shall be braced in a manner that will prevent tipping or topping. Generally cuting 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.



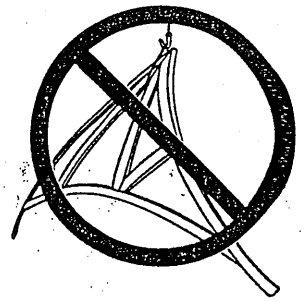


Care should be exercised when removing banding to avoid damaging trusses.

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.

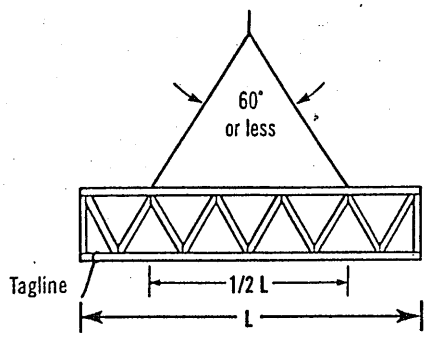
3 Hoisting

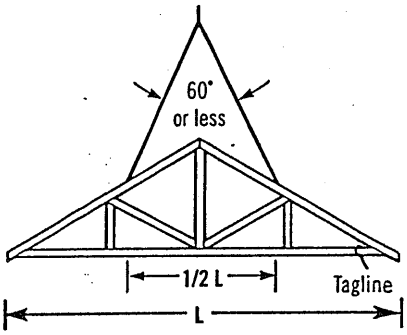
All trusses that are erected one at a time shall be held safely in position by the erection equipment until such time as all necessary bracing has been installed and the ends of the trusses are securely fastened to the building.



Avoid lateral bending

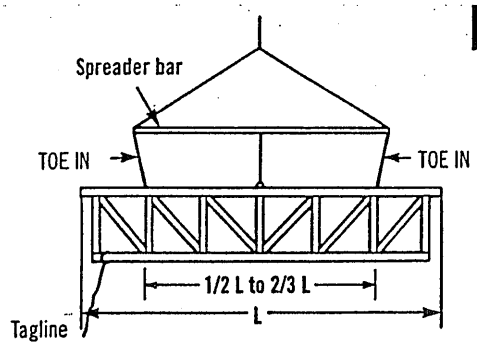
L ≤ 30'

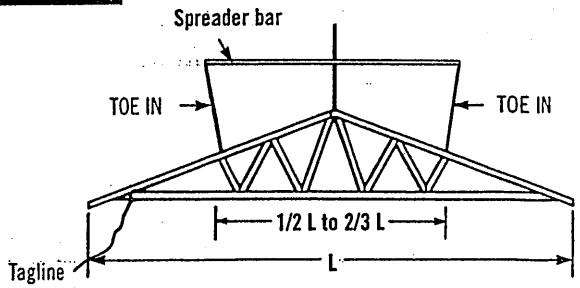




Truss sling is acceptable where these criteria are met.

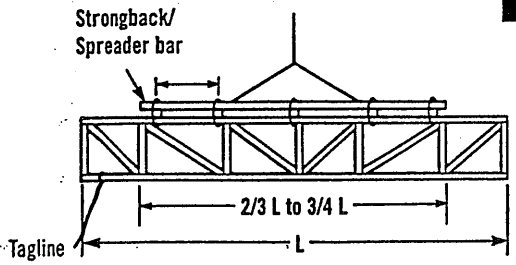
30' < L ≤ 60'

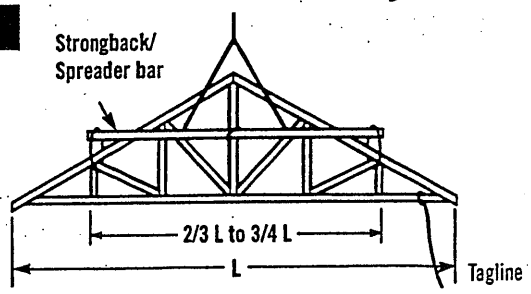




Use spreader bar in all other cases. It should be noted that the lines from the ends of the spreader bar "**TOE IN**"; if these lines should "**TOE OUT**" the truss may fold in half.

L > 60'





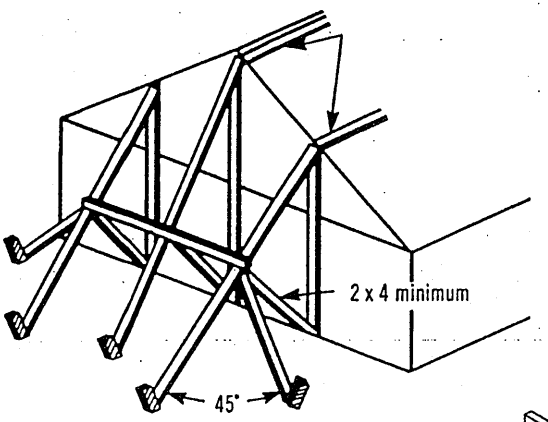
For lifting trusses with spans in excess of 60 feet, it is recommended that a strongback/spreader bar be used as illustrated. The strongback/spreader bar should be attached to the top chord and web members at intervals of approximately 10 feet. Further, the strongback/spreader bar should be at or above 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

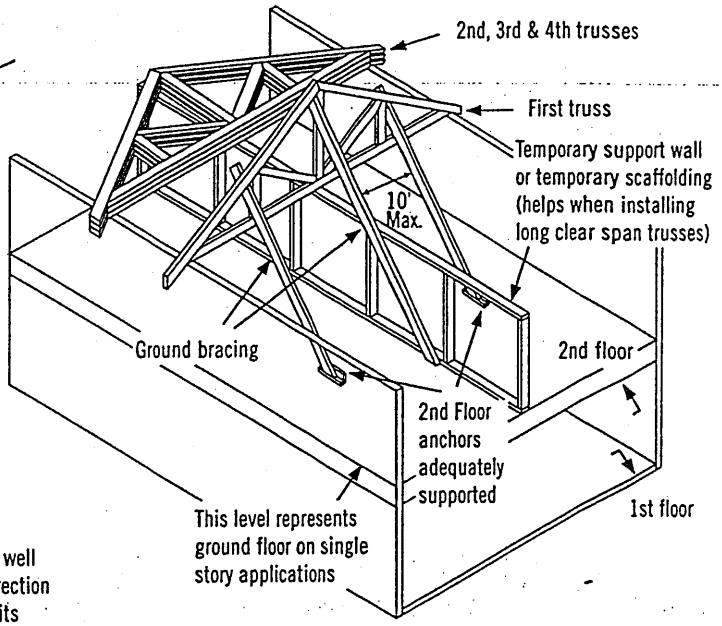
One satisfactory method ties the first unit of trusses off to a series of braces that are attached to a stake driven into the ground and securely anchored. The ground brace itself should be supported as shown below or it is apt to buckle. Additional ground braces in the opposite direction, inside the building, are also recommended.

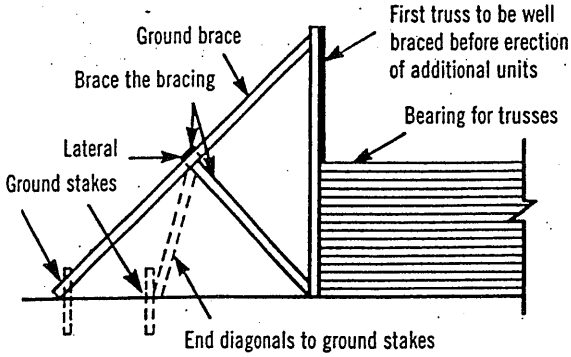


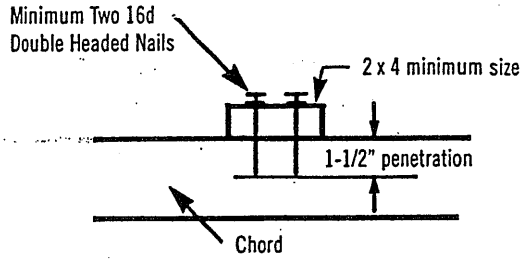
Note: Locate ground braces for first truss directly in line with all rows of top chord continuous lateral bracing (either temporary or permanent).

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.





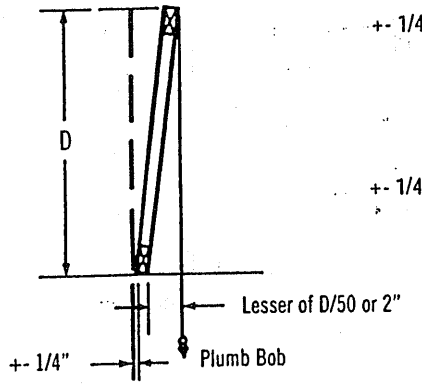


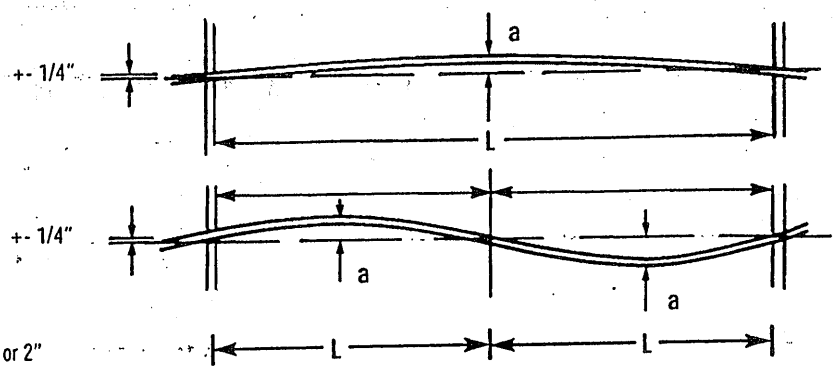
Inadequate size of bracing material or inadequate fastening is a major cause of erection dominoing.

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.

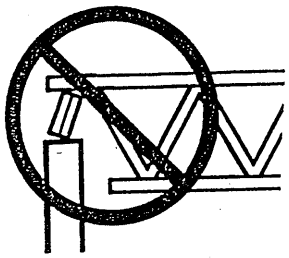
When sheathing, make sure nails are driven into the top chord of the trusses.



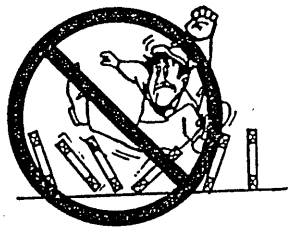


L = 16' to 32', a = 1"
L = 32' & over, a = 2"

6 Bracing

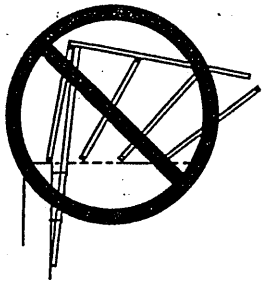


Do not install trusses on temporarily connected supports



Do not walk on unbraced trusses

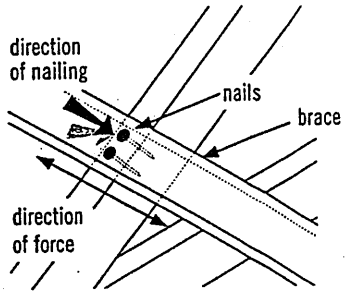
Do not walk on trusses or gable ends lying flat



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.



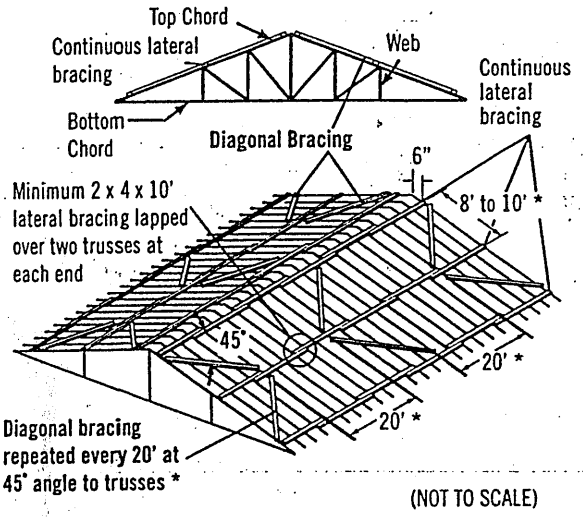
Well nailed (perpendicular to force)

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.

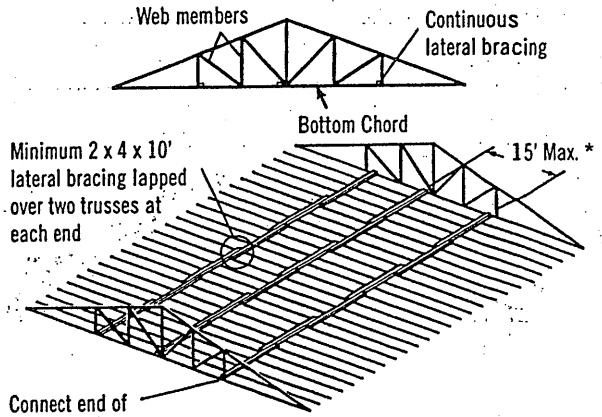


(NOT TO SCALE)

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.

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.

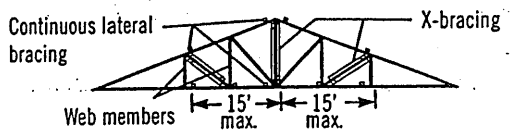


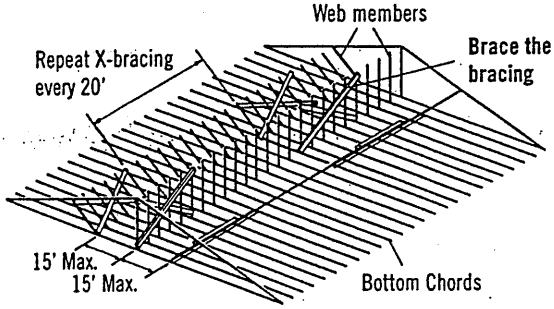
* Long spans, heavy loads or other spacing configurations may require closer spacing between lateral bracing and closer intervals between diagonals. Consult the building designer or HIB and DSB (*Recommended Design Specification for Temporary Bracing of Metal-Plate Connected Wood Trusses*) for details.

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.

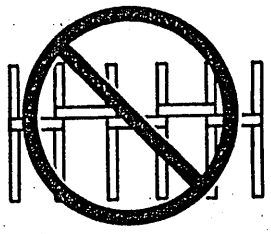
X-bracing should be installed on vertical web members wherever possible, at or near lateral bracing. Plywood or OSB may be substituted for X-bracing.



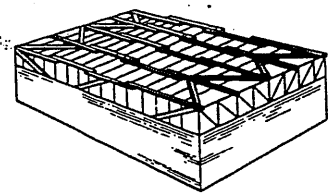


Note: Top chords and some web members are not shown, in order to make drawings more readable.

Diagonal or cross-bracing is very important!



Do not use short blocks to brace individual trusses without a specific bracing plan detailing their use

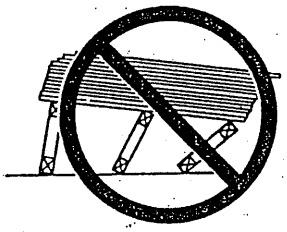


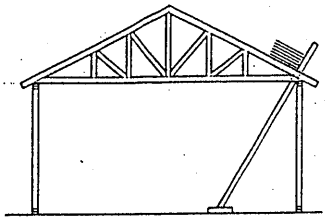
Bracing requirements using the same principles apply to parallel chord trusses

8 Stacking Materials

Do not proceed with building completion until all bracing is securely and properly in place

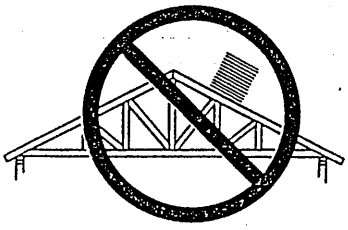
Never stack materials on unbraced or inadequately braced trusses

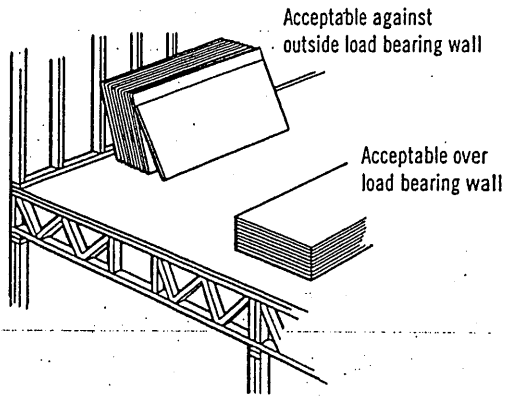




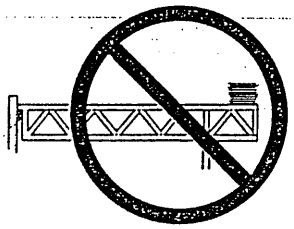
Proper distribution of construction materials is a must during construction.

Never stack materials near a peak

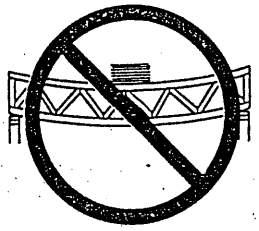


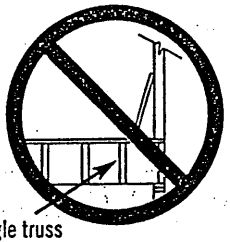


Never stack materials on the cantilever of a truss

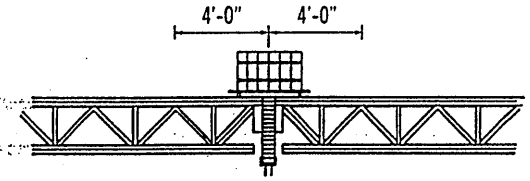


Always stack materials over two or more trusses.



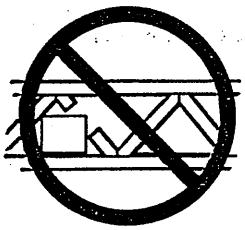


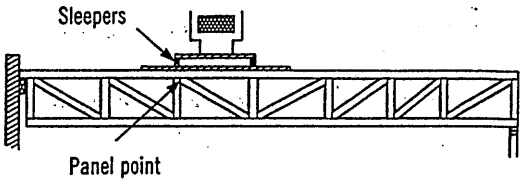
Never overload small groups or single trusses. Position load over as many trusses as possible.



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.

[Selected text and figures referenced or reproduced from HIB and DSB by permission of the Truss Plate Institute, Madison, WI.]

THE CANADIAN WOOD TRUSS ASSOCIATION

L'ASSOCIATION CANADIENNE DES FABRICANTS DE FERMES DE BOIS

1400 Blair Place, Suite 210, Ottawa, ON K1J 9B8
Tel.: 613-747-5544 Fax: 613-747-6264

Wood Truss Council of America

One WTCA Center
6300 Enterprise Lane, Madison, WI 53719-1140
Tel.: 608-274-4849 Fax: 608-274-3329
wtca@woodtruss.com www.woodtruss.com