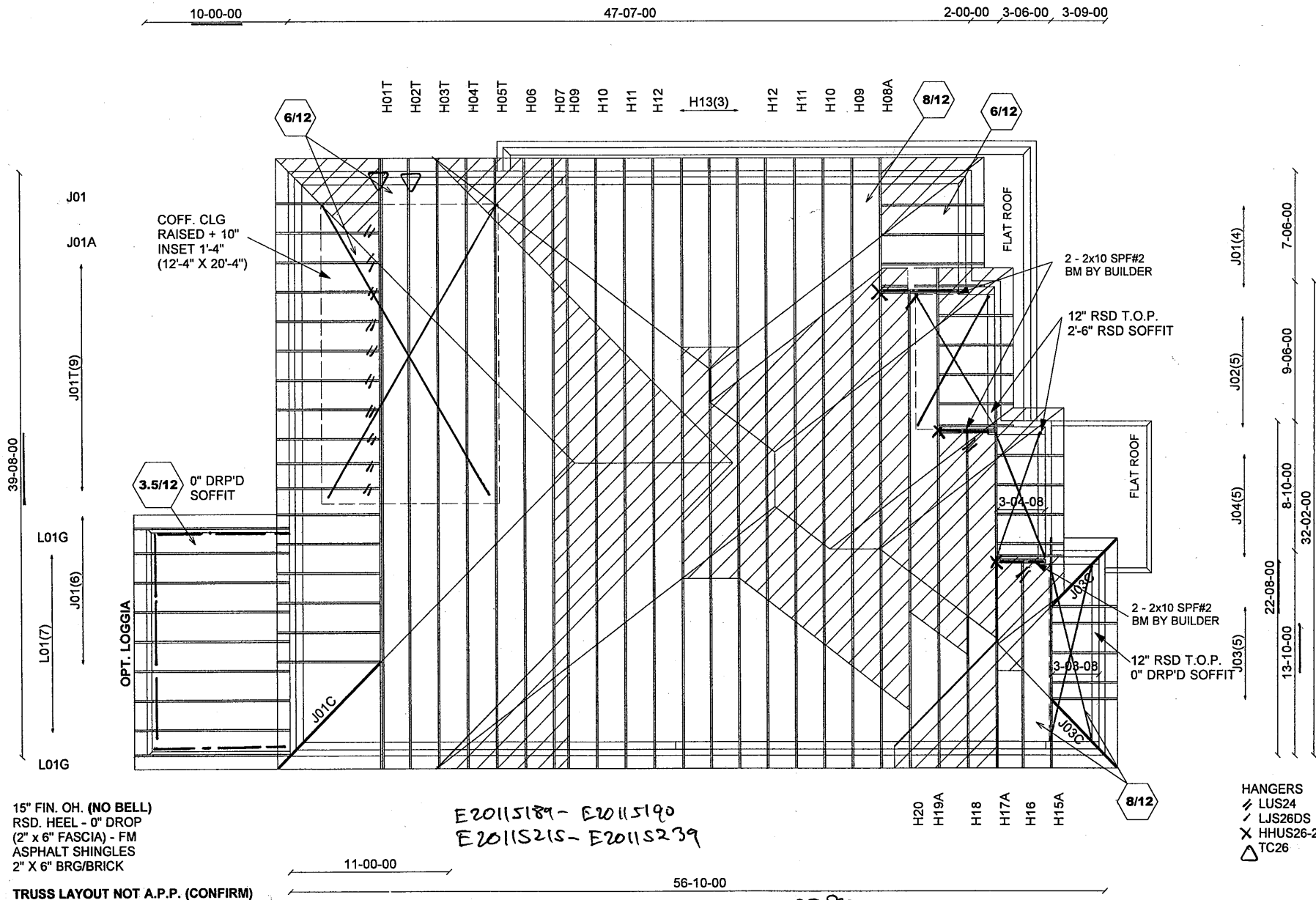




ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 O.B.C. LATEST EDITION. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE 2X4 SPF #2 @ 24" O.C WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS POINT. VERT. POSTS LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINTS & BETWEEN ROWS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

Mitek V. 8.2.0

CONVENTIONAL
FRAMING BY
OTHERS



Job Track: 45147

Layout ID: 324086

Plan Log: 106926

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 2020-09-24

Designer: emozes

Model / Elevation:

5009

/ C

STD OR OPT LOGGIA

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

EWP DESIGN INC.

(905) 832-2250

FAX (905) 832-0286

RESPONSIBILITIES AND SPECIFICATIONS

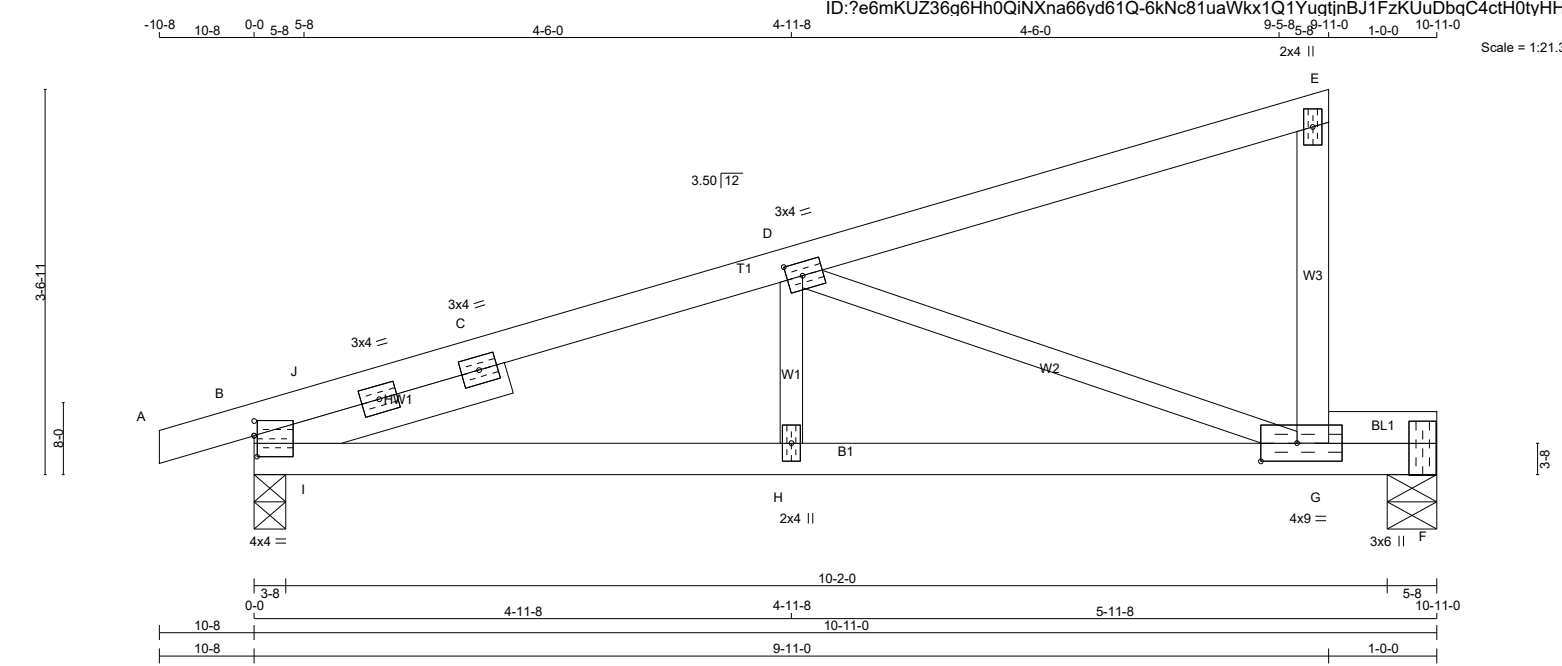
RESPONSIBILITIES

1. EWP DESIGN INC. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on each drawing meet or exceed the actual dead load imposed by the structure, the live load imposed by the intended use and the snow load imposed by local building code or authorities with jurisdictions.
3. All dimensions are to be verified by the owner, contractor, architect or other authorities with jurisdictions before truss fabrication.
4. EWP DESIGN INC. bears no responsibility for the erection of trusses. Persons erecting trusses are cautioned to seek professional advice regarding the temporary and permanent bracing for the system. Bracing shown on EWP DESIGN INC. drawing is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacturer's responsibility to ensure that trusses are manufactured in conformance with specifications of EWP DESIGN INC. as outlined below.

SPECIFICATIONS

1. Trusses designed by EWP DESIGN INC. conform to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type, as indicated on the EWP DESIGN INC. drawings, and conform to the design procedures established by the Truss Plate Institute of Canada. Unit stresses used for truss designs are as per the edition of CSA-O86 shown on EWP DESIGN INC. drawings.
2. Lumber is to be the size, species and grade as specified on EWP DESIGN INC. drawings.
3. Moisture content of lumber shall not exceed 19% in service unless specified otherwise.
4. Metal connector plates shall be applied to both faces of truss at each joint and shall be positioned as specified.
5. Top chords of trusses are assumed to be continuously braced laterally by roof sheathing or by purlins at intervals not exceeding 12.5 times the thickness of top chord member.
6. Bottom chords shall be laterally braced at intervals not exceeding 3M (10') o.c., where rigid ceiling is not applied directly to the underside of chords.

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



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2
G - E	2x4	DRY	No.2
B - F	2x4	DRY	No.2
REINFORCING MEMBERS			
HW1	2x4	DRY	No.2
BEARING BLOCKS			
BL1	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBMR1-I	MT20	4.0	4.0	2.25 0.25
B	RT-I	MT20	3.0	4.0	
B	RT-I	MT20	3.0	4.0	
B	TP+P	MT20	3.0	6.0	1.50
D	TMWW-I	MT20	3.0	4.0	1.50 1.75
E	TMV+P	MT20	2.0	4.0	
G	BMVWK-I	MT20	4.0	9.0	2.00 4.00
H	BMW+W	MT20	2.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	594	0	594	0	3-8	1-8
F	452	0	452	0	5-8	1-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	422	266 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0
F	324	189 / 0	0 / 0	0 / 0	0 / 0	135 / 0	0 / 0

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

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

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

LOADING					
TOTAL LOAD CASES: (4)					
CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	-4 / 0	-78.0 -78.0 0.03 (1)	10.00	H-D	0 / 243
B-J	-684 / 0	-78.0 -78.0 0.01 (4)	6.25	D-G	-994 / 0
J-C	-735 / 0	-78.0 -78.0 0.15 (1)	6.25	I-J	0 / 250
C-D	-735 / 0	-78.0 -78.0 0.15 (1)	6.25	I-C	-509 / 0
D-E	-8 / 0	-78.0 -78.0 0.23 (1)	10.00		
G-E	-165 / 0	0.0 0.0 0.03 (1)	7.81		
B-I	0 / 507	-18.5 -18.5 0.11 (1)	10.00		
I-H	0 / 934	-18.5 -18.5 0.35 (1)	10.00		
H-G	0 / 934	-18.5 -18.5 0.75 (1)	10.00		
G-F	0 / 0	-18.5 -18.5 0.60 (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, NBC 2015

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/ 477 (0.27")

CSI: TC=0.23/1.00 (D-E:1), BC=0.75/1.00 (G-H:1), WB=0.43/1.00 (D-G:1), SSI=0.35/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

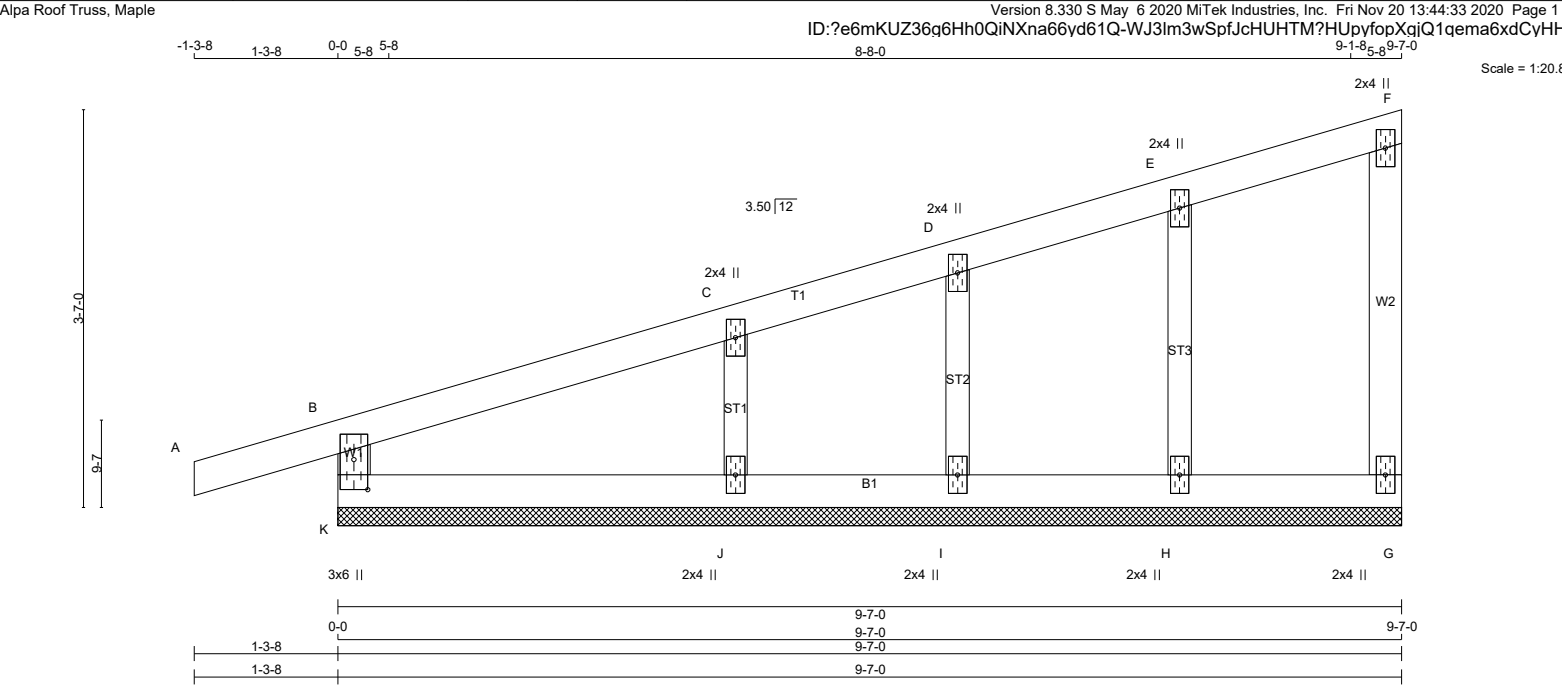
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (D) (INPUT = 0.90)
JSI METAL= 0.32 (B) (INPUT = 1.00)

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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324082	L01G		1	TRUSS DESC. JT 45147	E20115190

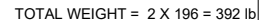


LUMBER N. L. G. A. RULES CHORDS SIZE				
--	--	--	--	--

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



Scale = 1:66.0



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100225448
11/20/2020
PROVINCE OF ONTARIO

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	H01T		2	TRUSS DESC. JT 45147	E20115215(2)

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	9.0	1.00	5.00
C	TMVW-t	MT20	3.0	5.0	1.50	2.25
D	TTWW+m	MT20	5.0	8.0	Edge	
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TMWW-t	MT20	4.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TS-t	MT20	4.0	6.0		
I	TMV+p	MT20	2.0	4.0		
J	TMWW-t	MT20	5.0	6.0	2.50	2.25
K	TTWW+m	MT20	5.0	8.0	Edge	
L	TMWW-t	MT20	4.0	6.0	1.75	2.25
M	TMV+p	MT20	2.0	4.0		
O	BMVW1-t	MT20	5.0	8.0		
P, U, Y						
P	BMWW-t	MT20	4.0	4.0		
Q	BS-t	MT20	4.0	6.0		
R	BMWWW-t	MT20	5.0	10.0	2.00	4.50
S	BMV+p	MT20	2.0	4.0		
T	BVMWWW-I	MT20	7.0	12.0	4.75	4.00
V	BMWW-t	MT20	4.0	4.0	2.00	1.50
W	BS-t	MT20	5.0	6.0		
X	BMWW-t	MT20	4.0	6.0	2.00	2.50
Z	BVMWWW-I	MT20	5.0	14.0		
AA	BMV+p	MT20	2.0	4.0		
AB	BMVW1-t	MT20	4.0	6.0		

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

CONNECTION REQUIREMENTS

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

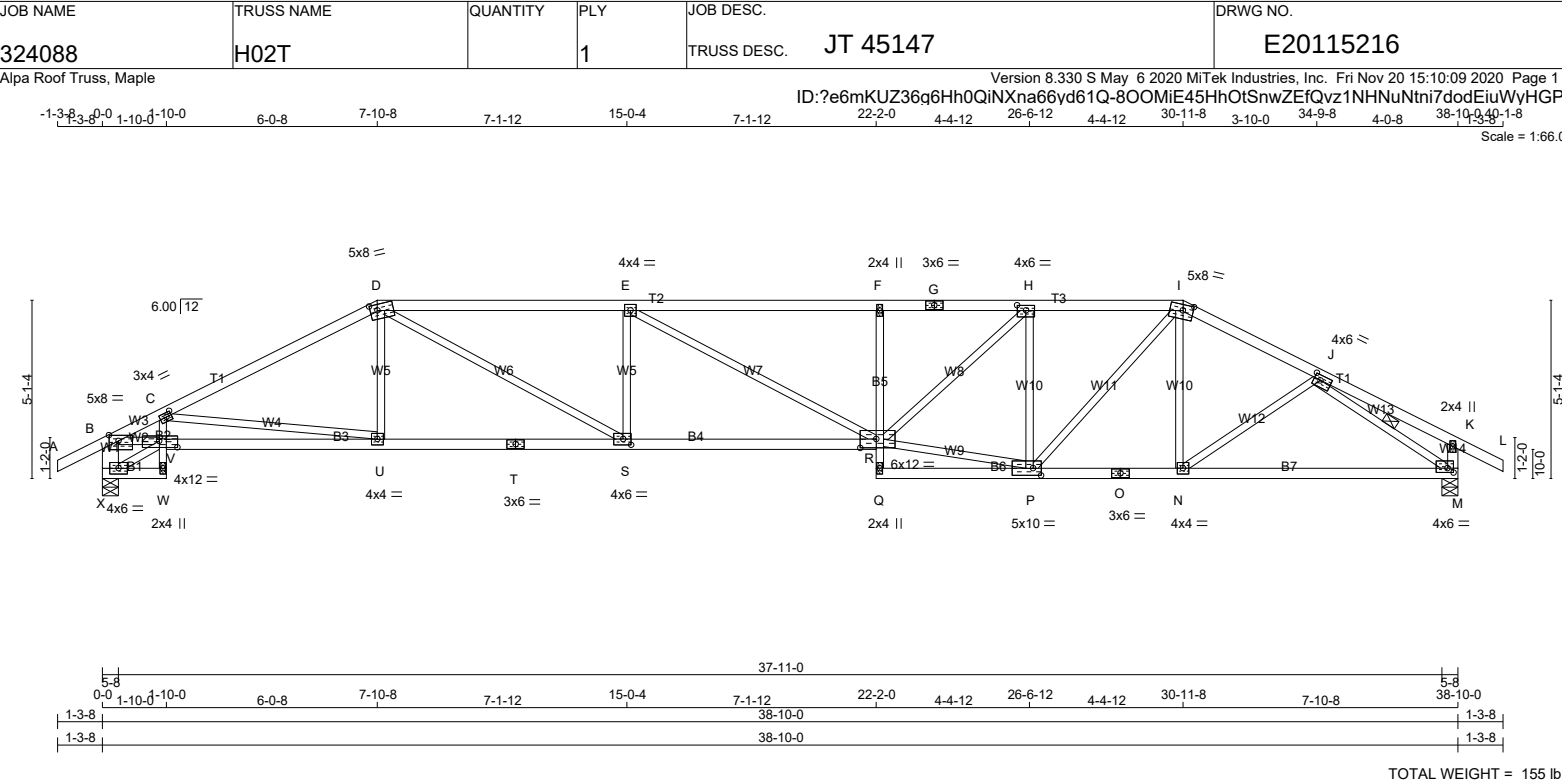
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

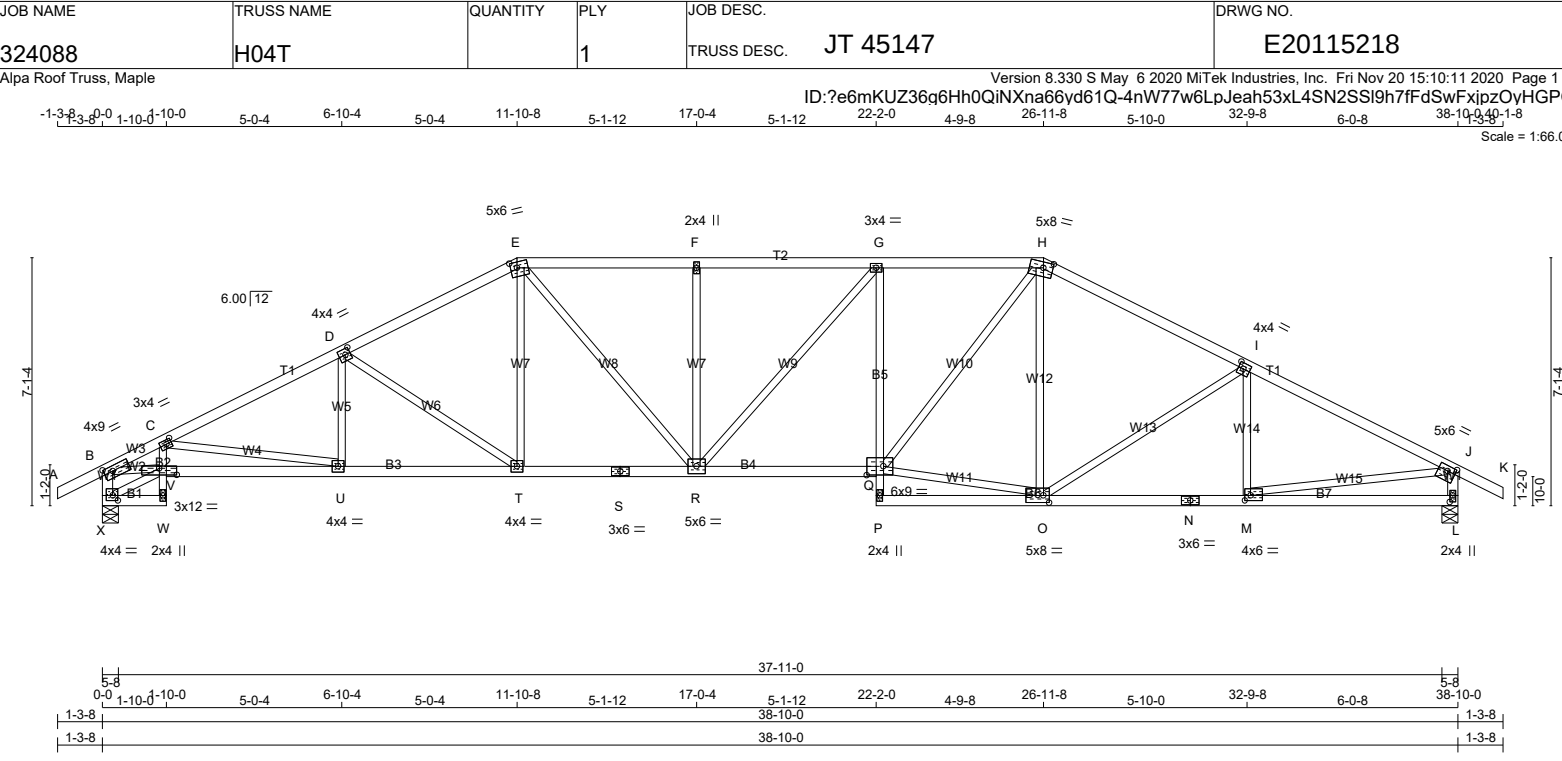
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.96 (W) (INPUT = 1.00)

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





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQ'D JT VERT HORZ DOWN HORZ UPLIFT IN-SX BRG M 1977 0 1977 0 0 5-8 2-2 X 1981 0 1981 0 0 5-8 2-2										DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 PSF			
A - D 2x4 DRY No.2 SPF D - G 2x4 DRY 1650F 1.5E SPF G - I 2x4 DRY 1650F 1.5E SPF I - L 2x4 DRY No.2 SPF X - B 2x6 DRY No.2 SPF M - K 2x4 DRY No.2 SPF X - W 2x4 DRY No.2 SPF W - C 2x3 DRY No.2 SPF V - T 2x4 DRY No.2 SPF T - R 2x4 DRY No.2 SPF Q - F 2x3 DRY No.2 SPF Q - O 2x4 DRY No.2 SPF O - M 2x4 DRY No.2 SPF				<u>ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD</u> UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL M 1407 871 / 0 0 / 0 0 / 0 536 / 0 0 / 0 X 1410 873 / 0 0 / 0 0 / 0 537 / 0 0 / 0										SPACING = 24.0 IN./C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
ALL WEBS 2x3 DRY No.2 SPF EXCEPT				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, X										THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014			
DRY: SEASONED LUMBER.				BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.15 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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-M. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW										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			
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMVW-p MT20 5.0 8.0 2.00 3.25 C TMVW-t MT20 3.0 4.0 1.50 1.75 D TTWW-m MT20 5.0 8.0 2.00 2.50 E TMVW-t MT20 4.0 4.0 F TMV+p MT20 2.0 4.0 G TS-t MT20 3.0 6.0 H TMWW-t MT20 4.0 6.0 1.75 3.00 I TTWW-m MT20 5.0 8.0 2.00 3.50 J TMVW-t MT20 4.0 6.0 1.75 2.25 K TMV+p MT20 2.0 4.0 M BMVW1-t MT20 4.0 6.0 1.50 2.00 N BMWW-t MT20 4.0 4.0 O BS-t MT20 3.0 6.0 P BMVWW-t MT20 5.0 10.0 2.50 2.75 Q BMV+p MT20 2.0 4.0 R BVMWW-t MT20 6.0 12.0 3.00 5.50 S BMWW-t MT20 4.0 6.0 2.00 2.75 T BS-t MT20 3.0 6.0 U BMWW-t MT20 4.0 4.0 V BVMWW-t MT20 4.0 12.0 2.25 6.25 W BMV+p MT20 2.0 4.0				LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. CSI (LC) UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. CSI (LC) FR-TO A-B 0 / 24 -78.0 -78.0 0.10 (1) 10.00 C-U -758 / 0 0.56 (1) B-C -4011 / 0 -78.0 -78.0 0.38 (1) 3.18 U-D 0 / 224 0.06 (4) C-D -3325 / 0 -78.0 -78.0 0.81 (1) 3.23 D-S 0 / 1692 0.38 (1) D-E -4448 / 0 -78.0 -78.0 0.95 (1) 3.17 S-E -681 / 0 0.19 (1) E-F -4514 / 0 -78.0 -78.0 0.98 (1) 3.15 E-R 0 / 75 0.02 (1) F-G -4499 / 0 -78.0 -78.0 0.38 (1) 3.56 R-P 0 / 3284 0.74 (1) G-H -4499 / 0 -78.0 -78.0 0.38 (1) 3.56 R-H 0 / 1642 0.37 (1) H-I -3274 / 0 -78.0 -78.0 0.24 (1) 4.22 P-H -1453 / 0 0.56 (1) I-J -2770 / 0 -78.0 -78.0 0.27 (1) 3.96 P-I 0 / 1209 0.27 (1) J-K 0 / 13 -78.0 -78.0 0.15 (1) 10.00 N-I 0 / 0 0.03 (4) L 04 (4) M 58 (1) N 02 (1) O 81 (1)										ALLOWABLE DEFL.(LL)= L/360 (1.29") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.33") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL) = L/ 648 (0.72") CSI: TC=0.98/1.00 (E-F:1) , BC=0.84/1.00 (R-S:1) , WB=0.81/1.00 (B-V:1) , SSI=0.26/1.00 (D-E:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 AUTOSOLVE RIGHT HEEL ONLY TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873			
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2														PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (V) (INPUT = 0.90) JSI METAL= 0.94 (T) (INPUT = 1.00)			
														CONTINUED ON PAGE 2			



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
H - K	2x4	DRY	No.2
X - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
X - W	2x4	DRY	No.2
W - C	2x3	DRY	No.2
V - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
P - G	2x3	DRY	No.2
P - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	9.0	1.75 3.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.75
D	TMVW-t	MT20	4.0	4.0	2.00 1.75
E	TTWW-m	MT20	5.0	6.0	2.00 2.25
F	TMW+w	MT20	2.0	4.0	
G	TMVW-t	MT20	3.0	4.0	
H	TTWW-m	MT20	5.0	8.0	2.00 3.25
I	TMVW-t	MT20	4.0	4.0	2.00 1.75
J	TMVW-t	MT20	5.0	6.0	1.75 2.75
L	BMV1+p	MT20	2.0	4.0	2.25 1.00
M	BMVW-t	MT20	4.0	6.0	1.75 2.00
N	BS-t	MT20	3.0	6.0	
O	BMVWV-t	MT20	5.0	8.0	2.50 2.00
P	BMV+p	MT20	2.0	4.0	
Q	BVMWV-t	MT20	6.0	9.0	3.00 5.75
R	BMVWV-t	MT20	5.0	6.0	
S	BS-t	MT20	3.0	6.0	
T	BMVW-t	MT20	4.0	4.0	
U	BMVW-t	MT20	4.0	4.0	
V	BVMWV-t	MT20	3.0	12.0	2.25 6.00
W	BMV+p	MT20	2.0	4.0	
X	BMVW1-t	MT20	4.0	4.0	1.75 1.75

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

Y. WIDYA
100225448
11/20/2020
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					
BEARINGS					
FACTORED		MAXIMUM FACTORED		INPUT	
GROSS REACTION		GROSS REACTION		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
L	1977	0	1977	0	0
X	1981	0	1981	0	0

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1407	871 / 0	0 / 0	0 / 0	0 / 0	536 / 0	0 / 0
X	1410	873 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS		WEBS	
MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 24	C-U	-358 / 0
B-C	-3793 / 0	D	0 / 144
C-D	-3467 / 0	D-T	-655 / 0
D-E	-2904 / 0	T-E	0 / 462
E-F	-3028 / 0	E-R	0 / 679
F-G	-3028 / 0	R-F	-446 / 0
G-H	-3023 / 0	R-G	0 / 10
H-I	-2568 / 0	Q-O	0 / 2284
I-J	-2831 / 0	Q-H	0 / 1206
J-K	0 / 24	O-H	-130 / 19
X-B	-1915 / 0	O-I	-336 / 0
L-J	-1928 / 0	M-I	-248 / 0
		M-J	0 / 2579
X-W	0 / 101	X-V	-113 / 0
W-V	0 / 18	B-V	0 / 3373
V-C	0 / 46		
V-U	0 / 3473		

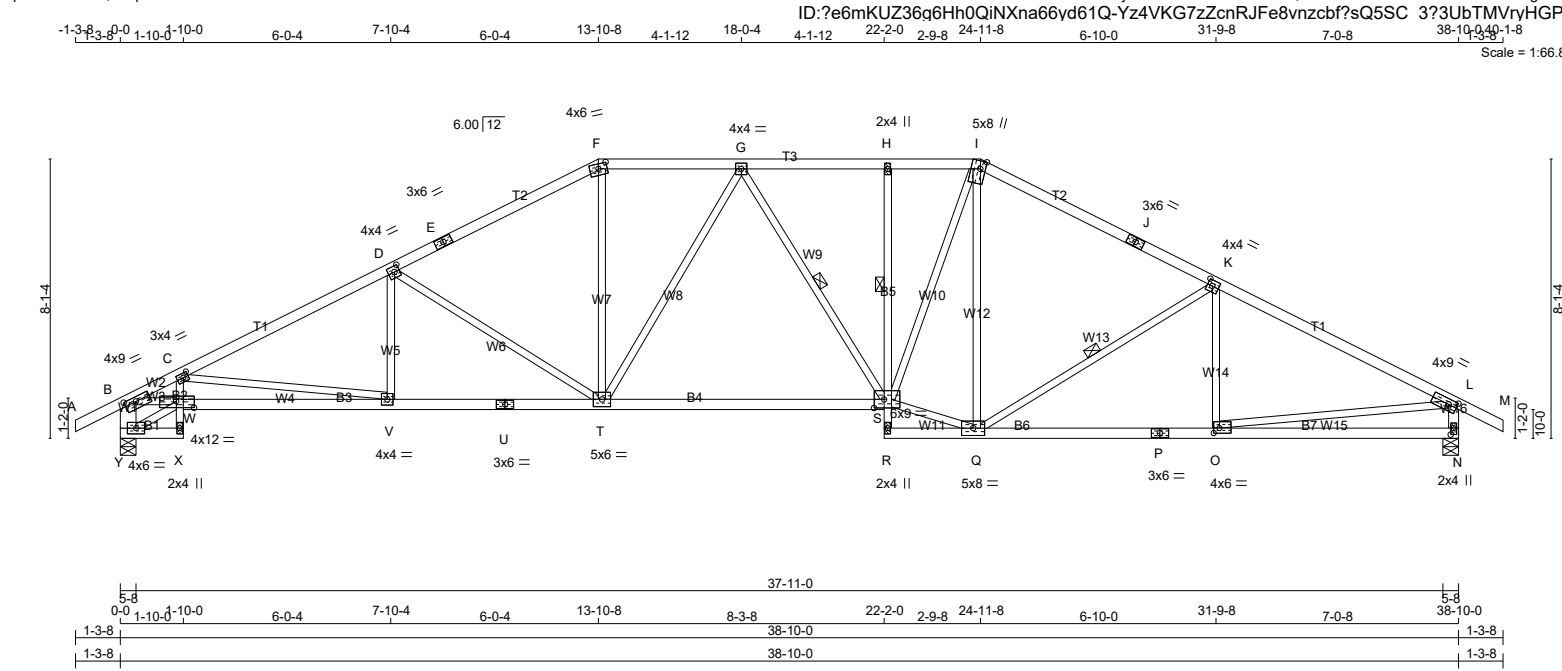
DESIGN CRITERIA					
SPECIFIED LOADS:					
TOP CH.	LL	=	21.0	PSF	
	DL	=	6.0	PSF	
BOT CH.	LL	=	0.0	PSF	
	DL	=	7.4	PSF	
TOTAL LOAD = 34.4 PSF					
SPACING = 24.0 IN./C					
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM					
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015					
THIS DESIGN COMPLIES WITH: - PART 9 OF CBC 2018, ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014					
DESIGN ASSUMPTIONS - OVERHANG NOT TO BE ALTERED OR CUT OFF.					
(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD					
ALLOWABLE DEFL.(LL)= L/360 (1.29") CALCULATED VERT. DEFL.(LL) = L/999 (0.21") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL) = L/999 (0.42")					
CSI: TC=0.51/1.00 (I-J:1), BC=0.62/1.00 (U-V:1), WB=0.76/1.00 (B-V:1), SSI=0.20/1.00 (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					
AUTOSOLVE RIGHT HEEL ONLY					
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.					
NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873					
PLATE PLACEMENT TOL. = 0.250 inches					
PLATE ROTATION TOL. = 5.0 Deg.					
JSI GRIP= 0.90 (J) (INPUT = 0.90) JSI METAL= 0.97 (V) (INPUT = 1.00)					

TOTAL WEIGHT = 167 lb [M][F]

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	H05T		1	TRUSS DESC. JT 45147	E20115219

Alpa Roof Truss, Maple

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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
I - J	2x4	DRY	No.2
J - M	2x4	DRY	No.2
Y - B	2x6	DRY	No.2
N - L	2x4	DRY	No.2
Y - X	2x4	DRY	No.2
X - C	2x3	DRY	No.2
W - U	2x4	DRY	No.2
U - S	2x4	DRY	No.2
R - H	2x3	DRY	No.2
R - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	9.0	1.50 4.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.75
D	TMVW-t	MT20	4.0	4.0	2.00 1.75
E	TS-t	MT20	3.0	6.0	
F	TTW-m	MT20	4.0	6.0	1.75 3.00
G	BMWW-t	MT20	4.0	4.0	
H	TMV+p	MT20	2.0	4.0	
I	TTWW+m	MT20	5.0	8.0	2.75 1.75
J	TS-t	MT20	3.0	6.0	
K	TMVW-t	MT20	4.0	4.0	2.00 1.75
L	TMVW-t	MT20	4.0	9.0	1.75 3.00
N	BMV1+p	MT20	2.0	4.0	2.25 1.00
O	BMWW-t	MT20	4.0	6.0	1.75 2.00
P	BS-t	MT20	3.0	6.0	
Q	BMWWW-t	MT20	5.0	8.0	
R	BMV+p	MT20	2.0	4.0	
S	BVWWW-t	MT20	6.0	9.0	3.00 3.50
T	BMWWW-t	MT20	5.0	6.0	
U	BS-t	MT20	3.0	6.0	
V	BMWW-t	MT20	4.0	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
N	1977	0	1977	0	0
Y	1981	0	1981	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
N	1407	871 / 0	0 / 0
Y	1410	873 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS		MEMB.		MEMB.	
MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)
FR-TO	FROM	FR-TO	FROM	FR-TO	FROM	FR-TO	FROM
A-B	0 / 24	-78.0	-78.0	0.10 (1)	10.00	C-V	-528 / 0
B-C	-3888 / 0	-78.0	-78.0	0.23 (1)	3.42	V-D	0 / 163
C-D	-3387 / 0	-78.0	-78.0	0.60 (1)	3.36	D-T	-774 / 0
D-E	-2708 / 0	-78.0	-78.0	0.51 (1)	3.78	T-F	0 / 891
E-F	-2708 / 0	-78.0	-78.0	0.51 (1)	3.78	F-G	-360 / 0
F-G	-2412 / 0	-78.0	-78.0	0.22 (1)	4.25	G-S	-73 / 0
G-H	-2554 / 0	-78.0	-78.0	0.23 (1)	4.14	S-Q	0 / 2223
H-I	-2552 / 0	-78.0	-78.0	0.14 (1)	4.23	Q-I	0 / 1153
I-J	-2424 / 0	-78.0	-78.0	0.64 (1)	3.78	I-J	-292 / 0
J-K	-2424 / 0	-78.0	-78.0	0.64 (1)	3.78	Q-K	-521 / 0
K-L	-2858 / 0	-78.0	-78.0	0.73 (1)	3.45	O-K	-175 / 43
L-M	0 / 24	-78.0	-78.0	0.10 (1)	10.00	C-I	0 / 2601

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL) = L/999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/953 (0.49")

CSI: TC=0.73/1.00 (K-L:1), BC=0.67/1.00 (V-W:1), WB=0.80/1.00 (D-T:1), SS=0.24/1.00 (K-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

AUTOSOLVE RIGHT HEEL ONLY

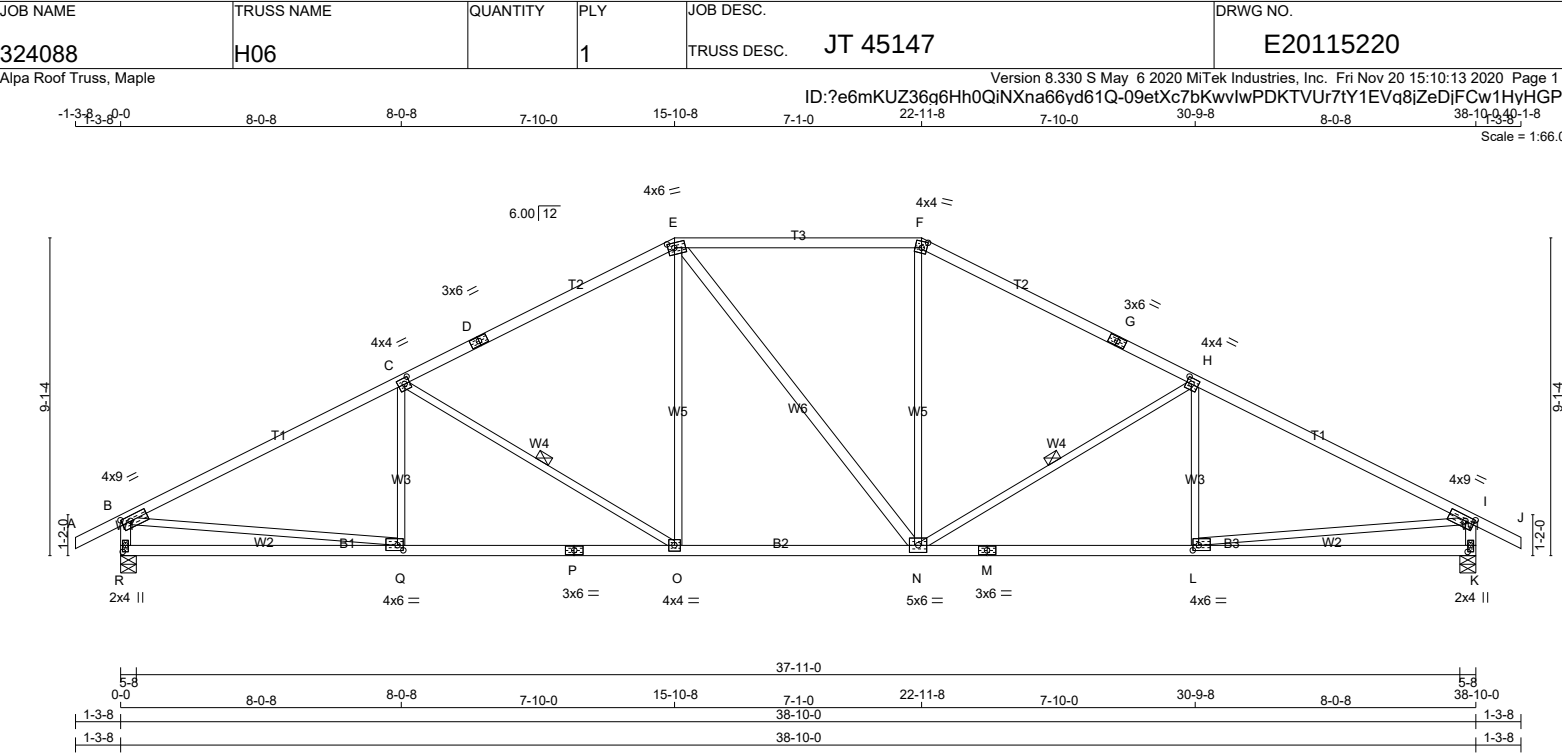
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - D	2x4	DRY 1650F 1.5E	SPF	
D - E	2x4	DRY 1650F 1.5E	SPF	
E - F	2x4	DRY 2100F 1.8E	SPF	
F - G	2x4	DRY 1650F 1.5E	SPF	
G - J	2x4	DRY 1650F 1.5E	SPF	
R - B	2x4	DRY No.2	SPF	
K - I	2x4	DRY No.2	SPF	
R - P	2x4	DRY No.2	SPF	
P - M	2x4	DRY No.2	SPF	
M - K	2x4	DRY No.2	SPF	
ALL WEBS	2x3	DRY No.2	SPF	
EXCEPT				
E - N	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 3.00
C	TMWW-t	MT20	4.0	4.0	2.00 1.75
D	TS-t	MT20	3.0	6.0	
E	TTWW-m	MT20	4.0	6.0	1.75 2.25
F	TTW-m	MT20	4.0	4.0	2.25 1.75
G	TS-t	MT20	3.0	6.0	
H	TMWW-t	MT20	4.0	4.0	2.00 1.75
I	TMVW-t	MT20	4.0	9.0	1.75 3.00
K	BMV1+p	MT20	2.0	4.0	2.25 1.00
L	BMWW-t	MT20	4.0	6.0	1.75 2.00
M	BS-t	MT20	3.0	6.0	
N	BMWWW-t	MT20	5.0	6.0	
O	BMWW-t	MT20	4.0	4.0	
P	BS-t	MT20	3.0	6.0	
Q	BMWW-t	MT20	4.0	6.0	1.75 2.00
R	BMV1+p	MT20	2.0	4.0	2.25 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		
R	1979	0	1979	0	0	5-8	2-15		
K	1979	0	1979	0	0	5-8	2-15		

UNFACTORED REACTIONS							
1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1409	872 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0
K	1409	872 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.93 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED VERT. LOAD (PLF)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 24	-78.0	-78.0 0.08 (1)	Q-C	-112 / 81	10.00	0.04 (1)
B-C	-2864 / 0	-78.0	-78.0 0.73 (1)	C-O	-693 / 0	3.93	0.42 (1)
C-D	-2271 / 0	-78.0	-78.0 0.64 (1)	O-E	0 / 496	4.37	0.11 (1)
D-E	-2271 / 0	-78.0	-78.0 0.64 (1)	E-N	0 / 0	4.37	0.00 (1)
E-F	-2007 / 0	-78.0	-78.0 0.36 (1)	N-F	0 / 497	5.30	0.11 (1)
F-G	-2272 / 0	-78.0	-78.0 0.64 (1)	N-H	-693 / 0	4.37	0.42 (1)
G-H	-2272 / 0	-78.0	-78.0 0.64 (1)	L-H	-113 / 81	4.37	0.05 (1)
H-I	-2864 / 0	-78.0	-78.0 0.73 (1)	B-Q	0 / 2606	3.93	0.59 (1)
I-J	0 / 24	-78.0	-78.0 0.08 (1)	L-I	0 / 2606	10.00	0.59 (1)
R-B	-1918 / 0	0.0	0.0 0.19 (1)			6.07	
K-I	-1917 / 0	0.0	0.0 0.19 (1)			6.07	

W-M	0 / 2591	-18.5	-18.5 0.56 (1)	10.00
M-L	0 / 2591	-18.5	-18.5 0.56 (1)	10.00
L-K	0 / 0	-18.5	-18.5 0.28 (4)	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31")

CSI: TC=0.73/1.00 (B-C:1), BC=0.56/1.00 (O-Q:1), WB=0.59/1.00 (B-Q:1), SI=0.27/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

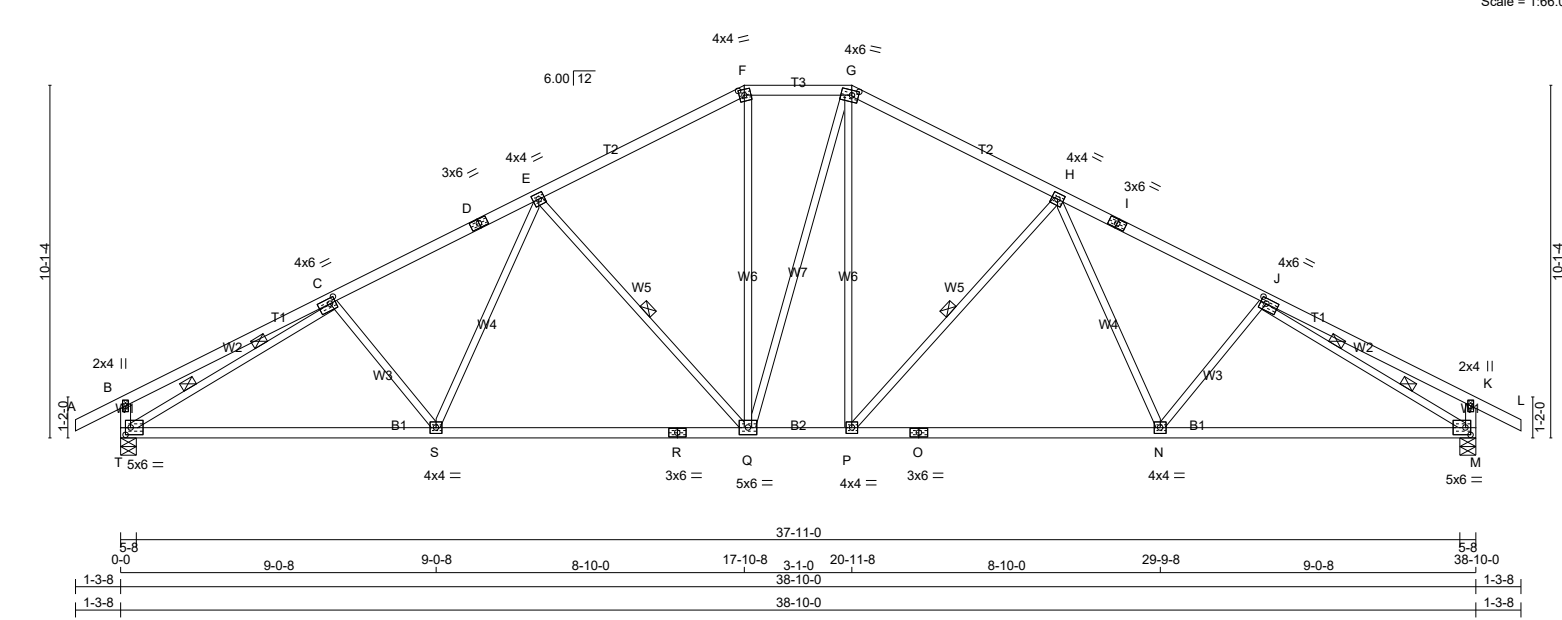
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (Q) (INPUT = 0.90)
JSI METAL= 0.86 (P) (INPUT = 1.00)



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - L	2x4	DRY	No.2
T - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
T - R	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			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 1.75 2.00
D	TS-t	MT20	3.0	6.0
E	TMWW-t	MT20	4.0	4.0
F	TTW-m	MT20	4.0	4.0 2.00 1.75
G	TTWW-m	MT20	4.0	6.0 1.75 2.25
H	TMWW-t	MT20	4.0	4.0
I	TS-t	MT20	3.0	6.0
J	TMWW-t	MT20	4.0	6.0 1.75 2.00
K	TMV+p	MT20	2.0	4.0
M	BMVW1-t	MT20	5.0	6.0 2.50 1.75
N, P, S				
N	BMWW-t	MT20	4.0	4.0
O	BS-t	MT20	3.0	6.0
Q	BMWWW-t	MT20	5.0	6.0
R	BS-t	MT20	3.0	6.0
T	BMVW1-t	MT20	5.0	6.0 2.50 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	MAXIMUM FACTORED	INPUT	REQRD
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
T	1979	0	1979	0	0
M	1979	0	1979	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
T	1409	872 / 0	0 / 0
M	1409	872 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.87 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-Q, H-P.
- 2 LATERAL BRACE(S) AT 1/3 LENGTH OF C-T, J-M.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 24	C-S	-135 / 26
B-C	0 / 19	S-E	0 / 322
C-D	-2711 / 0	E-Q	-689 / 0
D-E	-2711 / 0	Q-F	0 / 621
E-F	-2085 / 0	F-G	0 / 5
F-G	-1852 / 0	G-H	0 / 616
G-H	-2083 / 0	H-I	-691 / 0
H-I	-2712 / 0	I-J	0 / 324
I-J	-2712 / 0	J-K	-135 / 26
J-K	0 / 19	K-L	-2984 / 0
K-L	0 / 24	L-M	-2085 / 0

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.37")

CSI: TC=0.44/1.00 (H-J:1), BC=0.62/1.00 (M-N:4), WB=0.94/1.00 (J-M:1), SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

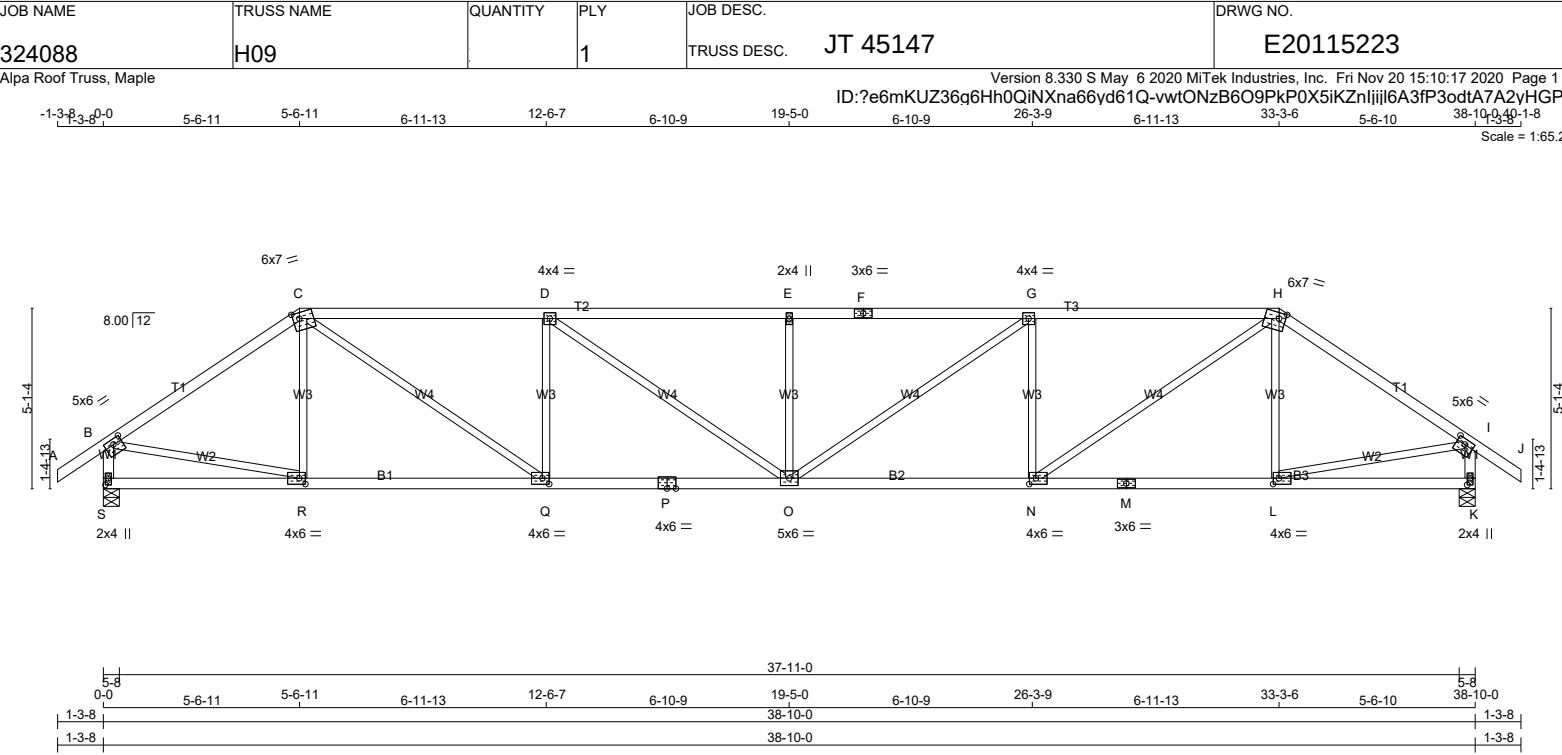
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL= 0.76 (O) (INPUT = 1.00)

scale = 1:65.2

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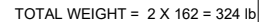


LUMBER						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA			
N. L. G. A. RULES		CHORDS		SIZE		LUMBER		DESCR.		BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
A - C		2x4		DRY		No.2		SPF		GROSS REACTION		GROSS REACTION		BRG		BRG			
C - F		2x4		DRY		1650F 1.5E		SPF		JT VERT		HORZ		DOWN		HORZ		UPLIFT	
F - H		2x4		DRY		1650F 1.5E		SPF		S 1980		0		1980		0		0	
H - J		2x4		DRY		No.2		SPF		K 1980		0		1980		0		0	
S - B		2x4		DRY		No.2		SPF											
K - I		2x4		DRY		No.2		SPF											
S - P		2x4		DRY		No.2		SPF											
P - M		2x4		DRY		No.2		SPF											
M - K		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	6.0	1.75	3.00													
C	TTWW-m	MT20	6.0	7.0	2.00	2.25													
D	TMVW-t	MT20	4.0	4.0															
E	TMVW-w	MT20	2.0	4.0															
F	TS-t	MT20	3.0	6.0															
G	BMVW-t	MT20	4.0	4.0															
H	TTWW-m	MT20	6.0	7.0	2.00	2.25													
I	TMVW-t	MT20	5.0	6.0	1.75	3.00													
K	BMV1+p	MT20	2.0	4.0	2.25	1.00													
L	BMVW-t	MT20	4.0	6.0	2.00	2.00													
M	BS-t	MT20	3.0	6.0															
N	BMVW-t	MT20	4.0	6.0	2.00	2.25													
O	BMVWVW-t	MT20	5.0	6.0															
P	BS-t	MT20	4.0	6.0															
Q	BMVW-t	MT20	4.0	6.0	2.00	2.25													
R	BMVW-t	MT20	4.0	6.0	2.00	2.00													
S	BMV1+p	MT20	2.0	4.0	2.25	1.00													
LOADING																			
TOTAL LOAD CASES: (4)																			
CHORDS										WEBS									
MEMB.		MAX. FACTORED		FACTORED		VERT. LOAD		MAX.		MEMB.		MAX. FACTORED		FACTORED		VERT. LOAD		MAX.	
		(LBS)		(PLF)		CSI (LC)		UNBRAC				(LBS)		CSI (LC)					
FR-TO		FROM		TO		LENGTH		FR-TO		FROM		TO		LENGTH		FR-TO		FROM	
A-B		0 / 30		-78.0		-78.0		0.10 (1)		10.00		R-C		-228 / 3		0.09 (1)			
B-C		-2262 / 0		-78.0		-78.0		0.61 (1)		3.96		C-Q		0 / 1846		0.42 (1)			
C-D		-3396 / 0		-78.0		-78.0		0.71 (1)		3.74		Q-D		-920 / 0		0.35 (1)			
D-E		-3841 / 0		-78.0		-78.0		0.76 (1)		3.52		D-O		0 / 543		0.12 (1)			
E-F		-3841 / 0		-78.0		-78.0		0.76 (1)		3.52		O-E		-496 / 0		0.19 (1)			
F-G		-3841 / 0		-78.0		-78.0		0.76 (1)		3.52		O-G		0 / 543		0.12 (1)			
G-H		-3396 / 0		-78.0		-78.0		0.71 (1)		3.74		N-G		-920 / 0		0.35 (1)			
H-I		-2262 / 0		-78.0		-78.0		0.61 (1)		3.96		N-H		0 / 1846		0.42 (1)			
I-J		0 / 30		-78.0		-78.0		0.10 (1)		10.00		L-H		-228 / 3		0.09 (1)			
S-B		-1940 / 0		0.0		0.0		0.20 (1)		6.04		B-R		0 / 1913		0.43 (1)			
K-I		-1940 / 0		0.0		0.0		0.20 (1)		6.04		L-I		0 / 1913		0.43 (1)			
S-R		0 / 0		-18.5		-18.5		0.17 (4)		10.00									
R-Q		0 / 1875		-18.5		-18.5		0.40 (1)		10.00									
Q-P		0 / 3396		-18.5		-18.5		0.62 (1)		10.00									
P-O		0 / 3396		-18.5		-18.5		0.62 (1)		10.00									
O-N		0 / 3396		-18.5		-18.5		0.62 (1)		10.00									
SPECIFIED LOADS:																			
TOP CH.		LL		=		21.0		PSF											
		DL		=		6.0		PSF											
BOT CH.		LL		=		0.0		PSF											
		DL		=		7.4		PSF											
TOTAL LOAD				=		34.4		PSF											
SPACING = 24.0 IN. C/C																			
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM																			
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015																			
THIS DESIGN COMPLIES WITH:																			
- PART 9 OF CBC 2018, ABC 2019																			
- PART 9 OF OBC 2012 (2019 AMENDMENT)																			
- CSA 086-14																			
- TPIC 2014																			
(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD																			
ALLOWABLE DEFL.(LL)= L/360 (1.29")																			
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")																			
ALLOWABLE DEFL.(TL)= L/360 (1.29")																			
CALCULATED VERT. DEFL.(TL) = L/ 980 (0.48")																			
CSI: TC=0.76/1.00 (E-G:1), BC=0.62/1.00 (O-Q:1), WB=0.43/1.00 (B-R: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																			

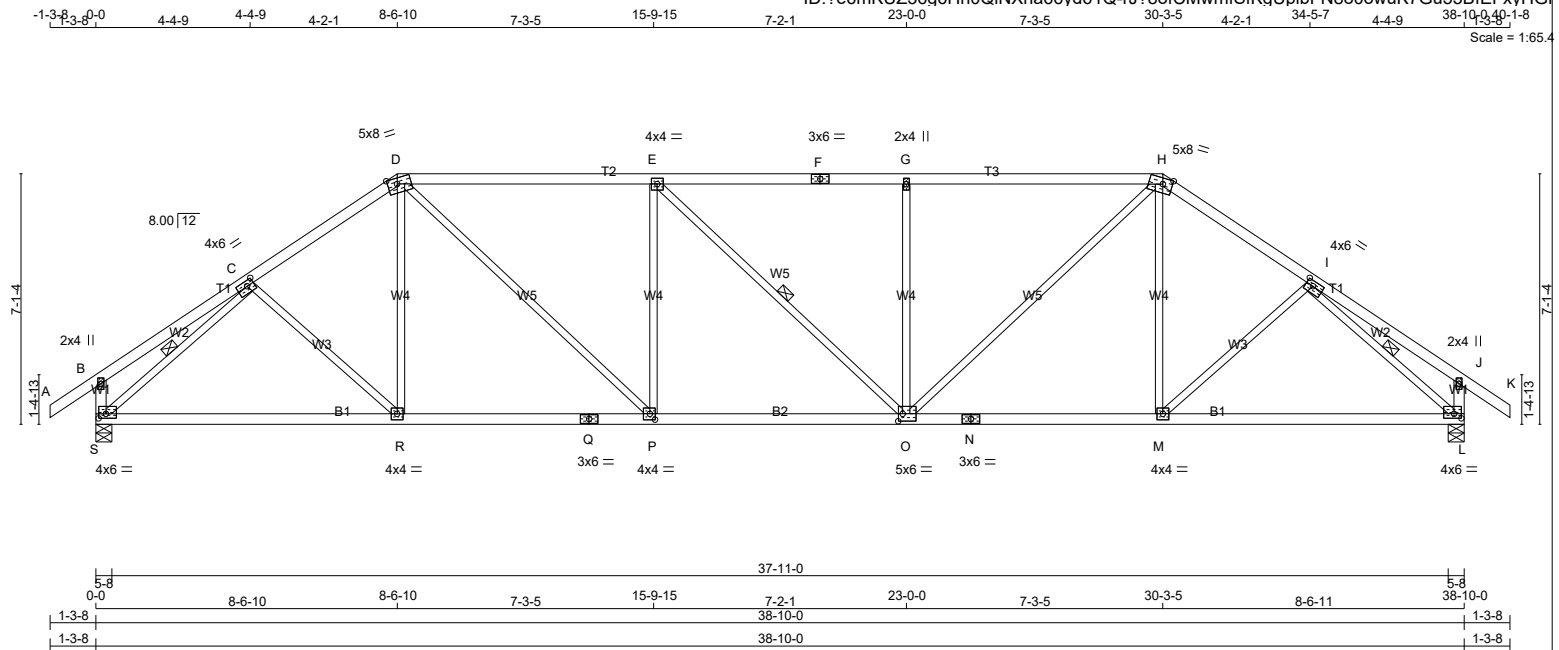
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



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JSI GRIP= 0.90 (U) (INPUT = 0.90)
JSI METAL= 0.92 (R) (INPUT = 1.00)



TOTAL WEIGHT = 2 X 161 = 322 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR	
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	T	TYPE	PLATES	W	LEN	Y	X
B	TMV+p		MT20	2.0	4.0		
C	TMWW-t		MT20	4.0	6.0	1.75	2.50
D	TTWW-m		MT20	5.0	8.0	2.00	3.25
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	8.0	2.00	3.25
I	TMWW-t		MT20	4.0	6.0	1.75	2.50
J	TMV+p		MT20	2.0	4.0		
L	BMWV1-t		MT20	4.0	6.0	1.50	2.50
M	BMWW-t		MT20	4.0	4.0		
N	BS-t		MT20	3.0	6.0		
O	BMWWW-t		MT20	5.0	6.0	2.50	1.50
P	BMWW-t		MT20	4.0	4.0	2.00	1.75
Q	BS-t		MT20	3.0	6.0		
R	BMWW-t		MT20	4.0	4.0		
S	BMWV1-t		MT20	4.0	6.0	1.50	2.50

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



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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
S	1980	0	1980	0	0	5-8	2-2
L	1980	0	1980	0	0	5-8	2-2

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1410	873 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0
L	1410	873 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.38 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-O, C-S, 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)

C H O R D S				W E B S				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 30	-78.0	-78.0	0.10 (1)	10.00	C-R	0 / 73	0.03 (4)
B-C	0 / 20	-78.0	-78.0	0.21 (1)	10.00	R-D	0 / 142	0.05 (4)
C-D	-2253 / 0	-78.0	-78.0	0.31 (1)	4.28	D-P	0 / 1079	0.24 (1)
D-E	-2646 / 0	-78.0	-78.0	0.92 (1)	3.38	P-E	-612 / 0	0.54 (1)
E-F	-2645 / 0	-78.0	-78.0	0.90 (1)	3.38	E-O	-1 / 0	0.00 (1)
F-G	-2645 / 0	-78.0	-78.0	0.90 (1)	3.38	O-G	-612 / 0	0.53 (1)
G-H	-2645 / 0	-78.0	-78.0	0.91 (1)	3.39	O-H	0 / 1077	0.24 (1)
H-I	-2253 / 0	-78.0	-78.0	0.31 (1)	4.28	M-H	0 / 143	0.05 (4)
I-J	0 / 20	-78.0	-78.0	0.21 (1)	10.00	M-I	0 / 73	0.03 (4)
J-K	0 / 30	-78.0	-78.0	0.10 (1)	10.00	S-C	-2477 / 0	0.60 (1)
S-B	-238 / 0	0.0	0.0	0.02 (1)	7.81	I-L	-2477 / 0	0.60 (1)
L-J	-238 / 0	0.0	0.0	0.02 (1)	7.81			

F-C	0 / 2040	-18.5	-18.5	0.51 (1)	10.00
O-N	0 / 1858	-18.5	-18.5	0.49 (4)	10.00
N-M	0 / 1858	-18.5	-18.5	0.49 (4)	10.00
M-L	0 / 1823	-18.5	-18.5	0.47 (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 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.92/1.00 (D-E:1), BC=0.51/1.00 (O-P:1),
WB=0.60/1.00 (I-L:1), SSI=0.26/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.58 (I) (INPUT = 1.00)

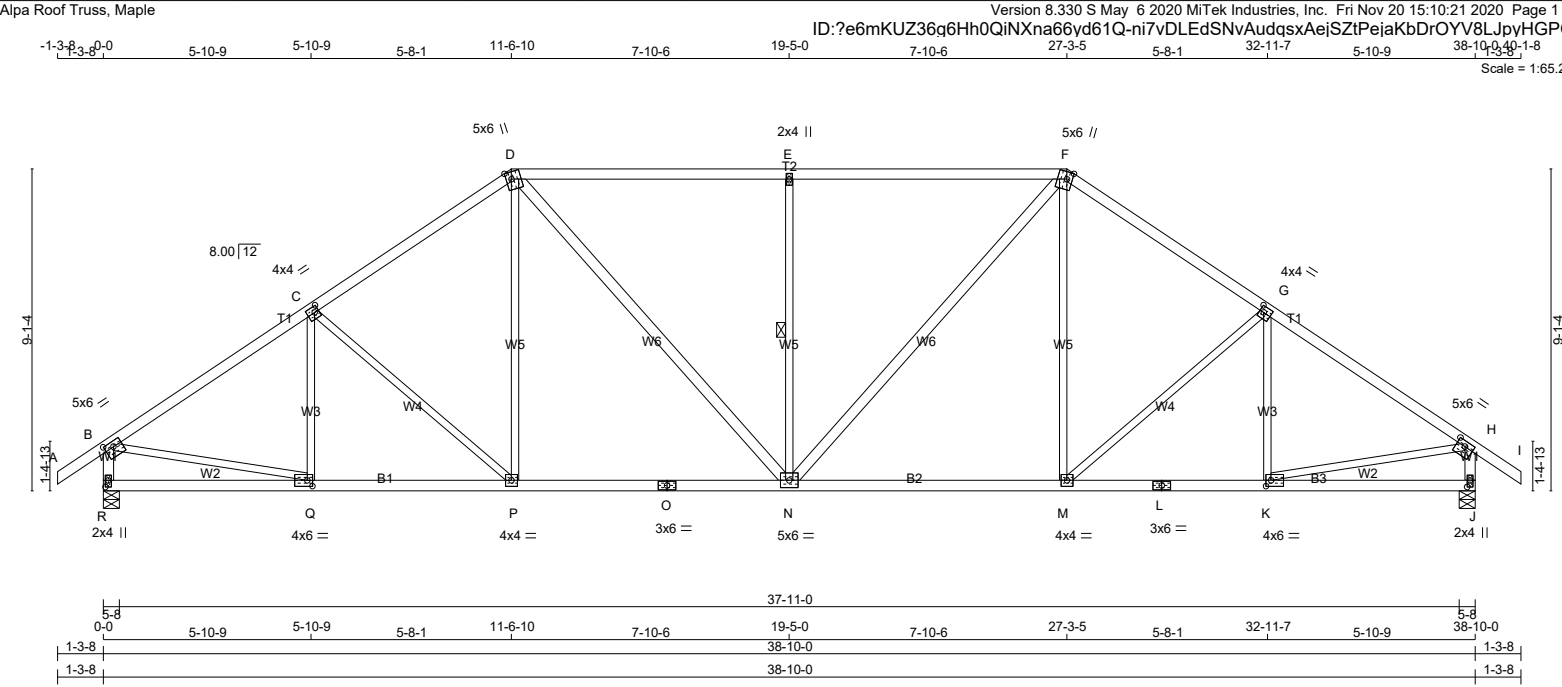
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R-Q	0 / 1797	-18.3	-18.3	0.36 (1)	10.00
Q-P	0 / 2314	-18.5	-18.5	0.45 (1)	10.00
P-O	0 / 1797	-18.5	-18.5	0.36 (1)	10.00
O-N	0 / 1797	-18.5	-18.5	0.36 (1)	10.00
N-M	0 / 1910	-18.5	-18.5	0.38 (1)	10.00
M-L	0 / 0	-18.5	-18.5	0.10 (4)	10.00

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.58 (J) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	H13		1	TRUSS DESC. JT 45147	E20115227



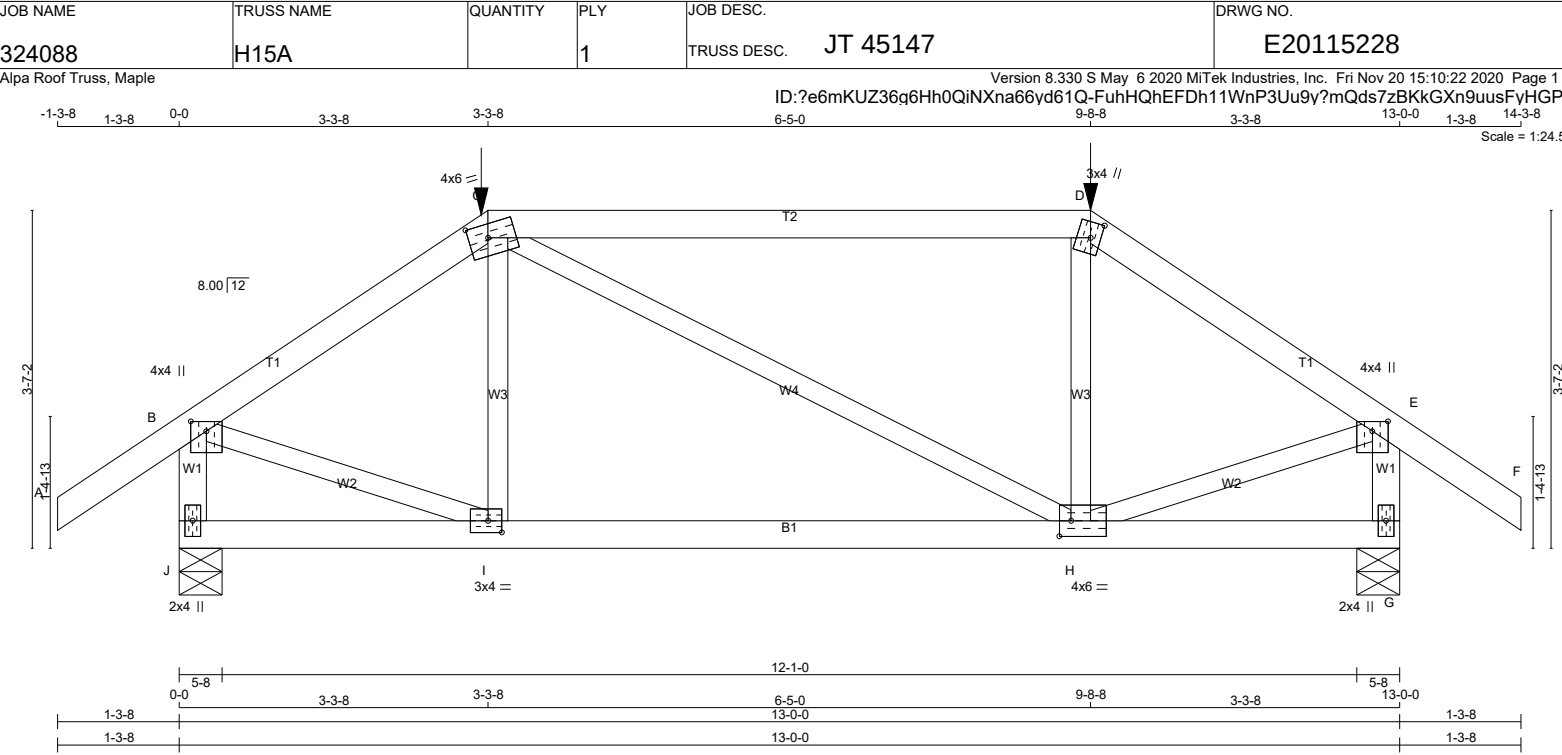
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED GROSS REACTION				TOP CH. LL = 21.0 PSF			
A - D	2x4	DRY	No.2	MAXIMUM FACTORED GROSS REACTION				DL = 6.0 PSF			
D - F	2x4	DRY	No.2	INPUT BRG				BOT CH. LL = 0.0 PSF			
F - I	2x4	DRY	No.2	REQRD BRG				DL = 7.4 PSF			
R - B	2x4	DRY	No.2	DOWN				TOTAL LOAD = 34.4 PSF			
J - H	2x4	DRY	No.2	UP				SPACING = 24.0 IN. C/C			
R - O	2x4	DRY	No.2	IN-SX				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
O - L	2x4	DRY	No.2	IN-SX				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015			
L - J	2x4	DRY	No.2	IN-SX				THIS DESIGN COMPLIES WITH:			
ALL WEBS	2x3	DRY	No.2	DEAD				- PART 9 OF CBC 2018, ABC 2019			
EXCEPT				SOIL				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
D - N	2x4	DRY	No.2	0/0				- CSA 086-14			
N - F	2x4	DRY	No.2	0/0				- TPIC 2014			

DRY: SEASONED LUMBER.				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J				(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			
PLATES (table is in inches)				BRACING				ALLOWABLE DEFL.(LL)= L/360 (1.29")			
JT	TYPE	PLATES	W	LEN	Y	X		CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")			
B	TMVW-t	MT20	5.0	6.0	1.75	3.00		ALLOWABLE DEFL.(TL)= L/360 (1.29")			
C	TMWW-t	MT20	4.0	4.0	2.00	1.50		CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")			
D	TTWW+m	MT20	5.0	6.0	Edge	1.75		CSI: TC=0.77/1.00 (E-F:1), BC=0.41/1.00 (M-N:1), WB=0.44/1.00 (H-K:1), SSI=0.30/1.00 (D-E:1)			
E	TMW+w	MT20	2.0	4.0				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
F	TTWW+m	MT20	5.0	6.0	Edge	1.75		COMP=1.10 SHEAR=1.10 TENS= 1.10			
G	TMWW-t	MT20	4.0	4.0	2.00	1.50		COMPANION LIVE LOAD FACTOR = 1.00			
H	TMVW-t	MT20	5.0	6.0	1.75	3.00		TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
J	BMV1+p	MT20	2.0	4.0	2.25	1.00		NAIL VALUES			
K	BMWW-t	MT20	4.0	6.0	2.00	1.75		PLATE GRIP(DRY) SHEAR SECTION			
L	BS-t	MT20	3.0	6.0				(PSI) (PLI) (PLI)			
M	BMWW-t	MT20	4.0	4.0				MAX MIN MAX MIN MAX MIN			
N	BMWWW-t	MT20	5.0	6.0				MT20 650 371 1747 788 1987 1873			
O	BS-t	MT20	3.0	6.0				PLATE PLACEMENT TOL. = 0.250 inches			
P	BMWW-t	MT20	4.0	4.0				PLATE ROTATION TOL. = 5.0 Deg.			
Q	BMWW-t	MT20	4.0	6.0	2.00	1.75		JSI GRIP= 0.85 (K) (INPUT = 0.90)			
R	BMV1+p	MT20	2.0	4.0	2.25	1.00		JSI METAL= 0.63 (O) (INPUT = 1.00)			

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



W- L	0 / 1940	-10.3	-10.3	0.41 (1)	10.00
L- K	0 / 1940	-18.5	-18.5	0.41 (1)	10.00
K- J	0 / 0	-18.5	-18.5	0.13 (4)	10.00



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - D	2x4	DRY 2100F 1.8E	SPF
D - F	2x4	DRY No.2	SPF
J - B	2x4	DRY No.2	SPF
G - E	2x4	DRY No.2	SPF
J - G	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	4.0	4.0	1.25	2.00
C TTWW-m	MT20	4.0	6.0	1.75	2.50
D TTWW+m	MT20	3.0	4.0	2.00	1.25
E TMVW+p	MT20	4.0	4.0	1.25	2.00
G BMV1+p	MT20	2.0	4.0		
H BMWWW-t	MT20	4.0	6.0	2.00	1.50
I BMWWW-t	MT20	3.0	4.0	1.50	1.75
J BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
J	930	0	930	0	0	5-8	1-8		
G	930	0	930	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	661	415 / 0	0 / 0	0 / 0	0 / 0	246 / 0	0 / 0
G	661	415 / 0	0 / 0	0 / 0	0 / 0	246 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 30	-78.0	-78.0 0.12 (1)	10.00	I-C	-81 / 67	0.03 (4)
B-C	-817 / 0	-78.0	-78.0 0.17 (1)	6.25	C-H	0 / 0	0.00 (1)
C-D	-676 / 0	-103.1	-103.1 0.55 (1)	6.25	H-D	-80 / 67	0.03 (4)
D-E	-818 / 0	-78.0	-78.0 0.17 (1)	6.25	B-I	0 / 712	0.18 (1)
E-F	0 / 30	-78.0	-78.0 0.12 (1)	10.00	H-E	0 / 712	0.18 (1)
J-B	-907 / 0	0.0	0.0 0.10 (1)	7.81			
G-E	-907 / 0	0.0	0.0 0.10 (1)	7.81			
J-I	0 / 0	-24.5	-24.5 0.17 (4)	10.00			
I-H	0 / 676	-24.5	-24.5 0.24 (4)	10.00			
H-G	0 / 0	-24.5	-24.5 0.17 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-3-8	-77	-77	---	FRONT	VERT	TOTAL	---	C1
D	9-8-8	-77	-77	---	FRONT	VERT	TOTAL	---	C1

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 3-3-8
END SETBACK = 3-3-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.43")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.43")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.05")

CSI: TC=0.55/1.00 (C-D:1) , BC=0.24/1.00 (H-I:4) , WB=0.18/1.00 (E-H:1) , SSI=0.28/1.00 (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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (H) (INPUT = 0.90)
JSI METAL= 0.23 (I) (INPUT = 1.00)

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



Scale = 1:34.1

JSI GRIP= 0.58 (D) (INPUT = 0.90)
JSI METAL= 0.17 (D) (INPUT = 1.00)

TOTAL WEIGHT = 120 lb

DRY: SEASONED LUMBER.

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

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

CONTINUED ON PAGE 2

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ID: ?e6mKUZ36q6Hh0QIiNXna66vd1Q-BH01rMGVlIHk5ZBcIBQ4BVul xdWob5qETN?w8yHGPD



JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.39 (G) (INPUT = 1.00)

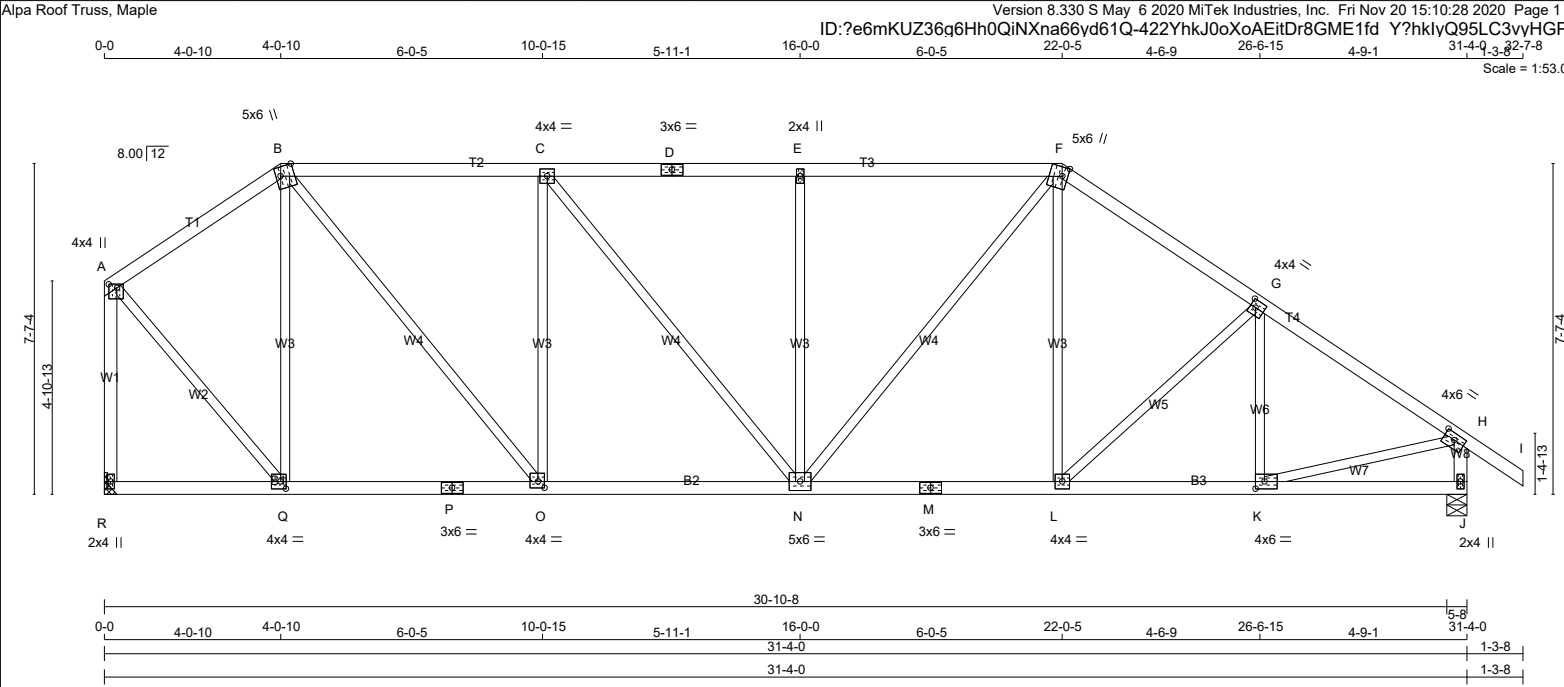
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1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	H20		1	TRUSS DESC. JT 45147	E20115233



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL	=	21.0 PSF
A - B	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	DL	=	6.0 PSF	
B - D	2x4	DRY	No.2	JT VERT	DOWN	HORZ	UPLIFT	BOT CH.	LL	=	0.0 PSF
D - F	2x4	DRY	No.2	R 1511	0	1511	0	DL	=	7.4 PSF	
F - I	2x4	DRY	No.2	J 1618	0	1618	0	TOTAL LOAD	=	34.4 PSF	
R - A	2x4	DRY	No.2	A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT R. MINIMUM BEARING LENGTH AT JOINT R = 1-10.				SPACING = 24.0 IN. C/C			
J - H	2x4	DRY	No.2					LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
R - P	2x4	DRY	No.2					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015			
P - M	2x4	DRY	No.2					THIS DESIGN COMPLIES WITH:			
M - J	2x4	DRY	No.2					- PART 9 OF CBC 2018, ABC 2019			
ALL WEBS	2x3	DRY	No.2					- PART 9 OF OBC 2012 (2019 AMENDMENT)			
EXCEPT								- 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 (0.14")			
								CSI: TC=0.63/1.00 (A-R:1), BC=0.30/1.00 (K-L:1),			
								WB=0.80/1.00 (C-O:1), SSI=0.22/1.00 (B-C:1)			
								DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
								COMP=1.10 SHEAR=1.10 TENS=1.10			
								COMPANION LIVE LOAD FACTOR = 1.00			
								TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
								NAIL VALUES			
								PLATE GRIP(DRY) SHEAR SECTION			
								(PSI) (PLI) (PLI)			
								MAX MIN MAX MIN MAX MIN			
								MT20 650 371 1747 788 1987 1873			
								PLATE PLACEMENT TOL. = 0.250 inches			
								PLATE ROTATION TOL. = 5.0 Deg.			
								JSI GRIP= 0.89 (Q) (INPUT = 0.90)			
								JSI METAL= 0.47 (M) (INPUT = 1.00)			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.00	2.25
B	TTWW+m	MT20	5.0	6.0	Edge	3.75
C	TMWW-t	MT20	4.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.50	1.50
G	TMWW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	4.0	6.0	1.75	3.00
J	BMV1+p	MT20	2.0	4.0		
K	BMWW-t	MT20	4.0	6.0	2.00	2.50
L	BMWW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMWWW-t	MT20	5.0	6.0		
O	BMWW-t	MT20	4.0	4.0	1.75	1.75
P	BS-t	MT20	3.0	6.0		
Q	BMWW-t	MT20	4.0	4.0	2.00	1.50
R	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



UNFACTORED REACTIONS						
1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R 1078	658 / 0	0 / 0	0 / 0	0 / 0	420 / 0	0 / 0
J 1152	715 / 0	0 / 0	0 / 0	0 / 0	436 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.62 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-902 / 0	-78.0 -78.0 0.24 (1)	6.18	Q-B	-719 / 0	0.76 (1)	
B-C	-1457 / 0	-78.0 -78.0 0.45 (1)	4.88	B-O	0 / 1128	0.25 (1)	
C-D	-1661 / 0	-78.0 -78.0 0.46 (1)	4.62	O-C	-760 / 0	0.80 (1)	
D-E	-1661 / 0	-78.0 -78.0 0.46 (1)	4.62	C-N	0 / 325	0.07 (1)	
E-F	-1661 / 0	-78.0 -78.0 0.46 (1)	4.63	N-E	-506 / 0	0.53 (1)	
F-G	-1659 / 0	-78.0 -78.0 0.34 (1)	4.79	N-F	0 / 471	0.11 (1)	
G-H	-1763 / 0	-78.0 -78.0 0.35 (1)	4.68	L-F	0 / 219	0.05 (4)	
H-I	0 / 30	-78.0 -78.0 0.10 (1)	10.00	L-G	-173 / 0	0.12 (1)	
R-A	-1485 / 0	0.0 0.0 0.63 (1)	6.73	K-G	-250 / 0	0.08 (1)	
J-H	-1579 / 0	0.0 0.0 0.16 (1)	6.56	A-Q	0 / 1114	0.25 (1)	
				K-H	0 / 1524	0.34 (1)	
R-Q	0 / 0	-18.5 -18.5 0.11 (4)	10.00				
C-P	0 / 730	-18.5 -18.5 0.20 (4)	10.00				

L-R	0 / 1400	-10.3 -10.3 0.30 (1)	10.00
K-J	0 / 0	-18.5 -18.5 0.09 (4)	10.00

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TOTAL WEIGHT = 11 X 17 = 185 lb

DRY: SEASONED LUMBER.

PLATES (table is in inches)

[M]

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=0.13/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.90)
JSI METAL= 0.16 (B) (INPUT = 1.00)

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

UNFACTORED REACTIONS

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (C)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		FR-TO			
E-B	-392 / 0	0.0	0.0 0.13 (4)	7.81			
A-B	0 / 24	-78.0	-78.0 0.10 (1)	10.00			
B-C	-26 / 0	-78.0	-78.0 0.46 (1)	6.25			
E-D	0 / 0	-18.5	-18.5 0.13 (4)	10.00			

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



Scale = 1:18.7



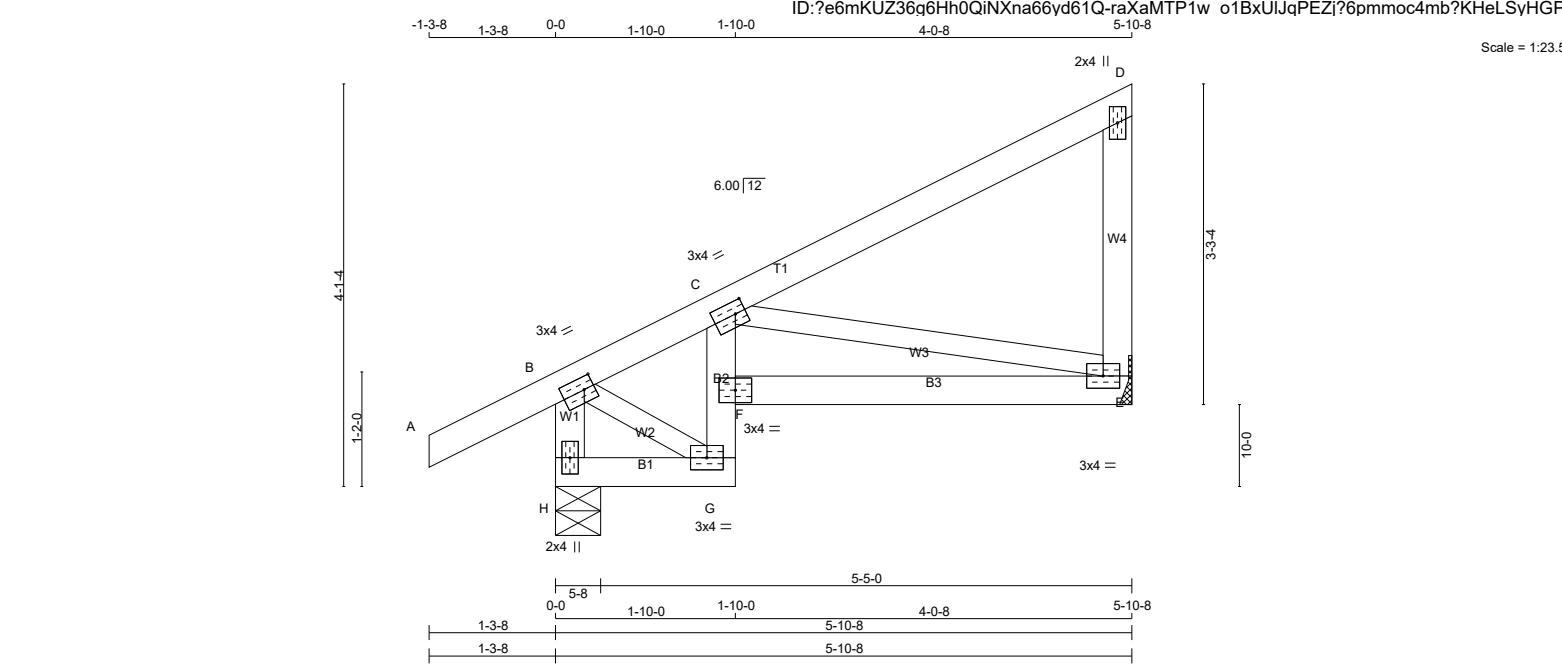
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	J01T		1	TRUSS DESC. JT 45147	E20115236

Alpa Roof Truss, Maple

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ID: ?e6mKUZ36g6Hh0QINXna66yd61Q-raXaMTP1w o1BxUIJqPEZj?6pmmoc4mb?KHeLSyHGF1



TOTAL WEIGHT = 9 X 26 = 232 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	3.0	4.0	1.50 1.25
C	TMVW-t	MT20	3.0	4.0	1.50 1.25
D	TMV+p	MT20	2.0	4.0	
E	BMVW1-t	MT20	3.0	4.0	
F	BVM-I	MT20	3.0	4.0	
G	BMVW-t	MT20	3.0	4.0	
H	BMV1+p	MT20	2.0	4.0	

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	401	0	401	0	0
E	271	0	271	0	0

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	284	187 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
E	194	117 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 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.				WEBS			
MAX. FACTORED		FORCE		VERT. LOAD		MAX. FACTORED		FORCE	
		(LBS)		(PLF)		MAX. UNBRACED		(LBS)	
				CSI (LC)		LENGTH			
FR-TO				FROM TO		FR-TO			
H-B	-412 / 0	0.0		0.0 0.03 (1)		7.81	B-G	0 / 244	0.05 (1)
A-B	0 / 24	-78.0		-78.0 0.10 (1)		10.00	C-E	-386 / 0	0.11 (1)
B-C	-227 / 0	-78.0		-78.0 0.07 (1)		6.25			
C-D	-52 / 0	-78.0		-78.0 0.13 (1)		6.25			
E-D	-138 / 0	0.0		0.0 0.12 (1)		7.81			
H-G	-29 / 3	-18.5		-18.5 0.06 (1)		6.25			
G-F	-68 / 0	0.0		0.0 0.16 (1)		7.81			
F-C	-45 / 33	0.0		0.0 0.14 (1)		7.81			
F-E	0 / 424	-18.5		-18.5 0.13 (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

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

CSI: TC=0.13/1.00 (C-D:1), BC=0.16/1.00 (F-G:1), WB=0.11/1.00 (C-E:1), SS=0.18/1.00 (C-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (E) (INPUT = 0.90)
JSI METAL= 0.14 (E) (INPUT = 1.00)

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

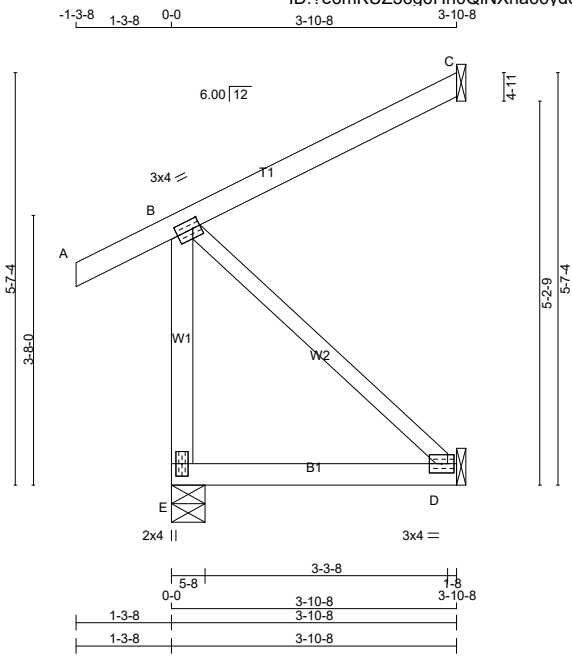


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
324088	J02		1	TRUSS DESC. JT 45147	E20115237

Alpa Roof Truss, Maple

ID: ?e6mKUZ36q6Hh0QiNXna66yd61Q-B3TKdJP1CNNDneiAe7KdxJfUSoPJxLBAuqD5wJyHGJt

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Scale = 1:31.3

TOTAL WEIGHT = 5 X 19 = 93 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	
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	4.0	1.50	1.25
D	BMW1-t	MT20	3.0	4.0		
E	BMV1-p	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
E	291	0	291	0	0
C	151	0	151	0	0
D	34	0	38	0	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	205	138 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
C	105	81 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	27	0 / 0	0 / 0	0 / 0	0 / 0	27 / 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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
E-B	-257 / 0	B-D	0 / 0
A-B	0 / 24		
B-C	0 / 0		
E-D	0 / 0		

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

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

ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.20/1.00 (B-C:1) , BC=0.07/1.00 (D-E:4) , WB=0.00/1.00 (B-D: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)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873

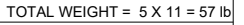
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.05 (E) (INPUT = 1.00)

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



Scale = 1:21.1

JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

Version 8.330 S May 6 2020 MiTek Industries, Inc. Fri Nov 20 15:10:38 2020 Page 1



TOTAL WEIGHT = $5 \times 17 = 86 \text{ lb}$

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

LUS – Double Shear Joist Hangers



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

Material: 18 gauge

Finish: G90 galvanized

Design:

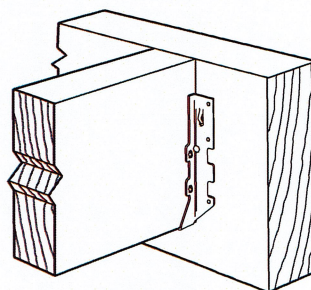
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

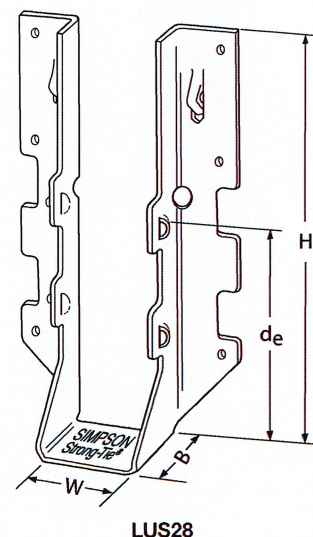
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



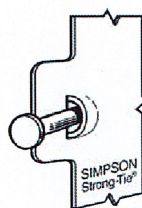
Typical LUS Installation



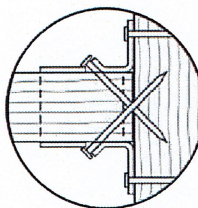
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1¾	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3½	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4½	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4½	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 15/16	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4½	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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T-SPECLUS20 3/20 exp. 6/22

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HUS/LJS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: See table

Finish: G90 galvanized

Design:

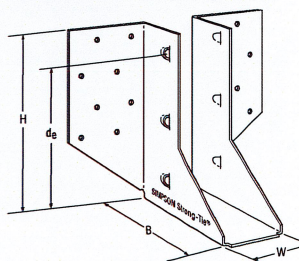
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

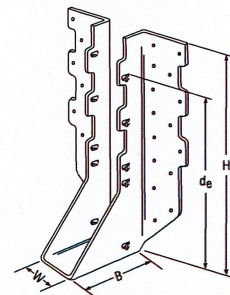
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

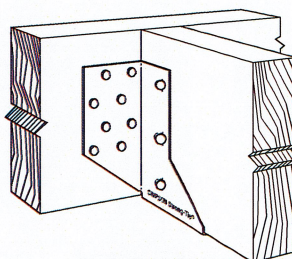
- See current catalogue for options



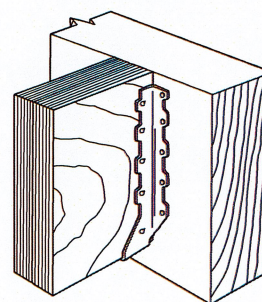
LJS26DS



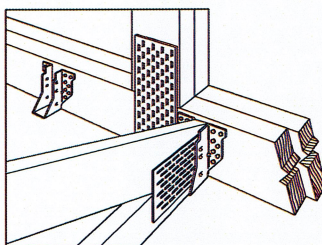
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



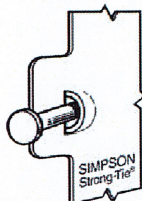
Typical HUS
Installation



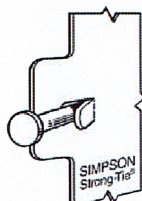
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.	Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.
LJS26DS	18	1½	5	3½	4⅞	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅞	3	3½	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7⅜	3	6⅜	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9⅜	3	7⅜	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅜	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

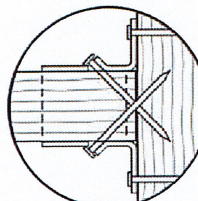
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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



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



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

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T-SPECHUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

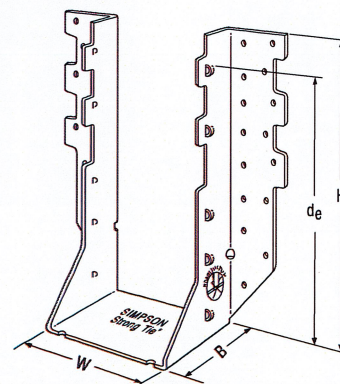
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

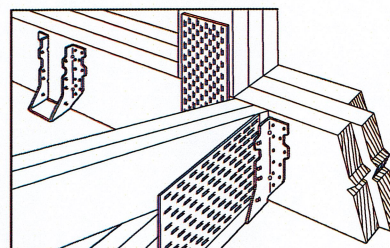
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

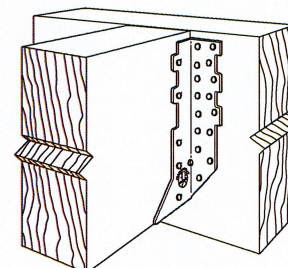
- See current catalogue for options



HHUS410



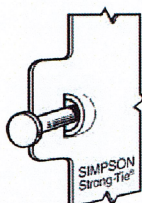
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

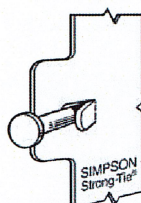
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HHUS26-2	14	3½	5¼	3	3¼	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3½	7½	3	6½	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3½	9½	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4¼	9	3	7¼	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6¼	8¾	3	7¾	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3½	5¼	3	3¼	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3½	7½	3	6½	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3½	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5½	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7¼	9	3½	7¾	(30) 16d	(10) 16d	4670	10155	3370	7210

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

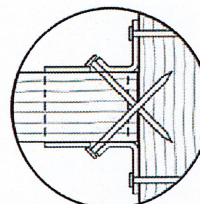


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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T-SPECHHUS20 3/20 exp. 6/22

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TC – Truss Connectors

SIMPSON
Strong-Tie

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

Material: 16 gauge

Finish: G90 galvanized

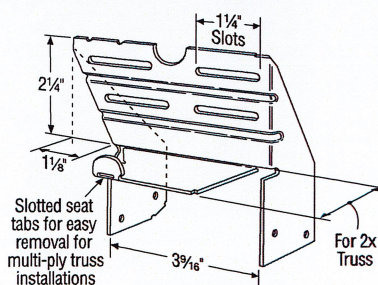
Design: Factored resistances are in accordance with CSA 086-14

Installation:

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

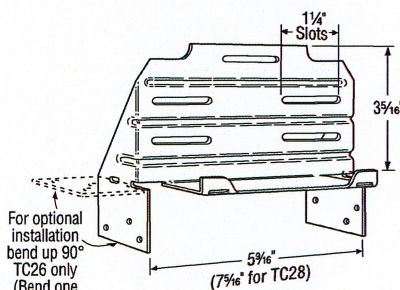
Optional TC Installation:

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



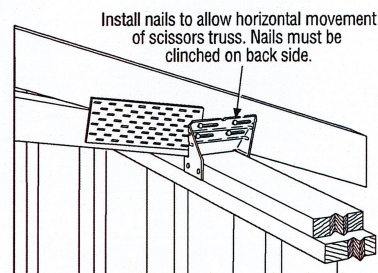
TC24

U.S. Patent 4,932,173

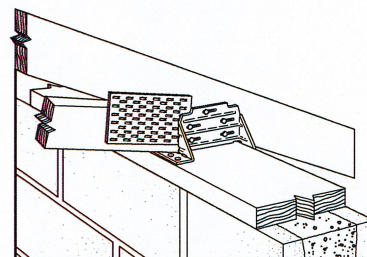


TC26

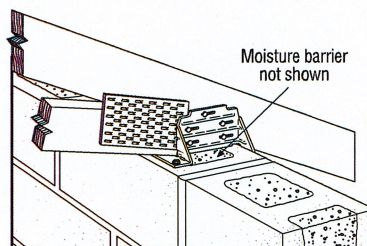
(TC28 Similar)



Typical TC24 Installation



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



Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

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



**LIMIT
STATES
DESIGN**

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