

ALL CONFRAMING TO CONFORM WITH THE 2012 IBC. 2012 ROOF TRUSSES SHALL BE MEET OVER TRUSSES TO BE 24" SF 42X10C WITH A VERT POST TO THE TRUSS WITH A VERT POST TO THE TRUSS WITH A VERT POST TO THE TRUSS TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & INTERMEDIATE PT. OF BRACING DOES NOT EXCEED 8'

53-01-00

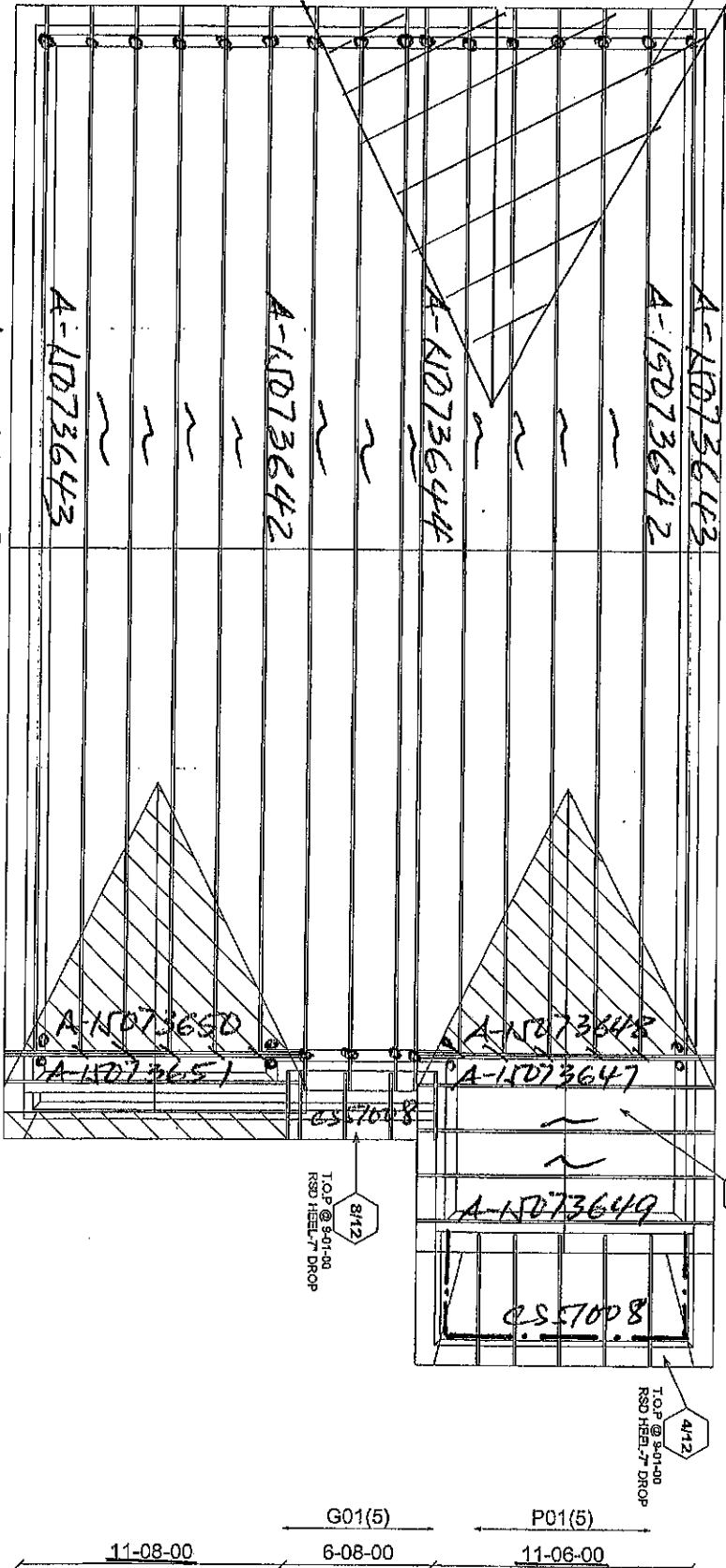
5-00-00

H04A
H04(3)
H04G

ALPA-BARRIE

29-10-00
H01(5) H02(4) H01(5)
H03(14)
H01G H03G

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCI) - FM
ASPHALT SHINGLES
2" x 6" BRGRICK
FRIGIBACK TRS
PURLINS BY OTHERS



FRIGIBACK (A-1073645)
(A-1073646)

HANGERS
/ LJS26DS
H2-5A

CONVENTIONAL
FRAMING BY
OTHERS

Millk Ver 7.5.0



Job Track: 40297
Layout ID: 253434
Plan Log: 79711

Builder Location:
GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/23/2015 Designer: danyla

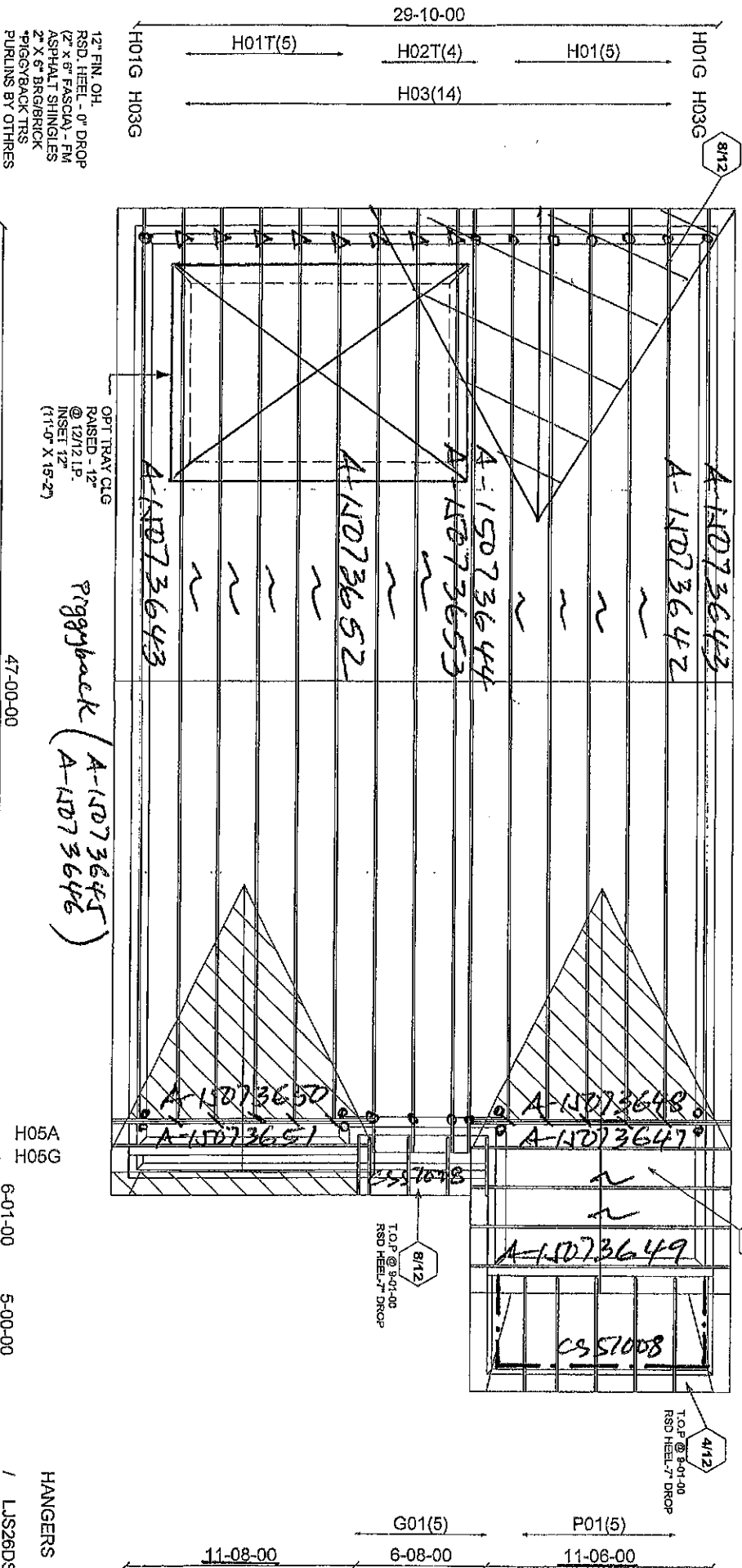
Model / Elevation: 38-3 / A LOT 48 REAR UPGRADE.

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

PL 82444 85348 (88062) (COTE4)

5-003-00

ALPAC-BAC-BE



P.L. 82444, 85348 86062 4764

Mikek Ver: 7.5.0



Job Track:	40297
Layout ID:	253435
Plan Log:	79711

Builder / Location:	GOLD PARK / KLEINBURG	
Project:	HUNTINGTON & NASHVILLE	
Date:	4/23/2015	Destination: Orlando

Model / Elevation: 38-3 / A OPT TRAY LOT 48 REAR OF RAOFF.

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



Job Track: 40297
Layout ID: 253436
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/22/2015 Designer: chryle

Model / Elevation: 38-3 / B
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

Max Ver: 7.5.0

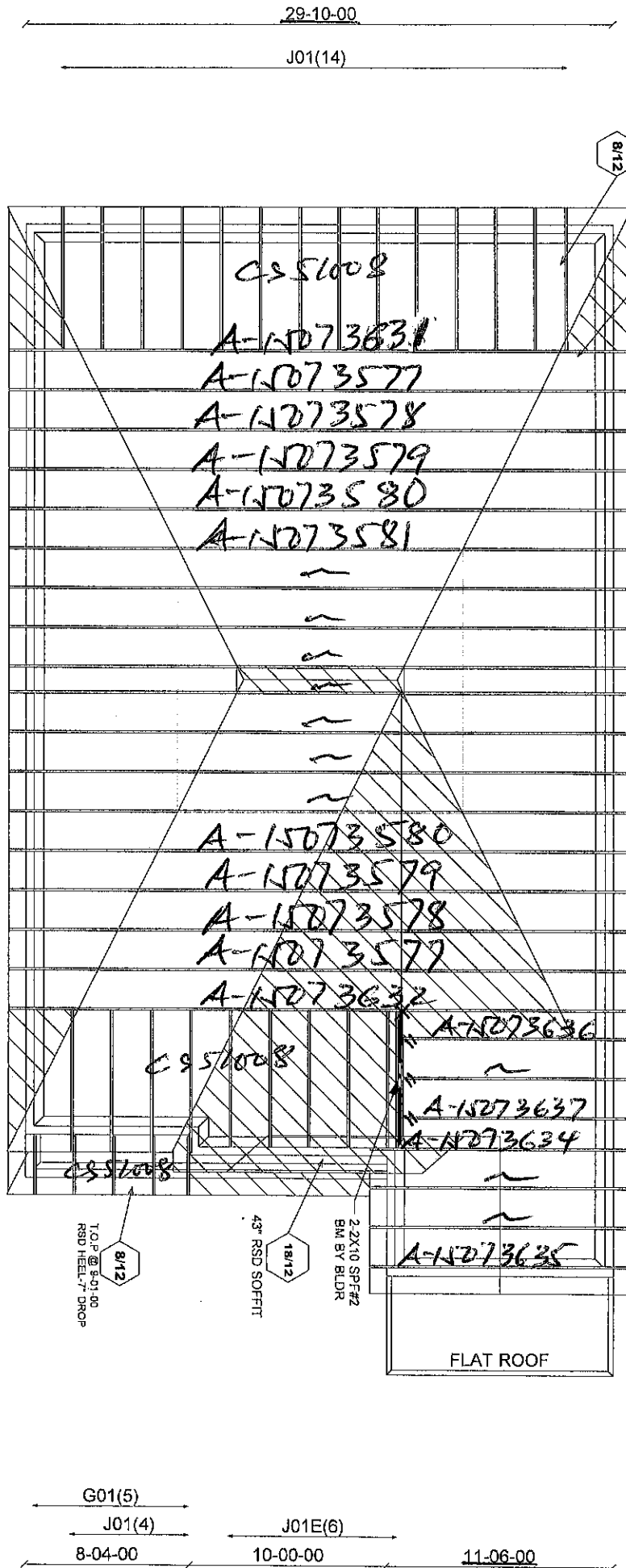


12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRICK
PIGGYBACK TRS
PURLINS BY OTHERS

Piggyback (A-15073582)
(A-15073633)

47-00-00
6-01-00 5-00-00

HANGERS
// LUS24
X HHUS26-2



ALL CONN. FRAMING TO CONFORM WITH PART 9 OF A.C. 2012. OVER TRUSSES TO BE CROSS MET WITH A VERTICAL TO THE TRUSS UNDERNEATH AT EACH CROSS PT. TO HAVE ALTERN BRACING SO THAT THE DIST BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

H01
H02
H03
H04
H05
H07
H08
H08
H07

H05
H04
H03
H02
H01
H11
H11
H11SG

H10(3)
H10G

ALPA-BARRE



Job Track: 40297
Layout ID: 253437
Plan Log: 79711

Builder / Location:
GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/22/2015
Designer: chayne

Model / Elevation:
38-3 / B OPT TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.



Meek Ver: 7.5.0

12" FIN. OH:
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" x 6" BROCKBRICK
PIGGYBACK TRS
PURLINS BY OTHERS

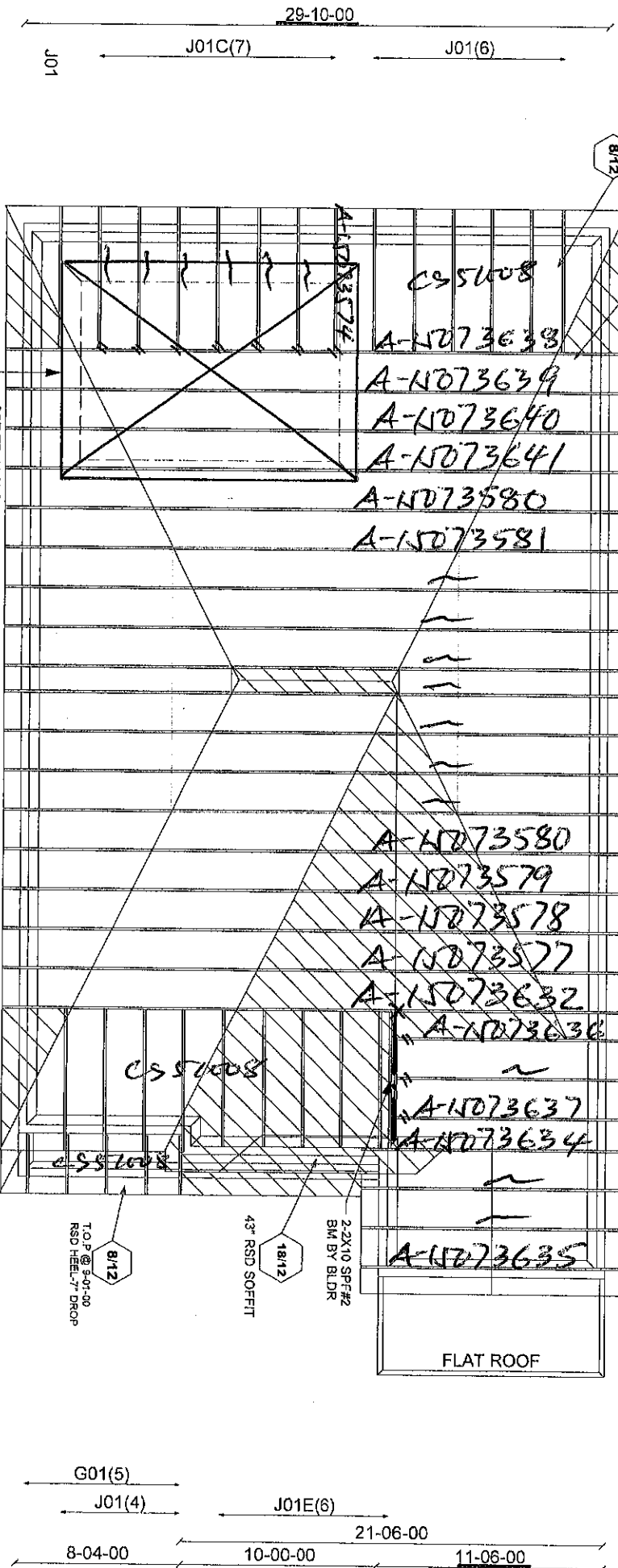
OPT TRAY CLG
RAISED - 12"
@ 12/12 I.P.
INSET 12"
(11'-0" X 15'-2")

Piggyback (A-N073582 / A-N073633)

47'-00'-00

6'-01'-00 5'-00'-00

HANGERS
// LUS24
X HHUS26-2



ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF TRUSSES TO BE CROSS-BRACED TO RESIST TWISTING AND TO BE SECURED TO THE WALLS WITH A VERT POST TO THE TRUSS CHORDS AT EACH CROSS PT. TRUSSES LONGER THAN 10' TO HAVE AN ADDITIONAL BRACE SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 5'.

H01T
H02T
H03T
H04T
H05
H07
H08
H08
H07

53-01-00

H05
H04
H03
H02
H01
H11
H11
H11SG

H10(3)

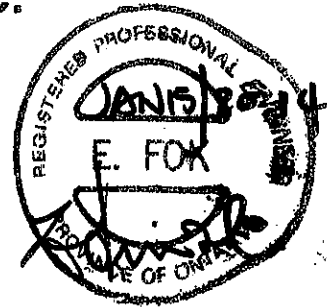
H10G

ALPA-Battelle

5-00-00

Stracon Engineering Inc.

69 Graydon Crescent
Richmond Hill, Ontario
L4B 3W7
(905) 832-2250 Fax (905) 832-0286



RESPONSIBILITIES

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

SPECIFICATIONS

1. Trusses designed by Stracon Engineering Inc. conforms 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 indicated on the drawings as well as to the procedures established by the truss plate institute of Canada. Unit stresses used are as per CSA-086-09.
2. Lumber is to be the sizes and grade specified.
3. Moisture content of lumber is not to exceed 19% in service unless otherwise specified.
4. Lumber not to be treated with chemicals unless otherwise specified.
5. Plates shall be applied to both faces of the truss at each joint and shall be positioned as specified.
6. The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals not exceeding 12.5 times in thickness.
7. Where not rigid ceiling is attached directly to the bottom chord, laterally brace the chords at intervals not exceeding 3M (10') o.c.

January 15, 2014

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S	BS-I	MT20	3.0	6.0		
T	BMWW-I	MT20	4.0	4.0		
U	BMWWW-I	MT20	5.0	6.0	2.25	3.00
V	BS-I	MT20	3.0	8.0		
W	BMWW-I	MT20	4.0	4.0	1.75	1.75
X	BMWW-h	MT20	5.0	8.0	1.25	4.50
Y	BBWWW+m	MT20	10.0	12.0	3.25	5.00
Z	BMWW-I	MT20	4.0	4.0		
AA	BBWW-I	MT20	7.0	8.0	3.00	4.00
AB	BBWW-h	MT20	8.0	9.0	2.00	6.25
AC	BMV1+p	MT20	3.0	5.0		

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

NOTES- (1)
 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23,13.11, and no less than 2x4 for Part 4 design.

LOADING

TOTAL LOAD CASES: (18)

CHORDS				WEBS			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX	MEMB.	FORCE
(LBS)	(PLF)	CSI (LC)	UNBRAC	LENGTH	FR-TO	(LBS)	CSI (LC)
FR-TO	FROM	TO					
T-S	-243 / 3048	-28.0	-28.0	0.64 (4)	6.25		
S-R	-243 / 3048	-28.0	-28.0	0.64 (4)	6.25		
R-Q	-7 / 15	-28.0	-28.0	0.30 (17)	10.00		

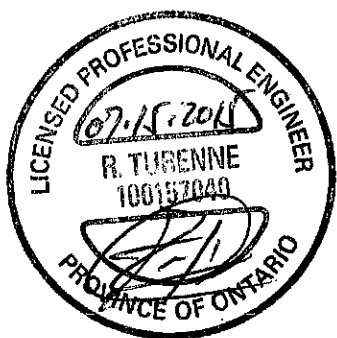
TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

JSI GRIP= 0.90 (AA) (INPUT = 0.90)
 JSI METAL= 0.93 (V) (INPUT = 1.00)



A-15073653(2)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253435	H01T	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:23:54 2015 Page 2

ID:1QNszwvSM1s7Hy6zUWPuozNqBL-TecIpV9nHgFTWlgN9EjzIXQEDHfNoqRwphBY92yxsa3

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
R	BMWW-I	MT20	4.0	4.0		
S	BMWWW-I	MT20	5.0	6.0	2.00	3.00
T	BS-I	MT20	3.0	8.0		
U	BMWW-I	MT20	4.0	4.0	1.75	1.75
V	BMBW-h	MT20	5.0	8.0	1.25	4.50
W	BBWWW+m	MT20	10.0	12.0	3.25	5.00
X	BMWW-I	MT20	4.0	4.0		
Y	BBWW-I	MT20	7.0	8.0	3.00	4.00
Z	BBWW-h	MT20	10.0	12.0	Edge	2.50
AA	BMV-I	MT20	6.0	7.0	3.50	

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

LOADING

TOTAL LOAD CASES: (18)

CHORDS				WEBS			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX	MEMB.	FORCE
	(LBS)	(PLF)	CSI (LC)	UNBRAC	MEMB.	FORCE	MAX
FR-TO		FROM	TO	LENGTH	FR-TO		
R-Q	-246 / 2861	-28.0	-28.0	0.60 (4)	6.25		
Q-P	-246 / 2861	-28.0	-28.0	0.60 (4)	6.25		
P-O	-8 / 18	-28.0	-28.0	0.28 (17)	10.00		

JSI GRIP= 0.90 (C) (INPUT = 0.80)
JSI METAL= 0.92 (T) (INPUT = 1.00)

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.2 } PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM) INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

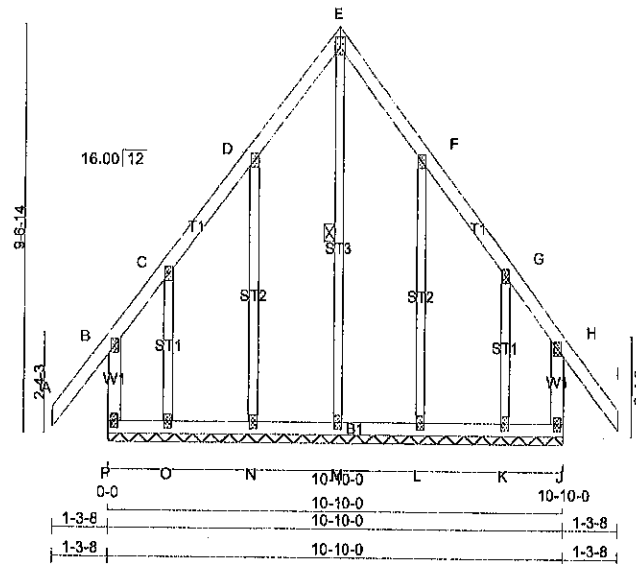


A-11073652 (2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H05G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MitTek Industries, Inc. Wed Jul 15 10:03:32 2015 Page 1
ID:1QNszwvSM1s7Hy6zUWPuozNqBL-FY_KLlMG3C!svV GWZbnPAqpb3hITK93pZAtGlyxst9
3x5 II Scale = 1:54.4



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - 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	TMV+p	MT20	2.0	4.0		
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	5.0	2.00	Edge
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O						
K	BMW1+w	MT20	2.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-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)	VERT. LOAD (PLF)	LC1 MAX	CS1 (LC) MAX	MEMB.	FORCE (LBS)	MAX UNBRACED LENGTH	FR-TO	CS1 (LC) MAX
P-B	-161 / 0	0.0	0.0	0.03 (1)	7.81	M-E	-181 / 0	0.10 (1)	0.10 (1)
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	N-D	-164 / 0	0.12 (1)	0.12 (1)
B-C	-8 / 0	-70.5	-70.5	0.06 (1)	10.00	O-C	-75 / 0	0.02 (1)	0.02 (1)
C-D	0 / 27	-70.5	-70.5	0.04 (1)	10.00	L-F	-164 / 0	0.12 (1)	0.12 (1)
D-E	0 / 21	-70.5	-70.5	0.04 (1)	10.00	K-G	-75 / 0	0.02 (1)	0.02 (1)
E-F	0 / 21	-70.5	-70.5	0.04 (1)	10.00				
F-G	0 / 27	-70.5	-70.5	0.04 (1)	10.00				
G-H	-8 / 0	-70.5	-70.5	0.06 (1)	10.00				
H-I	0 / 40	-70.5	-70.5	0.10 (1)	10.00				
J-H	-161 / 0	0.0	0.0	0.03 (1)	7.81				
P-O	-8 / 0	-17.5	-17.5	0.01 (4)	10.00				
O-N	-12 / 0	-17.5	-17.5	0.01 (4)	8.25				
N-M	-14 / 0	-17.5	-17.5	0.01 (4)	8.25				
M-L	-14 / 0	-17.5	-17.5	0.01 (4)	8.25				
L-K	-12 / 0	-17.5	-17.5	0.01 (4)	8.25				
K-J	-9 / 0	-17.5	-17.5	0.01 (4)	10.00				

TOTAL WEIGHT = 66 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

(56 % 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=0.10 (H-I:1), BC=0.01 (M-N:4), WB=0.12 (F-L:1), SSI=0.05 (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 = 0.50

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

PLATE	GRIP (DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1657
	822	2284	1656

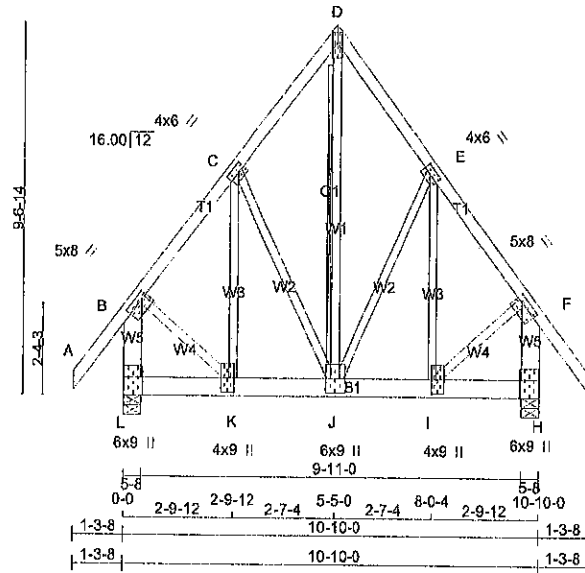
PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



A-15073651



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

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - D 1	12	TOP
D - G 1	12	TOP
L - B 2	12	TOP
H - F 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
L - H 2	4	SIDE(649.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	5.0	8.0	1.75 2.00
C	TMVW-1	MT20	4.0	6.0	2.00 2.50

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED DOWN	MAXIMUM FACTORED HORZ	INPUT UPLIFT	REQD BRG	REQD IN-SX
JT	VERT	0	7770	0	7770	0	7770
L	VERT	0	7770	0	7770	0	7770
H	VERT	0	7770	0	7770	0	7770

PROVIDE ANCHORAGE AT BEARING JOINT L FOR 983 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT H FOR 983 LBS FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES, SHALL BE PROVIDED BY BUILDING DESIGNER

PROVIDE FOR 341 LBS FACTORED HORIZONTAL REACTION AT JOINT L

UNFACTORED REACTIONS		1ST LOASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	6322	3459 / 0	1329 / 0	0 / 0	1731 / -1688	1533 / 0	0 / 0
H	6322	3459 / 0	1329 / 0	0 / 0	1731 / -1688	1533 / 0	0 / 0

HORIZONTAL REACTIONS		1ST LOASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
L	---	0 / 0	0 / 0	0 / 0	244 / -244	0 / 0	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.24FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT D-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: (18)

CHORDS		MAX. FACTORED	FACTORED	MAX	MAX	WEBS		MAX. FACTORED	MAX
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM	TO			FR-TO			
A-B	0 / 52	-92.7	-92.7	0.07 (1)	10.00	J-D	-1036 / 6028	0.74 (1)	
B-C	-4926 / 700	-92.7	-92.7	0.18 (1)	4.24	J-E	-1476 / 442	0.50 (3)	
C-D	-3934 / 701	-92.7	-92.7	0.13 (1)	4.71	I-E	-275 / 1033	0.24 (2)	
D-E	-3934 / 701	-92.7	-92.7	0.13 (1)	4.71	C-J	-1475 / 441	0.50 (2)	
E-F	-4926 / 700	-92.7	-92.7	0.18 (1)	4.24	K-C	-274 / 1933	0.24 (3)	
F-G	0 / 52	-92.7	-92.7	0.07 (1)	10.00	B-K	-455 / 3562	0.44 (1)	
L-B	-6174 / 805	0.0	0.0	0.27 (1)	5.97	I-F	-454 / 3562	0.44 (1)	
H-F	-6174 / 805	0.0	0.0	0.27 (1)	5.97				
L-K	-316 / 329	-1317.7	-1317.7	0.37 (2)	6.25				
K-J	-501 / 2995	-1317.7	-1317.7	0.42 (1)	6.25				
J-I	-390 / 2963	-1317.7	-1317.7	0.42 (1)	6.25				
I-H	-12 / 25	-1317.7	-1317.7	0.37 (3)	6.25				

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM OPEN TERRAIN. AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

TOTAL WEIGHT = 2 X 83 = 166 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.7 PSF
DL = 5.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.2 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 44-9-0
END DISTANCE = 10-10-0
END SPAN CARRIED = 44-9-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 80 % OF GSL.
THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

(80 % OF 23.0 P.S.F. G.S.L. PLUS
8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE
FACTOR EQUALS
26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/180 (0.72")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CS1: TC=0.27 (F-H:1), BC=0.42 (I-J:1), WB=0.74 (D-J:1), SS1=0.69 (H-I:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg

A-15073650

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H05A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:03:32 2015 Page 2

ID:tQNszwvSM1is7Hy6zUWPuozNqBL-FY_KLIMG3CIsVVGWZbnPAqPYNhfuTAT3pZAtGlyxst8

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	TTW+p	MT20	3.0	8.0	3.50	1.50
E	TMWW-I	MT20	4.0	6.0	2.00	2.50
F	TMVV-I	MT20	5.0	8.0	1.75	2.00
H	BMV1+I	MT20	6.0	9.0	Edge	0.50
I	BMWW+I	MT20	4.0	9.0	4.50	1.50
J	BMWW+I	MT20	6.0	9.0		
K	BMWW+I	MT20	4.0	9.0	4.50	1.50
L	BMV1+I	MT20	6.0	9.0	5.50	

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

JSI GRIP= 0.88 (C) (INPUT = 0.90)
JSI METAL= 0.66 (D) (INPUT = 1.00)

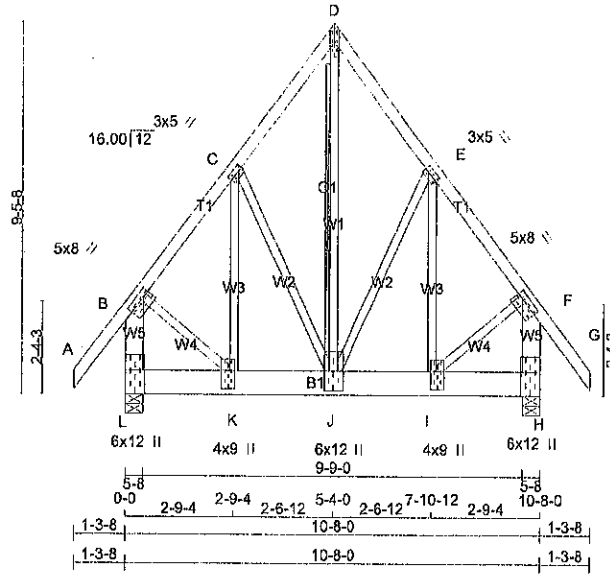


A-11073650(2)

JOB#NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H04A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.820 S Apr 15 2015 MTEK Industries, Inc. Wed Jul 15 10:03:30 2015 Page 1
ID:1QNsZwvSM1Is7Hy6zUWPuoZnqBL-JAsZwzL7Xb2gB68SAIx5PJDE1?o?G9mLGhmC?yxstB
3x8 II
Scale = 1:59.0



TOTAL WEIGHT = 2 X 87 = 174 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
L - B	2x6	DRY	No.2
H - F	2x6	DRY	No.2
L - H	2x8	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-D 1	12	TOP
D-G 1	12	TOP
L-B 2	12	TOP
H-F 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
L-H 2	4	SIDE(849.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-1	MT20	5.0	8.0	1.75	2.00
C TMWW-1	MT20	3.0	5.0	1.50	1.25

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
L	7653	0	7680	-335	-968
H	7653	0	7680	0	-968

PROVIDE ANCHORAGE AT BEARING JOINT L FOR 968 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT H FOR 968 LBS. FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES.
SHALL BE PROVIDED BY BLDG. DESIGNER.

PROVIDE FOR 335 LBS. FACTORED HORIZONTAL REACTION AT JOINT L

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
L	6226	3407 / 0	1309 / 0	0 / 0	1704 / -1682
H	6226	3407 / 0	1309 / 0	0 / 0	1704 / -1682
HORIZONTAL REACTIONS		L	---	0 / 0	239 / -239

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2. T-BRACE REQUIRED AT D-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: (18)

CHORDS		MAX. FACTORED	FACTORED	MAX	WEBS	MAX. FACTORED	MAX
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 52	-92.7	-92.7	0.07 (1)	J-D	-1016 / 5939	0.73 (1)
B-C	-4749 / 875	-92.7	-92.7	0.17 (1)	J-E	-1294 / 410	0.40 (3)
C-D	-3876 / 888	-92.7	-92.7	0.12 (1)	I-E	-237 / 1675	0.21 (2)
D-E	-3876 / 888	-92.7	-92.7	0.12 (1)	C-J	-1293 / 410	0.40 (2)
E-F	-4749 / 874	-92.7	-92.7	0.17 (1)	K-C	-236 / 1674	0.21 (3)
F-G	0 / 52	-92.7	-92.7	0.07 (1)	B-K	-438 / 3409	0.42 (1)
L-B	-5913 / 770	0.0	0.0	0.25 (1)	I-F	-437 / 3409	0.42 (1)
H-F	-5913 / 770	0.0	0.0	0.25 (1)			
L-K	-310 / 323	-1317.7	-1317.7	0.29 (2)			
K-J	-484 / 2887	-1317.7	-1317.7	0.34 (1)			
J-I	-378 / 2867	-1317.7	-1317.7	0.34 (1)			
I-H	-11 / 24	-1317.7	-1317.7	0.29 (3)			

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
DL = 5.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.2 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 44-8-0

END DISTANCE = 10-8-0

END SPAN CARRIED = 44-8-0

END WALL WIDTH = 0-0

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 80 % OF GSL.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 4 OF OBC 2012, CBC 2012, ABC 2014
- CSA 066-09
- TPIC 2011

DESIGN ASSUMPTIONS

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

(80 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS

26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.36")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/180 (0.71")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI: TC=0.25 (F-H:1), BC=0.34 (J-K:1), WB=0.73 (D-J:1), SSI=0.55 (K-L:3)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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 818 354 1567 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-H073648 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H04A	1	2	TRUSS DESC.	

Alpa Roof Truss, Meple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 10:03:30 2015 Page 2
ID:1QNszwvSM1ls7Hy6zUWPuozNgBL-JAsZwzL?Xb2BqB6BSAix5PJDE!7o?G9mLGhmC?yxstB

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	TTW+p	MT20	3.0	8.0	3.60	1.50
E	TMWW-l	MT20	3.0	5.0	1.50	1.25
F	TMVW-l	MT20	5.0	8.0	1.75	2.00
H	BMV1+H	MT20	6.0	12.0	Edge	0.50
I	BMWW+H	MT20	4.0	9.0	5.50	1.60
J	BMWWWW+H	MT20	6.0	12.0		
K	BMWW+H	MT20	4.0	9.0	5.50	1.50
L	BMV1+H	MT20	6.0	12.0	7.25	

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per
OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

JSI GRIP= 0.89 (K) (INPUT = 0.80)
JSI METAL= 0.55 (D) (INPUT = 1.00)

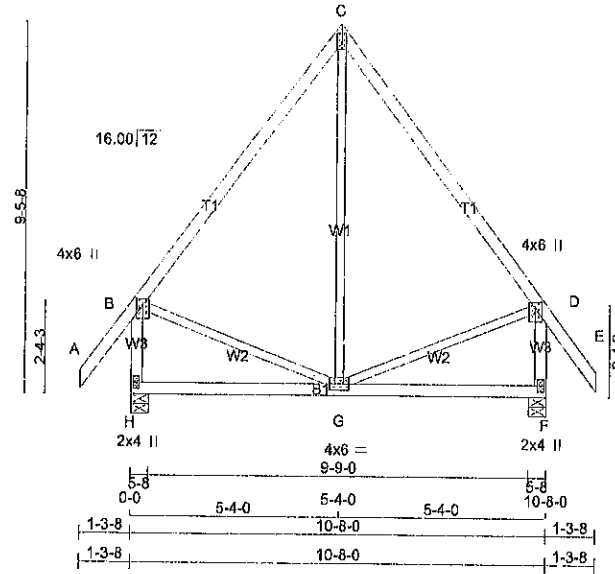


A-15073648(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H04	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mittek Industries, Inc. Wed Jul 15 10:03:29 2015 Page 1
ID: IQNszwvSM1s7Hy6zUWPuozNqBL-rzIBidKNmHvH21XxuTEIZCB1MTIbG_nc7cxDgYyxstC
3x5 II
Scale = 1:59.0



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW+p	MT20	3.0	6.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW+I	MT20	4.0	6.0		
H	BMV1+p	MT20	2.0	4.0		

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	588	0	588	0	0
F	588	0	588	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	398	283 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
F	398	283 / 0	0 / 0	0 / 0	0 / 0	115 / 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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.10 (1)	10.00	G-C	0 / 92	0.03 (4)
B-C	-241 / 0	-70.5 -70.5	0.28 (1)	6.25	B-G	0 / 154	0.03 (1)
C-D	-241 / 0	-70.5 -70.5	0.26 (1)	6.25	G-D	0 / 154	0.03 (1)
D-E	0 / 40	-70.5 -70.5	0.10 (1)	10.00			
H-B	-533 / 0	0.0 0.0	0.07 (1)	7.81			
F-D	-533 / 0	0.0 0.0	0.07 (1)	7.81			
H-G	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
G-F	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

TOTAL WEIGHT = 3 X 58 = 175 lb [M/J]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.00")
ALLOWABLE DEFL. (TL) = L/360 (0.36")
CALCULATED VERT. DEFL. (TL) = L/999 (0.02")

CSI: TC=0.26 (B-C:1), BC=0.14 (G-H:4),
WB=0.03 (D-G:1), SSI=0.09 (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 = 0.60

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 618 354 1657 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (D) (INPUT = 0.60)
JSI METAL = 0.10 (H) (INPUT = 1.00)

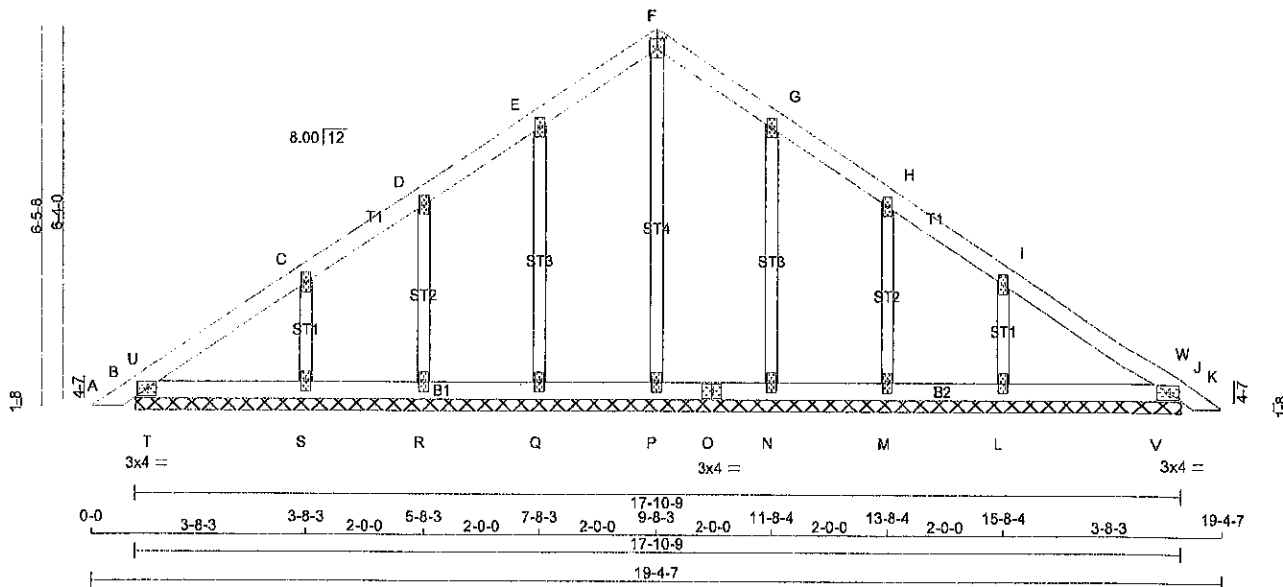


A-15073647

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H03G	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:03:29 2015 Page 1
ID:IQNszwvSM1s7Hy6zUWPuozNqBL-rzIBidKNmHvH21XxuTEIZCB5TTk5G_Nc7cxDgYyxstC
Scale = 1:39.6



TOTAL WEIGHT = 2 X 67 = 133 lb (M)

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - F	2x4	DRY	No.2	SPF
F - K	2x4	DRY	No.2	SPF
B - O	2x4	DRY	No.2	SPF
O - 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-H	MT20	3.0	4.0		
C, D, E, G, H, I						
C	TMW+H	MT20	2.0	4.0		
F	TTW+H	MT20	3.0	4.0	2.25	1.50
J	TMB1-H	MT20	3.0	4.0		
L, M, N, P, Q, R, S						
L	BMW1+H	MT20	2.0	4.0		
O	BS-H	MT20	3.0	4.0		

NOTES: (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO		
A-B	0/11	-70.5	-70.5 0.02 (1)	10.00	P-F	-87/0	0.06 (1)
B-U	-38/0	-70.5	-70.5 0.01 (4)	6.25	Q-E	-163/0	0.06 (1)
U-C	-34/0	-70.5	-70.5 0.06 (1)	6.25	R-D	-119/0	0.03 (1)
C-D	-41/0	-70.5	-70.5 0.06 (1)	6.25	S-C	-184/0	0.03 (1)
D-E	-27/0	-70.5	-70.5 0.04 (1)	6.25	N-G	-163/0	0.06 (1)
E-F	-35/0	-70.5	-70.5 0.04 (1)	6.25	M-H	-119/0	0.03 (1)
F-G	-35/0	-70.5	-70.5 0.04 (1)	6.25	L-I	-184/0	0.03 (1)
G-H	-27/0	-70.5	-70.5 0.04 (1)	6.25	T-U	-82/15	0.00 (1)
H-I	-41/0	-70.5	-70.5 0.06 (1)	6.25	V-W	-92/15	0.00 (1)
I-W	-34/0	-70.5	-70.5 0.06 (1)	6.25			
W-J	-38/0	-70.5	-70.5 0.01 (4)	6.25			
J-K	0/11	-70.5	-70.5 0.02 (1)	10.00			
B-T	0/36	-17.5	-17.5 0.05 (1)	10.00			
T-S	0/36	-17.5	-17.5 0.05 (1)	10.00			
S-R	0/28	-17.5	-17.5 0.04 (1)	10.00			
R-Q	0/25	-17.5	-17.5 0.02 (4)	10.00			
Q-P	0/22	-17.5	-17.5 0.02 (4)	10.00			
P-O	0/22	-17.5	-17.5 0.02 (4)	10.00			
O-N	0/22	-17.5	-17.5 0.02 (4)	10.00			
N-M	0/25	-17.5	-17.5 0.02 (4)	10.00			
M-L	0/28	-17.5	-17.5 0.04 (1)	10.00			
L-V	0/36	-17.5	-17.5 0.05 (1)	10.00			
V-J	0/36	-17.5	-17.5 0.05 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(65% 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=0.06 (C-U:1), BC=0.06 (S-T:1), WB=0.06 (E-Q:1), SSI=0.06 (J-V: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 = 0.50

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX	MIN	MAX
MT20	818	354
	1667	822
	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.54 (F) (INPUT = 0.90)
JSI METAL= 0.06 (I) (INPUT = 1.00)



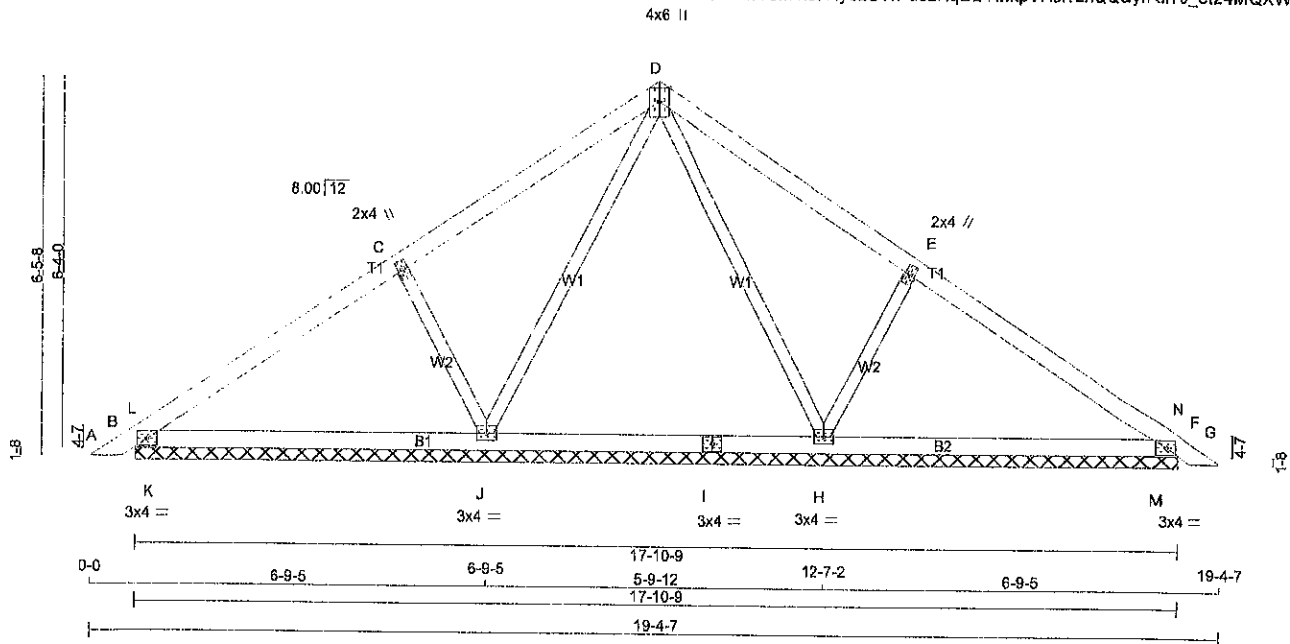
A-15073646

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H03	14	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:03:28 2015 Page 1

ID:1QNszwvSM1s7Hy6zUWPuozNqBL-NnkpVHJl?znQQuylKJIT0_et24MQXWFTuyCg76yxstC
Scale = 1:39,6



TOTAL WEIGHT = 14 X 62 = 874 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		
B - I	2x4 DRY	No.2	SPF		
I - F	2x4 DRY	No.2	SPF		
ALL WEBS	2x3 DRY	No.2	SPF		
DRY: SEASONED LUMBER.					

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REGRD BRG
	VERT	HORZ	DOWN	HORZ		
B	300	0	300	0	17-10-9 (9-11-00)	
H	532	0	532	0	17-10-9 (9-11-00)	
J	532	0	532	0	17-10-9 (9-11-00)	
F	300	0	300	0	17-10-9 (9-11-00)	

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	210	150 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
H	375	252 / 0	0 / 0	0 / 0	0 / 0	123 / 0	0 / 0
J	375	252 / 0	0 / 0	0 / 0	0 / 0	123 / 0	0 / 0
F	210	150 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 11	-70.5 -70.5	0.02 (1)	D-H	-140 / 0	0.12 (1)	
B-L	-193 / 0	-70.5 -70.5	0.06 (4)	H-E	-322 / 0	0.07 (1)	
L-C	-137 / 0	-70.5 -70.5	0.23 (1)	J-D	-140 / 0	0.12 (1)	
C-D	-12 / 0	-70.5 -70.5	0.23 (1)	C-J	-322 / 0	0.07 (1)	
D-E	-12 / 0	-70.5 -70.5	0.23 (1)	K-L	-64 / 100	0.00 (1)	
E-N	-137 / 0	-70.5 -70.5	0.23 (1)	M-N	-64 / 100	0.00 (1)	
N-F	-193 / 0	-70.5 -70.5	0.06 (4)				
F-G	0 / 11	-70.5 -70.5	0.02 (1)				
B-K	0 / 134	-17.5 -17.5	0.06 (1)				
K-J	0 / 134	-17.5 -17.5	0.14 (4)				
J-I	0 / 60	-17.5 -17.5	0.13 (4)				
I-H	0 / 60	-17.5 -17.5	0.13 (4)				
H-M	0 / 134	-17.5 -17.5	0.14 (4)				
M-F	0 / 134	-17.5 -17.5	0.06 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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=0.23 (E-N:1), BC=0.14 (H-M:4),
WB=0.12 (D-H:1), SSI=0.13 (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 = 0.50

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 618 354 1687 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (H) (INPUT = 0.90)
JSI METAL= 0.06 (F) (INPUT = 1.00)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+u	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	6.0	Edge	
E	TMW+u	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-I	MT20	3.0	4.0		
I	BS-I	MT20	3.0	4.0		
J	BMWW1-I	MT20	3.0	4.0		

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

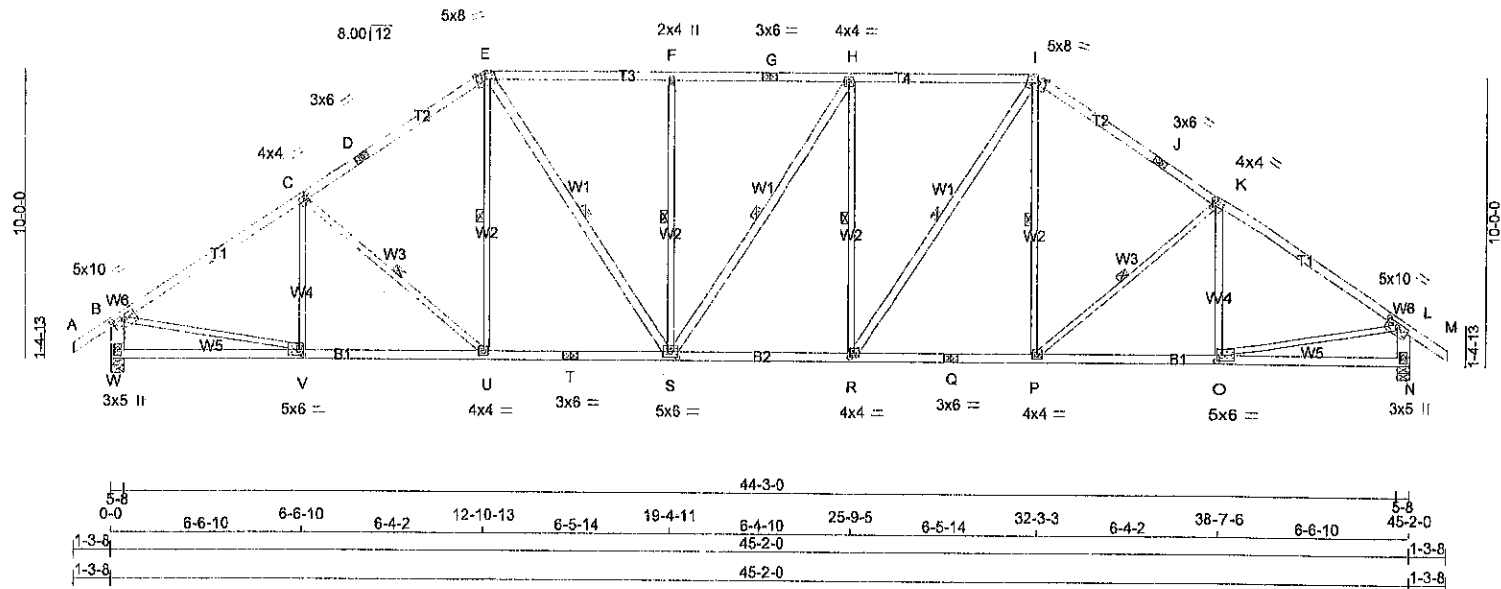


A-10073645

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H02	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 10:03:27 2015 Page 1
ID:QNszwvSM1Is7Hy8zUWPuoZnqBL-ubBR1xI7EgfZpkNZm2BETn5WnguwowyKfIS6bgxstE
Scale = 1:80.5



LUMBER				DESOR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - D	2x4	DRY	1650F 1.5E	SPF	
D - E	2x4	DRY	1650F 1.5E	SPF	
E - G	2x4	DRY	1650F 1.5E	SPF	
G - I	2x4	DRY	1650F 1.5E	SPF	
I - J	2x4	DRY	1650F 1.5E	SPF	
J - M	2x4	DRY	1650F 1.5E	SPF	
W - B	2x6	DRY	No.2	SPF	
N - L	2x6	DRY	No.2	SPF	
W - T	2x4	DRY	No.2	SPF	
T - Q	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
E - S	2x4	DRY	No.2	SPF	
S - H	2x4	DRY	No.2	SPF	
R - I	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-I	MT20	5.0	10.0	1.75	5.00
C	TMWW-I	MT20	4.0	4.0	2.00	1.50
D, G, J						
D	TS-I	MT20	3.0	8.0		
E	TTWW-m	MT20	5.0	8.0	2.00	3.25
F	TMWW-w	MT20	2.0	4.0		
H	TMWW-I	MT20	4.0	4.0		
I	TTWW-m	MT20	5.0	8.0	2.00	3.25
K	TMWW-I	MT20	4.0	4.0	2.00	1.60
L	TMWW-I	MT20	5.0	10.0	1.75	5.00
N	BMV1+p	MT20	3.0	5.0		
O	BMWW-I	MT20	5.0	6.0	2.25	1.75
P	BMWW-I	MT20	4.0	4.0		
Q	BS-I	MT20	3.0	8.0		
R	BMWW-I	MT20	4.0	4.0	1.75	1.75
S	BMWW-I	MT20	5.0	6.0	2.25	3.00
T	BS-I	MT20	3.0	6.0		
U	BMWW-I	MT20	4.0	4.0		
V	BMWW-I	MT20	5.0	6.0	2.25	1.75



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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
W	2974	0	2974	-300	-401	5-8	4-3
N	2974	0	2974	0	-397	5-8	4-3

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 401 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 397 LBS. FACTORED UPLIFT

PROVIDE FOR 300 LBS. FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2407	1280 / 0	474 / 0	0 / 0	217 / -706	853 / 0	0 / 0
N	2407	1280 / 0	474 / 0	0 / 0	215 / -703	853 / 0	0 / 0

HORIZONTAL REACTIONS

W	---	0 / 0	0 / 0	0 / 0	215 / -215	0 / 0	0 / 0
---	-----	-------	-------	-------	------------	-------	-------

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.44FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-U, E-U, E-S, F-S, H-S, H-R, I-R, I-P, K-P.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 38	-92.7	-92.7 0.11 (2)	10.00	V-C	-350 / 138	0.17 (7)
B-C	-3628 / 470	-92.7	-92.7 0.97 (1)	3.44	C-U	-487 / 290	0.24 (2)
C-D	-3358 / 498	-92.7	-92.7 0.88 (1)	3.58	U-E	-111 / 496	0.11 (5)
D-E	-3358 / 498	-92.7	-92.7 0.88 (1)	3.58	E-S	-136 / 1098	0.18 (1)
E-F	-3373 / 495	-105.2	-105.2 0.72 (2)	3.67	S-F	-825 / 201	0.66 (2)
F-G	-3373 / 495	-105.2	-105.2 0.71 (1)	3.65	S-H	-800 / 596	0.46 (3)
G-H	-3373 / 495	-105.2	-105.2 0.71 (1)	3.65	H-R	-765 / 199	0.51 (7)
H-I	-3375 / 487	-105.2	-105.2 0.72 (1)	3.65	R-I	-142 / 1101	0.18 (1)
I-J	-3358 / 492	-92.7	-92.7 0.88 (1)	3.68	I-L	-111 / 496	0.11 (6)
J-K	-3358 / 492	-92.7	-92.7 0.88 (1)	3.68	K-P	-491 / 291	0.24 (3)
K-L	-3628 / 404	-92.7	-92.7 0.97 (1)	3.44	O-K	-350 / 137	0.17 (8)
L-M	0 / 38	-92.7	-92.7 0.11 (3)	10.00	B-V	-266 / 3092	0.70 (1)
W-B	-2897 / 433	0.0	0.0 0.19 (1)	6.16	O-L	-261 / 3092	0.70 (1)
N-L	-2897 / 429	0.0	0.0 0.19 (1)	6.16			
W-V	-286 / 294	-28.0	-28.0 0.30 (17)	6.25			
V-U	-420 / 3051	-28.0	-28.0 0.84 (4)	6.25			
U-T	-189 / 2762	-28.0	-28.0 0.57 (1)	6.25			
T-S	-199 / 2762	-28.0	-28.0 0.57 (1)	6.25			
S-R	-124 / 3375	-28.0	-28.0 0.67 (1)	6.25			
R-Q	-45 / 2762	-28.0	-28.0 0.57 (1)	6.25			
Q-P	-45 / 2762	-28.0	-28.0 0.57 (1)	6.25			
P-O	-243 / 3051	-28.0	-28.0 0.64 (4)	6.25			
O-N	-7 / 15	-28.0	-28.0 0.30 (17)	10.00			

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

TOTAL WEIGHT = 4 X 218 = 870 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 26.7	PSF
	DL	= 5.0	PSF
BOT CH.	LL	= 10.5	PSF
	DL	= 7.0	PSF
TOTAL LOAD		= 49.2	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 WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
(80 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/380 (1.51")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.21")
ALLOWABLE DEFL.(TL)= L/180 (3.01")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.32")

CSI: TC=0.97 (K-L:1), BC=0.67 (R-S:1), WB=0.70 (L-O:1), SSI=0.36 (E-F:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618 354 1667 822 2284 1856	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-NB73644

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H02	4	1	TRUSS DESC.	
Alpha Roof Truss, Maple				Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:03:27 2016 Page 2	
ID: tQNszwySM1 s7Hy6zUWPuozNqBL-ubBRxi7EgIZpkNZm2BETn5WnguwowyKfIS6bgxstE					

PLATES (table is in inches)

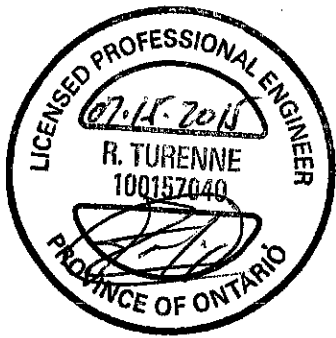
JT TYPE	PLATES	W	LEN	Y	X
W BMV1+p	MT20	3.0	5.0		

NOTES- (1)

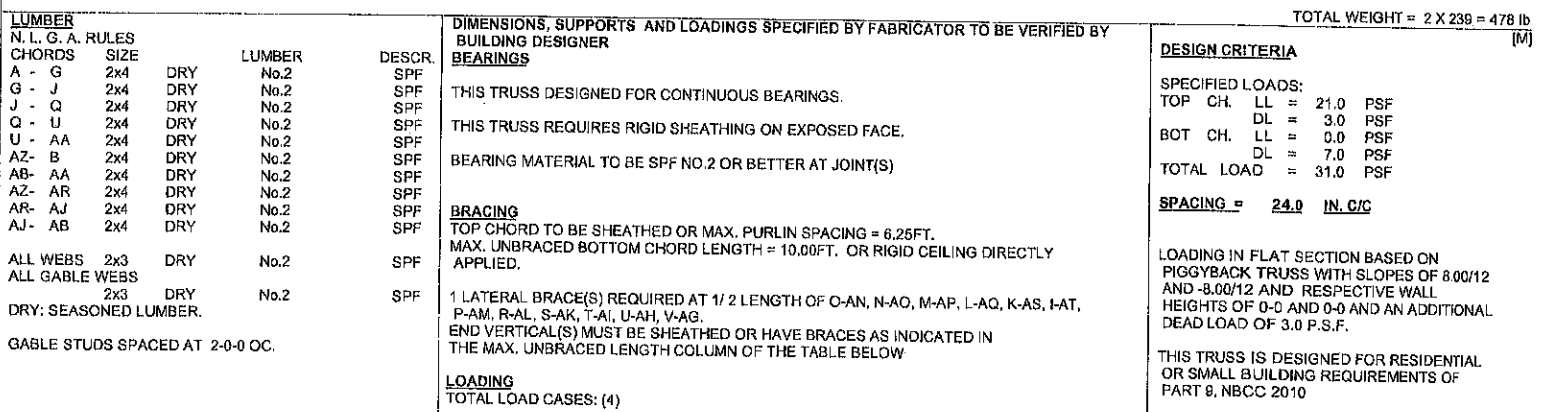
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.2} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.

JSI GRIP= 0.88 (S) (INPUT = 0.90)
JSI METAL= 0.80 (T) (INPUT = 1.00)



A-HD73644(2)

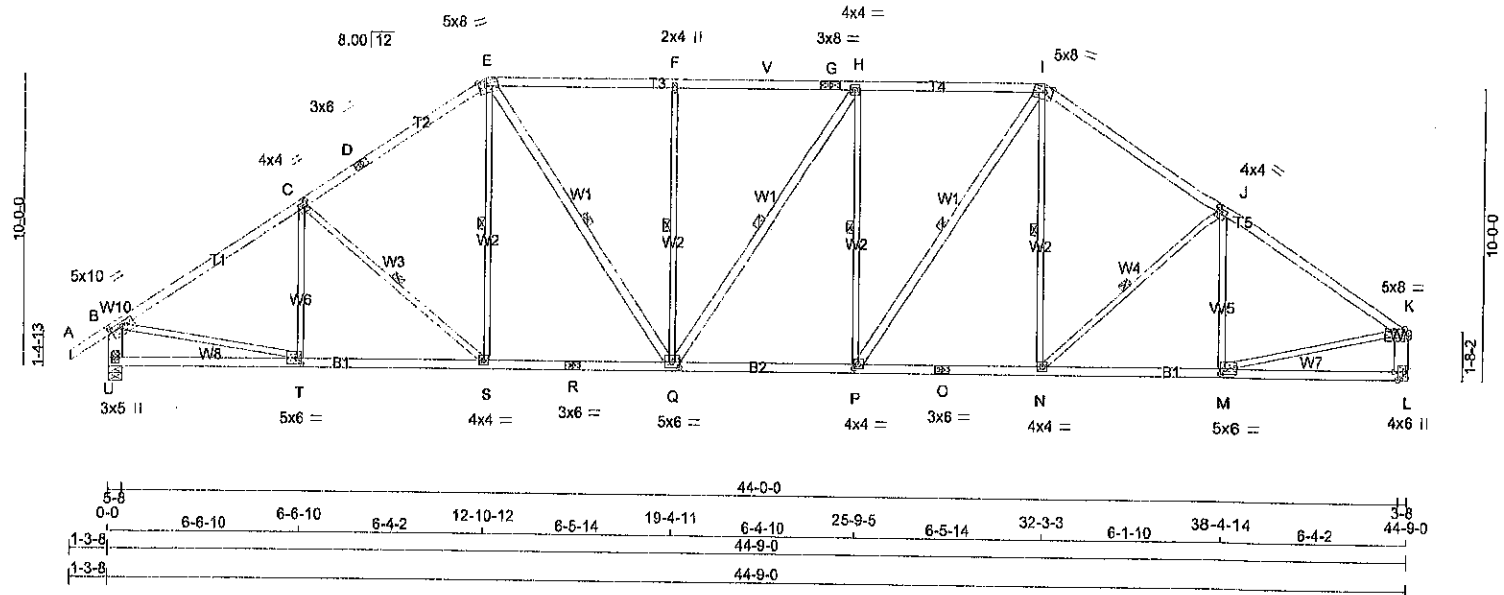


A-15073643

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H01	10	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Wed Jul 15 10:03:25 2015 Page 1
ID:1QNSzwvSM1Is7Hy6zUWpuozNqBL-yC3gtFHl2PrZQDAfd9mOM0BOsCcK0Z1C_z?WhyxstG
Scale = 1:79.7



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E
D - E	2x4	DRY	1650F 1.5E
E - G	2x4	DRY	1650F 1.5E
G - I	2x4	DRY	1650F 1.5E
I - K	2x4	DRY	1650F 1.5E
U - B	2x6	DRY	No.2
L - K	2x6	DRY	No.2
U - R	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - L	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
E - Q	2x4	DRY	No.2
Q - H	2x4	DRY	No.2
P - I	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	10.0	1.75	5.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTVW-m	MT20	5.0	8.0	2.00	3.25
F	TMVW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	8.0		
H	TMVW-t	MT20	4.0	4.0		
I	TTVW-m	MT20	5.0	8.0	2.00	3.25
J	TMVW-t	MT20	4.0	4.0	2.00	1.50
K	TMVW-p	MT20	5.0	8.0	Edge	
L	BMV1-t	MT20	4.0	6.0	Edge	1.50
M	BMVW-t	MT20	5.0	6.0	2.25	1.75
N	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.75	1.75
Q	BMVW-t	MT20	5.0	6.0	2.25	3.00
R	BS-t	MT20	3.0	6.0		
S	BMVW-t	MT20	4.0	4.0		
T	BMVW-t	MT20	5.0	6.0	2.25	1.75
U	BMV1-p	MT20	3.0	5.0		

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
U	2947	0	2947	296	-397	5-8	4-1		
L	2822	0	2822	0	-356				

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 397 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 356 LBS FACTORED UPLIFT

PROVIDE FOR 296 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS		1ST CASE		MAX/MIN COMPONENT REACTIONS		PERM.LIVE		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE								
U	2366	1269 / 0	470 / 0	0 / 0	216 / -699	647 / 0	0 / 0				
L	2301	1196 / 0	470 / 0	0 / 0	202 / -662	636 / 0	0 / 0				

HORIZONTAL REACTIONS
U --- 0 / 0 0 / 0 0 / 0 212 / -202 0 / 0 0 / 0

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

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.46FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-S, E-S, E-Q, F-Q, H-Q, H-P, I-P, I-N, J-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: (16)

CHORDS		FACTORED		MAX		MAX		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	PLF	CS1 (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX	CS1 (LC)		
FR-TO		FROM	TO		LENGTH	FR-TO					
A-B	0 / 38	-92.7	-92.7	0.11 (2)	10.00	T-C	-345 / 137	0.17 (7)			
B-C	-3590 / 464	-92.7	-92.7	0.96 (1)	3.45	C-S	-491 / 291	0.24 (2)			
C-D	-3316 / 491	-92.7	-92.7	0.88 (1)	3.60	S-E	-111 / 498	0.11 (5)			
D-E	-3316 / 491	-92.7	-92.7	0.88 (1)	3.60	E-Q	-133 / 1066	0.17 (1)			
E-F	-3321 / 486	-105.2	-105.2	0.71 (1)	3.69	Q-F	-813 / 198	0.65 (2)			
F-V	-3321 / 486	-105.2	-105.2	0.71 (1)	3.68	H-H	-572 / 614	0.43 (3)			
V-G	-3321 / 486	-105.2	-105.2	0.71 (1)	3.88	P-H	-789 / 199	0.62 (7)			
G-H	-3321 / 486	-105.2	-105.2	0.71 (1)	3.68	P-I	-142 / 1133	0.18 (1)			
H-I	-3305 / 480	-105.2	-105.2	0.71 (1)	3.69	N-I	-102 / 438	0.10 (5)			
I-J	-3252 / 481	-92.7	-92.7	0.78 (1)	3.72	N-J	-375 / 267	0.18 (3)			
J-K	-3404 / 435	-92.7	-92.7	0.84 (1)	3.63	M-J	-457 / 148	0.24 (8)			
U-B	-2871 / 429	0.0	0.0	0.19 (1)	6.20	B-T	-261 / 3060	0.69 (1)			
L-K	-2748 / 387	0.0	0.0	0.19 (1)	6.30	M-K	-271 / 2929	0.66 (1)			
U-T	-282 / 277	-28.0	-28.0	0.30 (17)	6.25						
T-S	-432 / 3020	-28.0	-28.0	0.63 (4)	6.25						
S-R	-211 / 2727	-28.0	-28.0	0.56 (1)	6.25						
R-Q	-211 / 2727	-28.0	-28.0	0.56 (1)	6.25						
Q-P	-131 / 3305	-28.0	-28.0	0.56 (1)	6.25						
P-O	-52 / 2674	-28.0	-28.0	0.56 (1)	6.25						
O-N	-52 / 2674	-28.0	-28.0	0.56 (1)	6.25						
N-M	-246 / 2864	-28.0	-28.0	0.60 (4)	6.25						
M-L	-9 / 18	-28.0	-28.0	0.28 (17)	10.00						

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

TOTAL WEIGHT = 10 X 216 = 2152 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 5.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.2 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 WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA D86-09
- TPIC 2011

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

(80 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.49")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL) = L/180 (2.98")
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CS1: TC=0.86 (B-C:1), BC=0.66 (P-Q:1),
WB=0.69 (B-T:1), SS1=0.36 (H-I:3)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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 618 354 1867 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-15073642

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H01	10	1	TRUSS DESC.	

Alpa Roof Truss, Maple

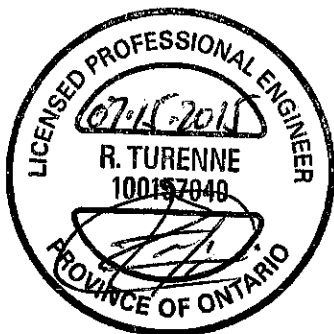
Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 10:03:25 2015 Page 2
ID:1QNszwvSM1ls7Hy8zUWPUozNgBL-yC3gtFHl2PrZQDAfd9mOM0BOsCcK0Z1C_z?WhyxstG

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.2 } PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

JSI GRIP= 0.89 (I) (INPUT = 0.90)
JSI METAL= 0.80 (R) (INPUT = 1.00)



A-15073642(2)



A-15073641



JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV+p	MT20	4.0	6.0	2.00	2.00
C	TMWV-h	MT20	4.0	6.0	2.00	2.00
D	TMWV-i	MT20	4.0	6.0	2.00	2.50
E	TTWV-h	MT20	6.0	7.0	1.50	3.75
F	TMWV-h	MT20	2.0	4.0		
G	TS-i	MT20	3.0	8.0		
H	TMWV-i	MT20	4.0	4.0		
I	TMWV+i	MT20	4.0	4.0	1.50	1.50
J	TMWV-i	MT20	4.0	4.0		
K	TTWV-h	MT20	4.0	4.0		
L	TMWV+p	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	2.0	4.0		
O	BMWVVV-i	MT20	5.0	6.0	2.50	1.50
P	BBWV-h	MT20	6.0	7.0	2.25	4.50
Q	BBWV-i	MT20	6.0	7.0		
R	BMWVVV-L	MT20	5.0	6.0	2.50	2.00
S	BMWV-i	MT20	4.0	4.0		
T	BBWV-h	MT20	6.0	7.0	Edge	
U	BBWV-i	MT20	4.0	6.0	1.75	4.25
V	BMV1+p	MT20	2.0	4.0		

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX UNBRAC	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)			(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	U-C	-957 / 0
B-C	-784 / 0	-70.5	-70.5	0.10 (1)	6.25	C-T	0 / 694
C-D	-1097 / 0	-70.5	-70.5	0.04 (1)	6.00	T-D	-215 / 0
D-E	-1186 / 0	-70.5	-70.5	0.04 (1)	5.87	D-S	0 / 44
E-F	-1284 / 0	-70.5	-70.5	0.40 (1)	5.19	S-E	0 / 61
F-G	-1284 / 0	-70.5	-70.5	0.40 (1)	5.19	E-R	0 / 910
G-H	-1284 / 0	-70.5	-70.5	0.40 (1)	5.19	R-F	-462 / 0
H-I	-1385 / 0	-70.5	-70.5	0.13 (1)	5.36	R-H	-161 / 0
I-J	-1185 / 0	-70.5	-70.5	0.20 (1)	5.63	Q-H	-111 / 13
J-K	-625 / 0	-70.5	-70.5	0.18 (1)	8.25	Q-I	0 / 1350
K-L	-1034 / 0	-70.5	-70.5	0.26 (1)	5.87	P-I	-1472 / 0
L-M	0 / 40	-70.5	-70.5	0.10 (1)	10.00	P-J	0 / 427
V-B	-1364 / 0	0.0	0.0	0.17 (1)	6.95	J-O	-789 / 0
N-L	-1357 / 0	0.0	0.0	0.17 (1)	6.97	O-K	0 / 563
						B-U	0 / 716
						O-L	0 / 877
V-U	0 / 0	-17.5	-17.5	0.01 (4)	10.00		
U-T	0 / 685	-17.5	-17.5	0.10 (1)	10.00		
T-S	0 / 673	-17.5	-17.5	0.16 (1)	10.00		
S-R	0 / 690	-17.5	-17.5	0.20 (4)	10.00		
R-Q	0 / 1387	-17.5	-17.5	0.30 (1)	10.00		
Q-P	0 / 1647	-17.5	-17.5	0.27 (1)	10.00		
P-O	0 / 985	-17.5	-17.5	0.32 (4)	10.00		
O-N	0 / 0	-17.5	-17.5	0.24 (4)	10.00		

JSI GRIP= 0.79 (B) (INPUT = 0.90)
JSI METAL= 0.29 (K) (INPUT = 1.00)

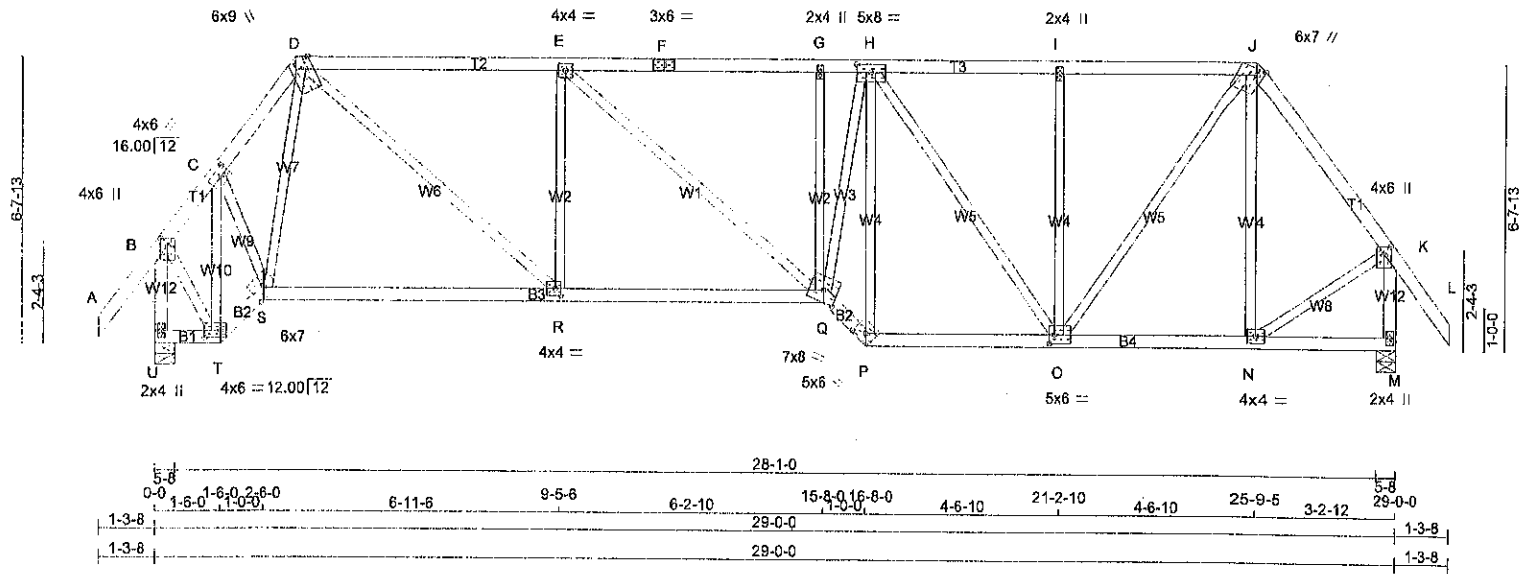


A-15073640

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253437	H02T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.820 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 09:37:43 2015 Page 1
ID:97W_oc7jcybVbeU0Ab4z7zOVES-6YukE?cdrl8eaSlpKnU9vA9mQH7J2Y33c4RPP9yxtFM
Scale = 1:54.2



TOTAL WEIGHT = 149 lb [M]

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2 SPF
D - F	2x4	DRY	No.2 SPF
F - J	2x4	DRY	No.2 SPF
J - L	2x4	DRY	No.2 SPF
U - B	2x4	DRY	No.2 SPF
M - K	2x4	DRY	No.2 SPF
U - T	2x4	DRY	No.2 SPF
T - S	2x4	DRY	No.2 SPF
S - Q	2x4	DRY	No.2 SPF
Q - P	2x4	DRY	No.2 SPF
P - 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	2.00	2.00
C	TMVW-t	MT20	4.0	6.0	2.00	2.50
D	TTWW+m	MT20	6.0	9.0	Edge	2.00
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW+w	MT20	2.0	4.0		
H	TMVWV-t	MT20	5.0	8.0	2.25	4.00
I	TMVW+w	MT20	2.0	4.0		
J	TTWW+m	MT20	6.0	7.0	Edge	1.50
K	TMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMVWV-t	MT20	5.0	6.0	2.50	1.50
P	BBW-h	MT20	5.0	6.0	2.00	3.25
Q	BBWV-m	MT20	7.0	8.0	3.25	4.00
R	BMVW-t	MT20	4.0	4.0	2.00	1.50
S	BBWV-h	MT20	6.0	7.0	Edge	
T	BBWV-t	MT20	4.0	6.0	2.00	4.50
U	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
U	968	0	1377	0	0	5-8	1-8		
M	1372	0	1372	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST CASE	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	968	669 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	T-C	-964 / 0	0.25 (1)
B-C	-782 / 0	-70.5	-70.5 0.10 (1)	6.25	C-S	0 / 654	0.15 (1)
C-D	-1105 / 0	-70.5	-70.5 0.09 (1)	5.97	S-D	-133 / 3	0.07 (1)
D-E	-1678 / 0	-70.5	-70.5 0.51 (1)	4.68	D-R	0 / 1169	0.27 (1)
E-F	-1740 / 0	-70.5	-70.5 0.52 (1)	4.46	R-E	-641 / 0	0.31 (1)
F-G	-1740 / 0	-70.5	-70.5 0.52 (1)	4.46	E-Q	0 / 213	0.05 (1)
G-H	-1736 / 0	-70.5	-70.5 0.17 (1)	4.89	Q-G	-233 / 0	0.11 (1)
H-I	-1166 / 0	-70.5	-70.5 0.23 (1)	5.63	Q-H	0 / 1596	0.36 (1)
I-J	-1166 / 0	-70.5	-70.5 0.23 (1)	5.63	P-H	-1359 / 0	0.99 (1)
J-K	-988 / 0	-70.5	-70.5 0.15 (1)	8.11	H-O	-470 / 0	0.57 (1)
K-L	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-I	-348 / 0	0.25 (1)
U-B	-1364 / 0	0.0	0.0 0.17 (1)	6.96	O-J	0 / 993	0.22 (1)
M-K	-1352 / 0	0.0	0.0 0.17 (1)	6.97	N-J	-267 / 0	0.20 (1)
					B-T	0 / 721	0.18 (1)
					N-K	0 / 683	0.15 (1)
U-T	0 / 0	-17.5	-17.5 0.01 (4)	10.00			
T-S	0 / 688	-17.5	-17.5 0.10 (1)	10.00			
S-R	0 / 676	-17.5	-17.5 0.27 (4)	10.00			
R-Q	0 / 1579	-17.5	-17.5 0.37 (1)	10.00			
Q-P	0 / 1997	-17.5	-17.5 0.32 (1)	10.00			
P-O	0 / 1434	-17.5	-17.5 0.28 (1)	10.00			
O-N	0 / 584	-17.5	-17.5 0.14 (1)	10.00			
N-M	0 / 0	-17.5	-17.5 0.08 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. G/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(65 % 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.52 (E-G:1), BC=0.37 (Q-R:1),
WB=0.99 (H-P:1), SSI=0.21 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.34 (H) (INPUT = 1.00)

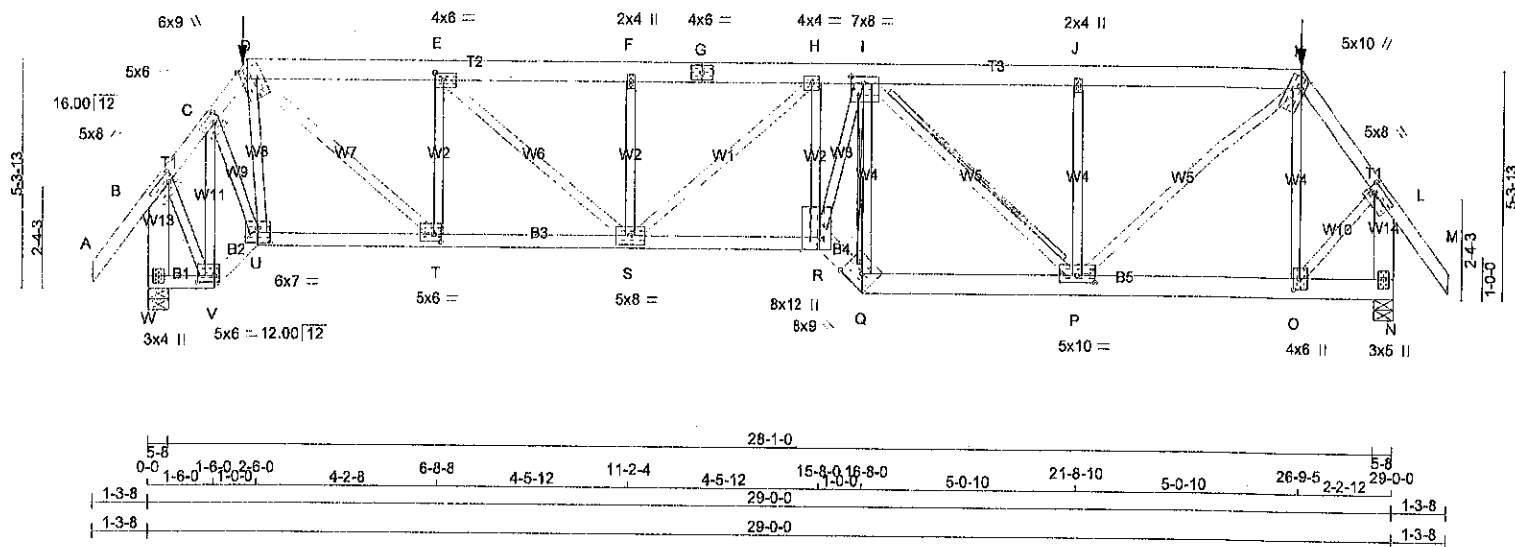
A-15073639



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253437	H01T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Wed Jul 15 09:41:28 2015 Page 1
ID:9?W_oc?jYybVbeU0Ab4z?zOVES-0q_oSwLmsPUj31237X1wWdzGGzhpGKcAMaSpodyxB;
Scale = 1:54.0



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2 SPF
D - G	2x6	DRY	No.2 SPF
G - K	2x6	DRY	No.2 SPF
K - M	2x4	DRY	No.2 SPF
W - B	2x6	DRY	No.2 SPF
N - L	2x6	DRY	No.2 SPF
W - V	2x4	DRY	No.2 SPF
V - U	2x4	DRY	No.2 SPF
U - R	2x4	DRY	1850F 1.5E SPF
R - Q	2x6	DRY	No.2 SPF
Q - N	2x6	DRY	No.2 SPF
ALL WEBS EXCEPT	2x3	DRY	No.2 SPF

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWW-I	MT20	5.0	8.0	2.25 2.00
C	TMWW-I	MT20	5.0	8.0	2.25 1.75
D	TTWW+m	MT20	6.0	9.0	2.75 1.75
E	TMWW-I	MT20	4.0	8.0	2.00 2.50
F	TMWW-I	MT20	2.0	4.0	
G	TS-I	MT20	4.0	8.0	
H	TMWW-I	MT20	4.0	4.0	
I	TMWW-I	MT20	7.0	8.0	2.00 3.50
J	TMWW-I	MT20	2.0	4.0	
K	TTWW+m	MT20	5.0	10.0	3.00 1.25
L	TMWW-I	MT20	5.0	8.0	2.25 2.00
N	BMV1+p	MT20	3.0	5.0	
O	BMWW-I	MT20	4.0	6.0	3.00 1.75
P	BMWW-I	MT20	5.0	10.0	2.00 5.00
Q	BBW-I	MT20	8.0	9.0	3.75 5.00
R	BBWW+p	MT20	8.0	12.0	Edge 4.75
S	BMWW-I	MT20	5.0	8.0	
T	BMWW-I	MT20	5.0	6.0	2.00 2.00
U	BBWW-I	MT20	8.0	7.0	4.25 3.50
V	BBWW-I	MT20	5.0	6.0	1.75 4.50
W	BMV1+p	MT20	3.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
W	2561	0	2561	0	5-8	2-13
N	2572	0	2572	0	5-8	2-14

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS					SOIL
		1ST CASE	SNOW	LIVE	PERM.LIVE	WIND	
W	1803	1228 / 0	0 / 0	0 / 0	0 / 0	575 / 0	0 / 0
N	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT I-Q, I-P
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH (FT)	MAX FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.11 (1)	10.00	V-C	-1924 / 0	0.53 (1)
B-C	-1530 / 0	-70.5 -70.5	0.14 (1)	5.15	D-U	-288 / 0	0.08 (1)
C-D	-2232 / 0	-70.5 -70.5	0.11 (1)	4.46	T-E	-1204 / 0	0.35 (1)
D-E	-3345 / 0	-70.5 -70.5	0.19 (1)	4.49	E-S	0 / 1494	0.37 (1)
E-F	-4467 / 0	-70.5 -70.5	0.23 (1)	3.94	S-F	-412 / 0	0.11 (1)
F-G	-4467 / 0	-70.5 -70.5	0.36 (1)	3.80	S-H	-244 / 0	0.14 (1)
G-H	-4467 / 0	-70.5 -70.5	0.36 (1)	3.80	R-H	0 / 431	0.11 (1)
H-I	-4659 / 0	-138.7 -138.7	0.33 (1)	3.74	R-I	0 / 3636	0.88 (1)
I-J	-2889 / 0	-138.7 -138.7	0.28 (1)	4.64	Q-I	-3387 / 0	0.74 (1)
J-K	-2888 / 0	-138.7 -138.7	0.29 (1)	4.63	I-P	-1219 / 0	0.44 (1)
K-L	-1878 / 0	-70.5 -70.5	0.12 (1)	4.79	P-J	-754 / 0	0.29 (1)
L-M	0 / 40	-70.5 -70.5	0.11 (1)	10.00	P-K	0 / 2468	0.61 (1)
W-B	-2535 / 0	0.0 0.0	0.24 (1)	6.47	O-K	-694 / 0	0.28 (1)
N-L	-2587 / 0	0.0 0.0	0.23 (1)	6.42	B-V	0 / 1439	0.36 (1)
W-V	0 / 0	-34.5 -34.5	0.02 (4)	10.00	O-L	0 / 1444	0.36 (1)
V-U	0 / 1174	-34.5 -34.5	0.21 (1)	10.00	D-T	0 / 2679	0.88 (1)
U-T	0 / 1332	-102.7 -102.7	0.39 (1)	10.00	C-U	0 / 1419	0.35 (1)
T-S	0 / 3345	-102.7 -102.7	0.86 (1)	10.00			
S-R	0 / 4848	-102.7 -102.7	0.83 (1)	10.00			
R-Q	0 / 5105	-34.5 -34.5	0.67 (1)	10.00			
Q-P	0 / 3759	-34.5 -34.5	0.58 (1)	10.00			
P-O	0 / 1110	-34.5 -34.5	0.24 (1)	10.00			
O-N	0 / 0	-34.5 -34.5	0.09 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
D	2-2-12	-115	-115	---	FRONT	VERT	TOTAL
K	26-9-5	-115	-115	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 168 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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 = 2-2-12
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 2-6-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGlder
START DISTANCE = 2-6-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 15-8-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-2-12
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 13-4-0 OF SPAN MEASURED FROM THE RIGHT.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/788 (0.44")

CSI: TC=0.35 (F-H:1), BC=0.83 (R-S:1), WB=0.88 (I-R:1), SSI=0.34 (H-I:1)

A-1073638 2015/07/15



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253437	H01T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Wed Jul 15 09:37:42 2015 Page 2
ID:9?W oc?jYybVbeU0Ab4z?zOVES-eMKM1fc75z0nylmdm3zwMzcfItYxJ7fvOQissjxtFN

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 114.5 lbs. FACTORED DOWN AT 2-2-12,
AND 114.5 lbs. FACTORED DOWN AT 28-9-5 ON
TOP CHORD. DESIGN FOR UNSPECIFIED
CONNECTION(S) IS DELEGATED TO THE
BUILDING DESIGNER.

NOTES- (1)

- 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per
CBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

COMPANION LIVE LOAD FACTOR = 0.50

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
MT20	818	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.68 (R) (INPUT = 1.00)

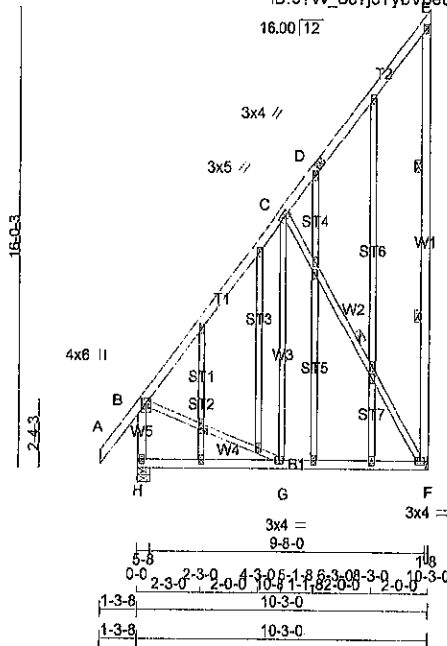


A-15073638(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H11SG	1	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 09:25:56 2015 Page 1
ID:9?W_oc?jcYybVpeU0Ab4z?zOVES-JXgTsF39L23yF0oxPoJm4N14HITuzl?2ahV4eyxlQF
Scale = 1:80.7



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
H - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
H - F	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	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TMVW-l	MT20	3.0	5.0	1.50	1.50
D	TS-l	MT20	3.0	4.0		
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BMVW-l	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		
I, J, K, L, M, N, O, P, Q, R, S						
I	NP+w	MT20	2.0	4.0		
Q	NP-p	MT20	2.0	4.0	1.00	1.50

NOTES: (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	560	0	560	0	0	5-8	1-8
F	461	0	451	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	385	274 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
F	318	215 / 0	0 / 0	0 / 0	0 / 0	103 / 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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2 LATERAL BRACE(S) REQUIRED AT 1/3 LENGTH OF E-F.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-F.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
H-B	-515 / 0	0.0	0.0 0.07 (1)	7.81	B-G	0 / 175	0.04 (1)
A-B	0 / 140	-70.5	-70.5 0.10 (1)	10.00	G-C	0 / 105	0.04 (4)
B-C	-237 / 0	-70.5	-70.5 0.25 (1)	6.25	C-F	-325 / 0	0.24 (1)
C-D	-36 / 0	-70.5	-70.5 0.25 (1)	6.25			
D-E	-36 / 0	-70.5	-70.5 0.25 (1)	6.25			
F-E	-136 / 0	0.0	0.0 0.09 (1)	6.25			
H-G	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
G-F	0 / 164	-17.5	-17.5 0.14 (4)	10.00			

TOTAL WEIGHT = 101 lb
(M/F)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(65 % OF 23.0 P.S.F. G.S.I. PLUS
8.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.26 (B-C:1), BC=0.14 (F-G:4),
WB=0.24 (C-F:1), SSI=0.11 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 L S 8END=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 0.50

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 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.43 (C) (INPUT = 0.80)
JSI METAL = 0.10 (H) (INPUT = 1.00)

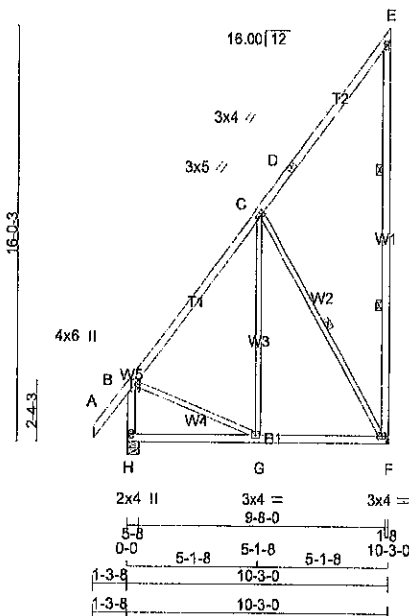


A-15073637

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H11	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 16 2015 MITek Industries, Inc. Wed Jul 15 09:12:47 2015 Page 1
ID:9?W_oc7?cYybVbeU0Ab4z?zOVES-vlVBGSWE9dfv5Yz/hbflGIBBCETuX8RscK2Futyxtck
Scale = 1:88.6



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
H - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
H - 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+p	MT20	4.0	6.0	2.00 2.00
C	TMVW-t	MT20	3.0	5.0	1.50 1.50
D	TS-t	MT20	3.0	4.0	
E	TMV+p	MT20	2.0	4.0	
F	BMVW1-t	MT20	3.0	4.0	
G	BMVW-t	MT20	3.0	4.0	
H	BMV1+p	MT20	2.0	4.0	

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG IN-SX
H	550	0	550	0	0	5-8	1-8
F	451	0	451	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	385	274 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
F	318	215 / 0	0 / 0	0 / 0	0 / 0	103 / 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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2 LATERAL BRACE(S) REQUIRED AT 1/3 LENGTH OF E-F.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-F.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
H-B	-515 / 0	0.0	0.0 0.07 (1)	B-G	0 / 175	0.04 (1)	
A-B	0 / 40	-70.5	-70.5 0.10 (1)	G-C	0 / 105	0.04 (4)	
B-C	-237 / 0	-70.5	-70.5 0.25 (1)	C-F	-325 / 0	0.24 (1)	
C-D	-36 / 0	-70.5	-70.5 0.25 (1)				
D-E	-36 / 0	-70.5	-70.5 0.25 (1)				
F-E	-136 / 0	0.0	0.0 0.08 (1)				
H-G	0 / 0	-17.5	-17.5 0.13 (4)				
G-F	0 / 164	-17.5	-17.5 0.14 (4)				

TOTAL WEIGHT = 2 X 73 = 146 lb
[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.25 (B-C:1), BC=0.14 (F-G:4),
WB=0.24 (C-F:1), SSI=0.11 (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 = 0.50

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 618 354 1867 822 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.43 (C) (INPUT = 0.90)
JSI METAL= 0.10 (H) (INPUT = 1.00)

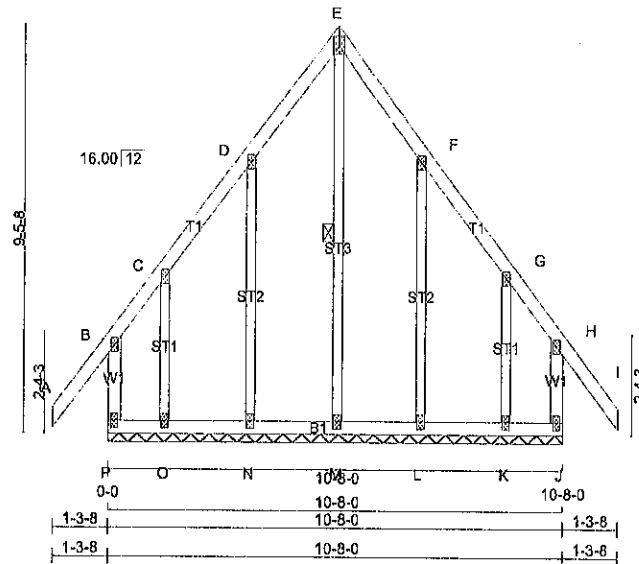


A-15073636

JOBB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H10G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 09:12:47 2015 Page 1
ID:97W_oc?jcYybVbeU0Ab4z?zOVES-vlVBGSWE9dfv5YzIhbfLGIBDWEVvXAQscK2Futyxtck
3x5 II
Scale = 1:53.8



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - 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	TMV+p	MT20	2.0	4.0	
C, D, F, G					
C	TMW+w	MT20	2.0	4.0	
E	TTW+p	MT20	3.0	5.0	2.00 Edge
H	TMV+p	MT20	2.0	4.0	
J	BMV1+p	MT20	2.0	4.0	
K, L, M, N, O					
K	BMW1+w	MT20	2.0	4.0	
P	BMV1+p	MT20	2.0	4.0	

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-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.	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		
P-B	-181 / 0	0.0	0.0	0.03 (1)	7.81	M-E	-181 / 0
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	N-D	-154 / 0
B-C	-9 / 0	-70.5	-70.5	0.07 (1)	10.00	O-C	-70 / 0
C-D	0 / 27	-70.5	-70.5	0.04 (1)	10.00	L-F	-154 / 0
D-E	0 / 21	-70.5	-70.5	0.04 (1)	10.00	K-G	-70 / 0
E-F	0 / 21	-70.5	-70.5	0.04 (1)	10.00		
F-G	0 / 27	-70.5	-70.5	0.04 (1)	10.00		
G-H	-9 / 0	-70.5	-70.5	0.07 (1)	10.00		
H-I	0 / 40	-70.5	-70.5	0.10 (1)	10.00		
J-H	-181 / 0	0.0	0.0	0.03 (1)	7.81		
P-O	-9 / 0	-17.5	-17.5	0.01 (4)	10.00		
O-N	-12 / 0	-17.5	-17.5	0.01 (4)	6.25		
N-M	-14 / 0	-17.5	-17.5	0.01 (4)	6.25		
M-L	-14 / 0	-17.5	-17.5	0.01 (4)	6.25		
L-K	-12 / 0	-17.5	-17.5	0.01 (4)	6.25		
K-J	-9 / 0	-17.5	-17.5	0.01 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-08
- TPIC 2011

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

(65 % 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=0.10 (A-B:1), BC=0.01 (L-M:4), WB=0.12 (F-L:1), SS=0.05 (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 = 0.50

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 618 354 1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.80)
JSI METAL= 0.06 (D) (INPUT = 1.00)

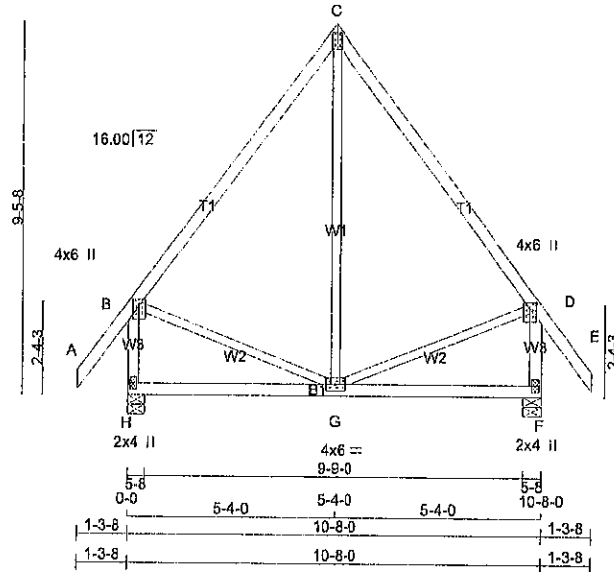


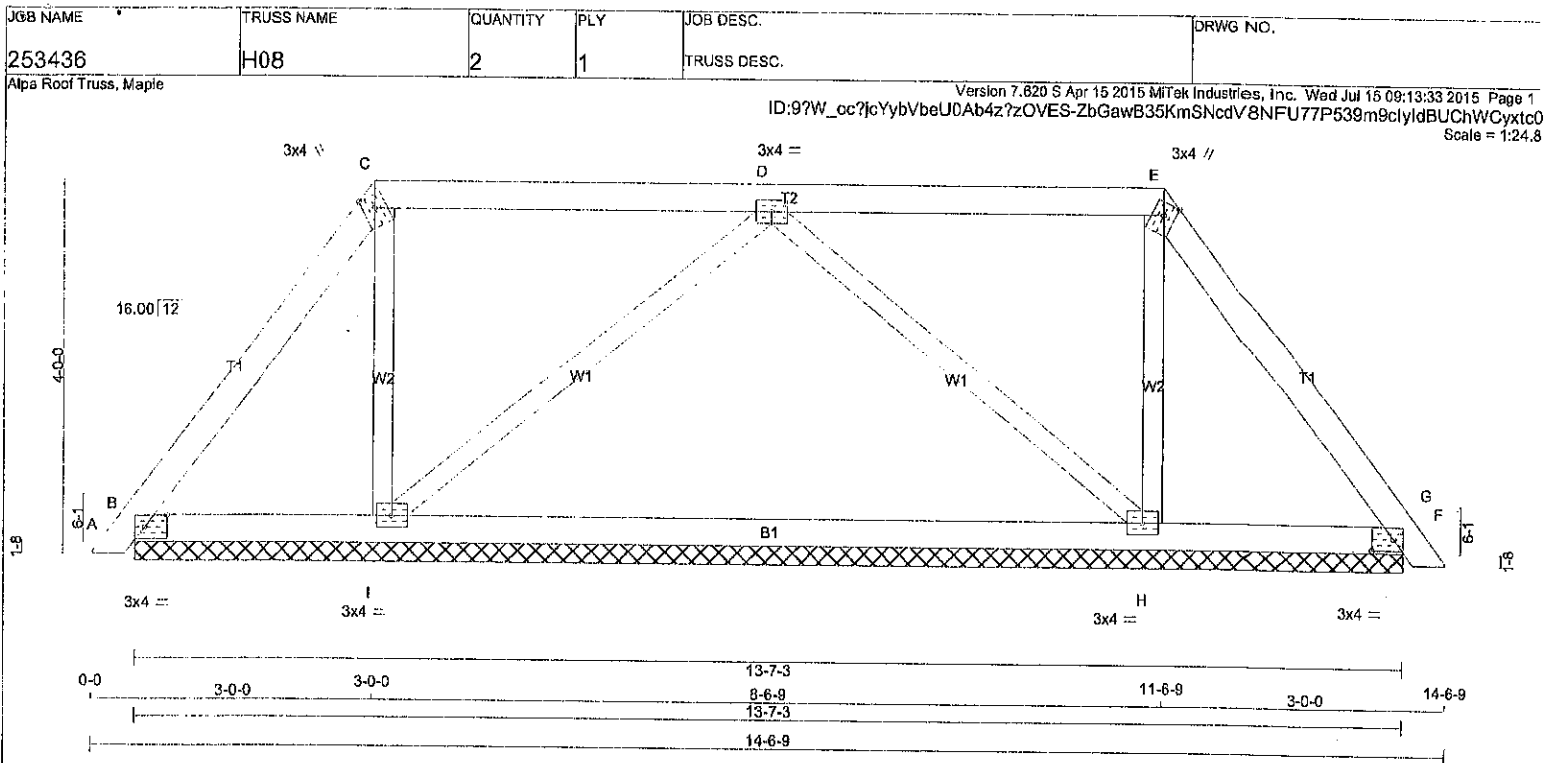
A-15073635

JQS NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H10	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 09:12:46 2015 Page 1
 ID:9?W_oc?jYybVbeU0Ab4z?zOVES-RYxp26VcOKX2UOP67186Juf0Jq7gokSjNgJiMQyxld
 3x5 II Scale = 1.59.0





LUMBER

N. L. G. A. RULES

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTW+m	MT20	3.0	4.0	Edge	
D	TMWV-I	MT20	3.0	4.0		
E	TTW+m	MT20	3.0	4.0	Edge	
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H	BMWW1-I	MT20	3.0	4.0		
I	BMWW1-I	MT20	3.0	4.0		

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	127	0	127	0	13-7-3	1-8
F	127	0	127	0	13-7-3	1-8
I	496	0	496	0	13-7-3	1-8
H	496	0	496	0	13-7-3	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	85	81/0	0/0	0/0	0/0	4/0	0/0
F	85	81/0	0/0	0/0	0/0	4/0	0/0
I	353	219/0	0/0	0/0	0/0	134/0	0/0
H	353	219/0	0/0	0/0	0/0	134/0	0/0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
A-B	0 / 9	-70.5	-70.5	I-C	-180 / 0	0.04 (1)	
B-C	-28 / 0	-70.5	-70.5	I-D	-287 / 0	0.15 (1)	
C-D	-11 / 0	-70.5	-70.5	D-H	-287 / 0	0.15 (1)	
D-E	-11 / 0	-70.5	-70.5	H-E	-180 / 0	0.04 (1)	
E-F	-28 / 0	-70.5	-70.5				
F-G	0 / 9	-70.5	-70.5				
B-I	0 / 16	-17.5	-17.5				
I-H	0 / 229	-17.5	-17.5				
H-F	0 / 16	-17.5	-17.5				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. G/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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=0.21 (D-E:1), BC=0.21 (H-I:4), WB=0.15 (D-I:1), SSI=0.15 (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 = 0.50

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 618 364 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.38 (I) (INPUT = 0.90)
JSI METAL= 0.08 (H) (INPUT = 1.00)

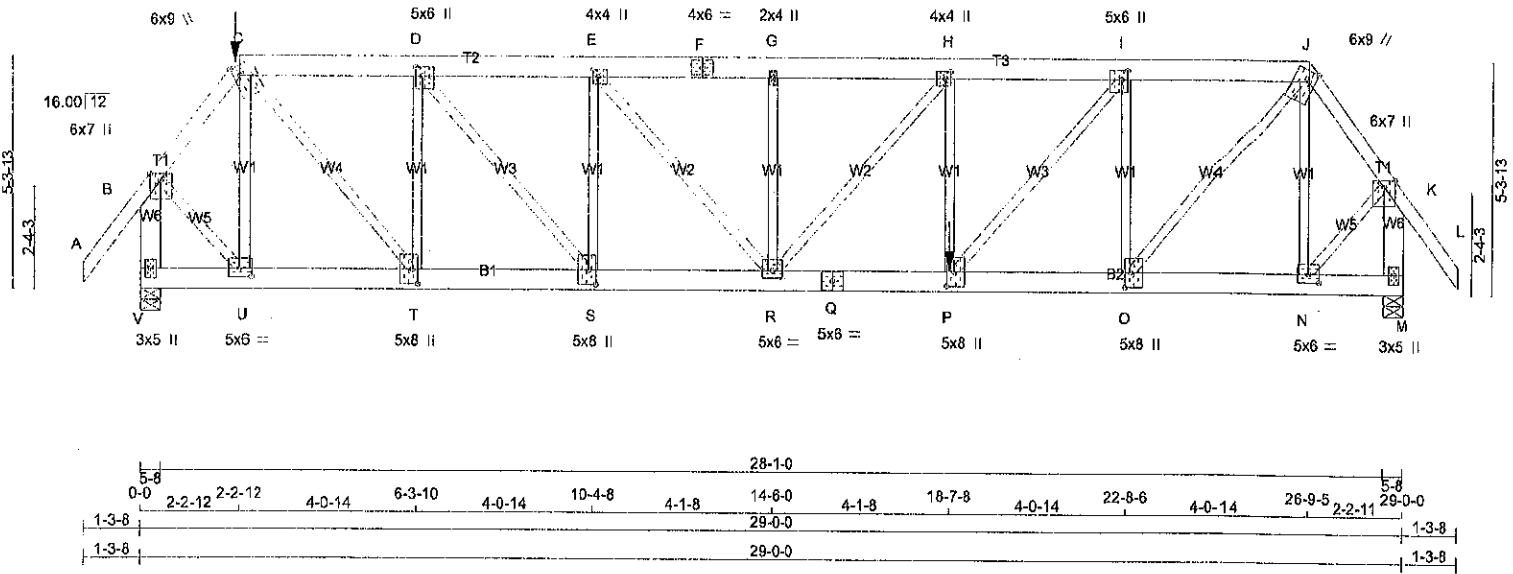


A-15073633

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H01-Cond2	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 09:12:45 2015 Page 1
ID:9?W_oc?jYybVbeU0Ab4z?zOVES-zMNRmU_d0PBsEqvZActBH6rQL35WZ90Z8p_vxtcm
Scale = 1:53.1



TOTAL WEIGHT = 2 X 176 = 351 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 - J	2x6	DRY	No.2	SPF
J - L	2x4	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
V - Q	2x6	DRY	No.2	SPF
Q - M	2x6	DRY	No.2	SPF

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	8.0	7.0	1.75 3.00
C	TTWW+m	MT20	8.0	9.0	2.75 1.75
D	TMVW+H	MT20	5.0	6.0	2.50 1.75
E	TMVW+H	MT20	4.0	4.0	2.00 1.50
F	TS-I	MT20	4.0	8.0	
G	TMVW+w	MT20	2.0	4.0	
H	TMVW+H	MT20	4.0	4.0	2.00 1.50
I	TMVW+H	MT20	5.0	6.0	2.50 1.75
J	TTWW+m	MT20	6.0	9.0	2.75 1.75
K	TMVW+p	MT20	6.0	7.0	1.75 3.00
M	BMV1+p	MT20	3.0	5.0	
N	BMVW+I	MT20	5.0	6.0	2.25 3.00
O	BMVW+H	MT20	5.0	8.0	4.00 1.50
P	BMVW+H	MT20	5.0	8.0	4.00 2.00
Q	BS-I	MT20	5.0	6.0	
R	BMVW+H	MT20	5.0	6.0	2.00 3.00
S	BMVW+H	MT20	5.0	8.0	4.00 2.00
T	BMVW+H	MT20	5.0	8.0	4.00 1.50
U	BMVW+I	MT20	5.0	6.0	2.25 3.00
V	BMV1+p	MT20	3.0	5.0	

HANGERS NOTES

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
V	3007	0	3007	0	0
M	2613	0	2613	0	0

UNFACTORED REACTIONS							
	1ST LOASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2118	1440 / 0	0 / 0	0 / 0	0 / 0	677 / 0	0 / 0
M	1839	1259 / 0	0 / 0	0 / 0	0 / 0	580 / 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 = 3.78FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM TO		FR-TO			
A-B	0/40	-70.5 -70.5	0.11 (1)	10.00	U-C	-866	0.33 (1)
B-C	-2208	-70.5 -70.5	0.14 (1)	4.48	C-T	0/2797	0.69 (1)
C-D	-3103	-156.3 -156.3	0.24 (1)	4.57	T-D	-2012	0.76 (1)
D-E	-4205	-156.3 -156.3	0.28 (1)	3.99	D-S	0/1718	0.42 (1)
E-F	-4859	-156.3 -156.3	0.28 (1)	3.81	S-E	-1156	0.44 (1)
F-G	-4859	-156.3 -156.3	0.28 (1)	3.81	E-R	0/700	0.17 (1)
G-H	-4859	-156.3 -156.3	0.30 (1)	3.78	R-G	-872	0.26 (1)
H-I	-4397	-70.5 -70.5	0.19 (1)	4.00	R-H	0/404	0.10 (1)
I-J	-2913	-70.5 -70.5	0.16 (1)	4.79	P-H	-756	0.29 (1)
J-K	-1913	-70.5 -70.5	0.12 (1)	4.74	P-I	0/2309	0.57 (1)
K-L	0/40	-70.5 -70.5	0.11 (1)	10.00	O-I	-2062	0.78 (1)
V-B	-3011	0.0 0.0	0.27 (1)	6.03	O-J	0/2775	0.69 (1)
M-K	-2632	0.0 0.0	0.23 (1)	6.37	N-J	-806	0.31 (1)
					B-U	0/1698	0.42 (1)
					N-K	0/1471	0.36 (1)
V-U	0/0	-38.8 -38.8	0.06 (1)	10.00			
U-T	0/1304	-38.8 -38.8	0.25 (1)	10.00			
T-S	0/3103	-38.8 -38.8	0.46 (1)	10.00			
S-R	0/4205	-38.8 -38.8	0.61 (1)	10.00			
R-Q	0/4397	-38.8 -38.8	0.66 (1)	10.00			
Q-P	0/4397	-38.8 -38.8	0.66 (1)	10.00			
P-O	0/2813	-17.5 -17.5	0.43 (1)	10.00			
O-N	0/1129	-17.5 -17.5	0.21 (1)	10.00			
N-M	0/0	-17.5 -17.5	0.07 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX.	FACE	DIR.
C	2-2-12	-141	-141	---	FRONT VERT
P	18-7-8	-925	-925	---	FRONT VERT

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 = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-2-12
RIGHT SETBACK = 2-2-11
END SETBACK = 6-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55% OF GSL.
LOADS APPLIED TO FIRST 16-7-8 OF SPAN MEASURED FROM THE LEFT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.30 (G-H-I), BC=0.66 (P-R-I), WB=0.78 (I-O-I), SSI=0.26 (C-D-I)

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

COMPANION LIVE LOAD FACTOR = 0.50
AUTOSOLVE HEELS OFF

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

A-15073632

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H01-Cond2	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 09:12:45 2015 Page 2
ID:9?W_0c?jcYybVbeU0Ab4z?zOVES-zMNRrnU_d0PBsEqvZActBH6rrQfL35WZ90Z8p_vxtcm

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 140.7 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD, AND 925.4 lbs FACTORED DOWN AT 18-7-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

- 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN
MT20 618 354	1667 822	2284 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.83 (E) (INPUT = 0.80)

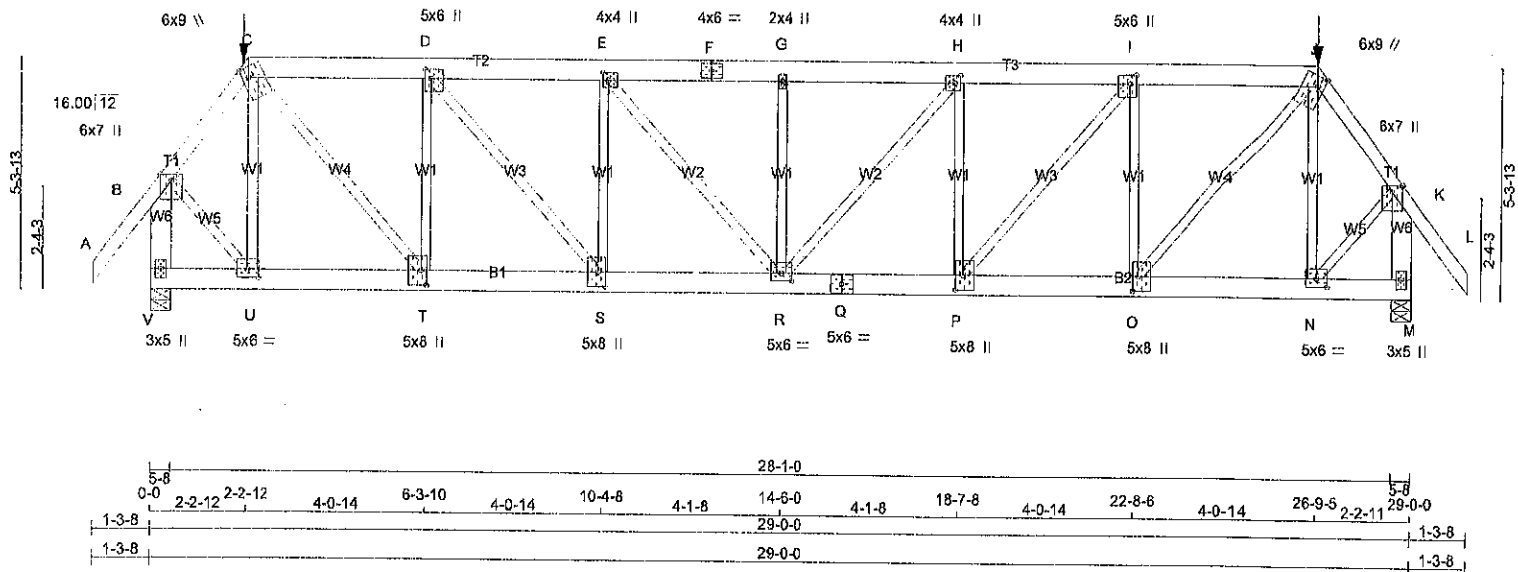
JSI METAL = 0.74 (Q) (INPUT = 1.00)



A-15073632(2)

Alpa Roof Truss, Maple

ID:9?W_0c?jYybVbeU0Ab4z?zOVES-zMNRmU_d0PBsEqvZActBH6s0Qhb38qZ90Z8p_yxtcm Scale = 1:53.1



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - F	2x6	DRY	No.2
F - J	2x6	DRY	No.2
J - L	2x4	DRY	No.2
V - B	2x6	DRY	No.2
M - K	2x6	DRY	No.2
V - Q	2x8	DRY	No.2
Q - M	2x8	DRY	No.2

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	7.0	1.75	3.00
C	TTWW+m	MT20	6.0	9.0	2.75	1.75
D	TMVW+H	MT20	5.0	6.0	2.50	1.75
E	TMVW+H	MT20	4.0	4.0	2.00	1.50
F	TS-I	MT20	4.0	8.0		
G	TMVW+w	MT20	2.0	4.0		
H	TMVW+H	MT20	4.0	4.0	2.00	1.50
I	TMVW+H	MT20	5.0	6.0	2.50	1.75
J	TTWW+m	MT20	6.0	9.0	2.75	1.75
K	TMVW+p	MT20	6.0	7.0	1.75	3.00
M	BMV1+p	MT20	3.0	5.0		
N	BMVW-I	MT20	5.0	6.0	2.25	3.00
O	BMVW+H	MT20	5.0	8.0	4.00	1.50
P	BMVW+H	MT20	5.0	8.0	4.00	2.00
Q	BS-I	MT20	5.0	6.0		
R	BMVW+H	MT20	5.0	6.0	2.00	3.00
S	BMVW+H	MT20	5.0	8.0	4.00	2.00
T	BMVW+H	MT20	5.0	8.0	4.00	1.50
U	BMVW-I	MT20	5.0	6.0	2.25	3.00
V	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	2572	0	0	5-8
V	2572	0	2572	0	5-8
M	2572	0	2572	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
V	1811 1235 / 0 0 / 0 0 / 0 576 / 0 0 / 0
M	1811 1235 / 0 0 / 0 0 / 0 576 / 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 = 4.24FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
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 / 40	-70.5	-70.5	0.11 (1)	10.00	U-C	-727 / 0	0.28 (1)
B-C	-1888 / 0	-70.5	-70.5	0.12 (1)	4.79	C-T	0 / 2334	0.58 (1)
C-D	-2604 / 0	-138.7	-138.7	0.20 (1)	4.84	T-D	-1672 / 0	0.63 (1)
D-E	-3489 / 0	-138.7	-138.7	0.22 (1)	4.37	D-S	0 / 1378	0.34 (1)
E-F	-3787 / 0	-138.7	-138.7	0.21 (1)	4.24	S-E	-909 / 0	0.35 (1)
F-G	-3787 / 0	-138.7	-138.7	0.21 (1)	4.24	E-R	0 / 460	0.11 (1)
G-H	-3787 / 0	-138.7	-138.7	0.21 (1)	4.24	R-G	-571 / 0	0.22 (1)
H-I	-3489 / 0	-138.7	-138.7	0.22 (1)	4.37	R-H	0 / 460	0.11 (1)
I-J	-2604 / 0	-138.7	-138.7	0.20 (1)	4.94	P-H	-909 / 0	0.35 (1)
J-K	-1888 / 0	-70.5	-70.5	0.12 (1)	4.79	P-I	0 / 1378	0.34 (1)
K-L	0 / 40	-70.5	-70.5	0.11 (1)	10.00	O-I	-1672 / 0	0.63 (1)
V-B	-2574 / 0	0.0	0.0	0.23 (1)	6.42	O-J	0 / 2334	0.58 (1)
M-K	-2574 / 0	0.0	0.0	0.23 (1)	6.42	N-J	-727 / 0	0.28 (1)
						B-U	0 / 1437	0.38 (1)
V-U	0 / 0	-34.5	-34.5	0.07 (1)	10.00	N-K	0 / 1437	0.38 (1)
U-T	0 / 1103	-34.5	-34.5	0.22 (1)	10.00			
T-S	0 / 2604	-34.5	-34.5	0.39 (1)	10.00			
S-R	0 / 3489	-34.5	-34.5	0.52 (1)	10.00			
R-Q	0 / 3489	-34.5	-34.5	0.52 (1)	10.00			
Q-P	0 / 3489	-34.5	-34.5	0.52 (1)	10.00			
P-O	0 / 2604	-34.5	-34.5	0.39 (1)	10.00			
O-N	0 / 1103	-34.5	-34.5	0.22 (1)	10.00			
N-M	0 / 0	-34.5	-34.5	0.07 (1)	10.00			

TOTAL WEIGHT = 2 X 176 = 351 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0 PSF
DL = 3.0 PSF	
BOT CH.	LL = 0.0 PSF
DL = 7.0 PSF	
TOTAL LOAD	= 31.0 PSF

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 2-2-12
RIGHT SETBACK = 2-2-11
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 23.0 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.97")
CALCULATED VERT. DEFL.(LL)= L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL)= L/999 (0.24")

CSI: TC=0.23 (B-V:1), BC=0.52 (R-S:1), WB=0.63 (I-O:1), SSI=0.22 (I-J:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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 518 354 1667 822 2284 1866

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (B) (INPUT = 0.90)
JSI METAL= 0.58 (Q) (INPUT = 1.00)

A-15073631

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253436	H01-Cond1	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 09:12:45 2015 Page 2
ID:9?W oc?lcYybVbeU0Ab4z?zOVES-zMNRmU_d0PBsEqvZActBH6s0Qhb38qZ90Z8p_yxtcm

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 26-8-5, AND 114.6 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

- 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

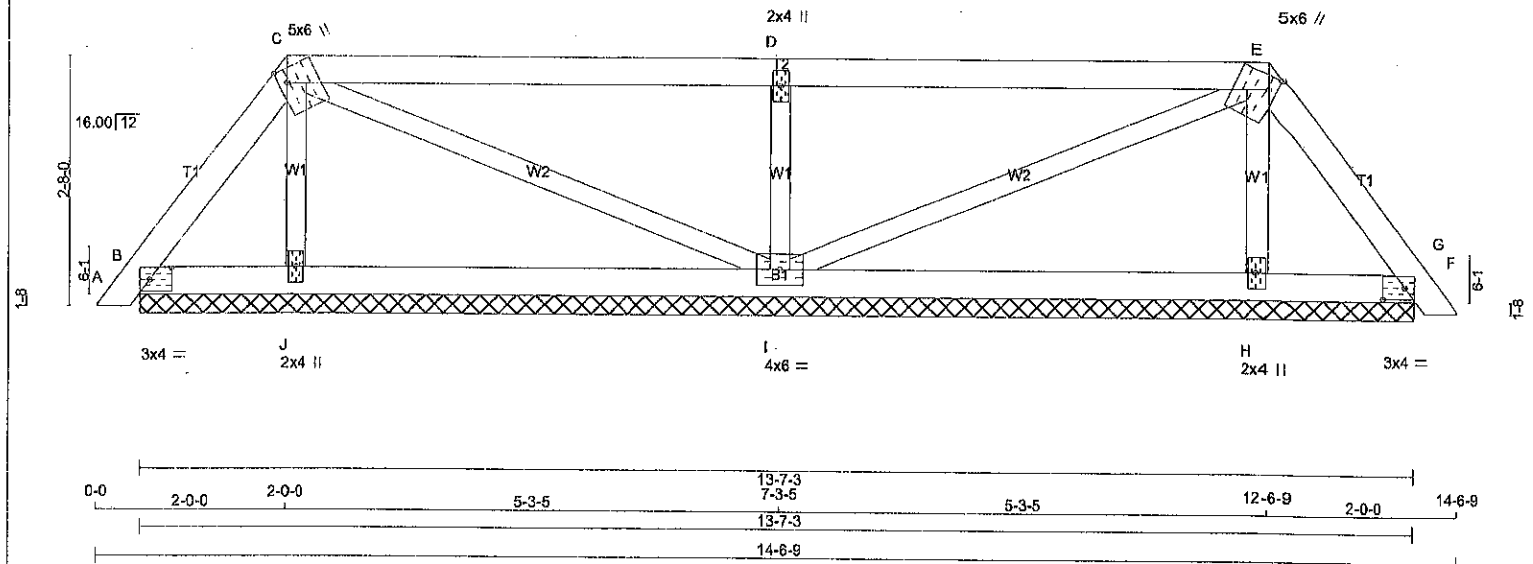


A-ND73631(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H07	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2016 MITek Industries, Inc. Tue Jul 14 15:28:33 2016 Page 1
ID:97W_cc?jcYybVbeU0Ab4z?zOVES-XHBIIzUj2TZU3263LJBYzLICfQ?L6PvBNkxy7CS
Scale = 1:24.8



LUMBER				
N.L.G.A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY				
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 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TTWW+m	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	6.0	1.75 1.00
F	TMB1-L	MT20	3.0	4.0	1.50 2.75
H	BMW1+w	MT20	2.0	4.0	
I	BMWW1-L	MT20	4.0	8.0	
J	BMW1+w	MT20	2.0	4.0	

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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	128	0	128	0	0	13-7-3	1-8		
F	128	0	128	0	0	13-7-3	1-8		
J	205	0	205	0	0	13-7-3	1-8		
I	578	0	578	0	0	13-7-3	1-8		
H	205	0	205	0	0	13-7-3	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
B	87	79/0	0/0	0/0	0/0	8/0	0/0	
F	87	79/0	0/0	0/0	0/0	8/0	0/0	
J	148	78/0	0/0	0/0	0/0	71/0	0/0	
I	405	287/0	0/0	0/0	0/0	118/0	0/0	
H	148	78/0	0/0	0/0	0/0	71/0	0/0	

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

BRACING

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

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 LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0/9	-70.5	-70.5 0.01 (1)	10.00	J-C	-131/0	0.02 (1)
B-C	-68/0	-70.5	-70.5 0.03 (1)	8.25	C-I	-23/0	0.01 (1)
C-D	-9/0	-70.5	-70.5 0.33 (1)	10.00	I-D	-484/0	0.07 (1)
D-E	-9/0	-70.5	-70.5 0.33 (1)	10.00	I-E	-23/0	0.01 (1)
E-F	-66/0	-70.5	-70.5 0.03 (1)	8.25	H-E	-131/0	0.02 (1)
F-G	0/9	-70.5	-70.5 0.01 (1)	10.00			
B-J	0/37	-17.5	-17.5 0.07 (4)	10.00			
J-I	0/31	-17.5	-17.5 0.10 (4)	10.00			
I-H	0/31	-17.5	-17.5 0.10 (4)	10.00			
H-F	0/37	-17.5	-17.5 0.07 (4)	10.00			

TOTAL WEIGHT = 2 X 48 = 97 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (D-E:1), BC=0.10 (H-I:4), WB=0.07 (D-I:1), SSI=0.18 (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 = 0.50

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 618 354 1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (F) (INPUT = 0.80)
JSI METAL= 0.09 (D) (INPUT = 1.00)

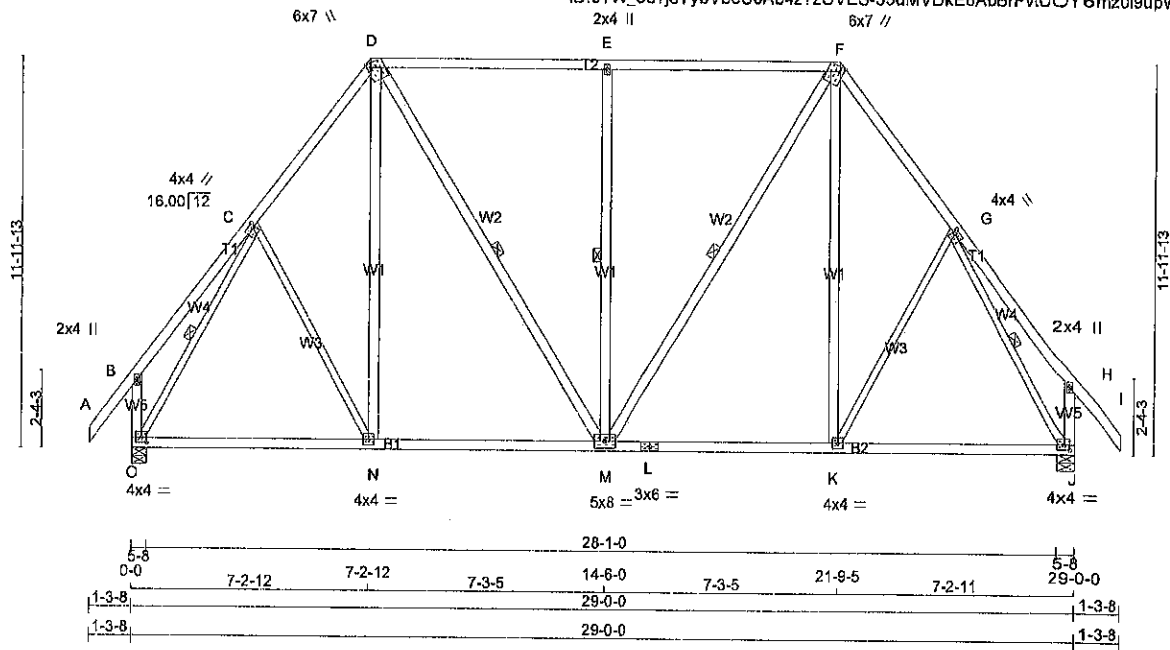


A-15073582

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H06	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Tue Jul 14 15:28:32 2015 Page 1
ID:97W_oc7jcYybVbeU0Ab4zZOVES-35dMVDKE6AbBrPvtUCY6mz0i9uWhRmzAFRpbVyy7CT
Scale = 1:71.1



TOTAL WEIGHT = 6 X 181 = 1084 lb
[M/F]

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

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	TMW+u	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMWW-t	MT20	4.0	4.0	1.50	1.00
H	TMV+p	MT20	2.0	4.0		
J	BMVW1-t	MT20	4.0	4.0	1.75	2.00
K	BMWW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMWWW-t	MT20	5.0	8.0		
N	BMWW-t	MT20	4.0	4.0		
O	BMVW1-t	MT20	4.0	4.0	1.75	2.00

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per

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
O	1429	0	1429	0	0	5-8	1-9
J	1429	0	1429	0	0	5-8	1-9

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
O	1010	688 / 0	0 / 0	0 / 0	342 / 0	0 / 0
J	1010	688 / 0	0 / 0	0 / 0	342 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.67FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-M, E-M, F-M, C-O, 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX UNBRAC LENGTH	MAX (LC)
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	C-N	0 / 61	0.02 (4)	
B-C	0 / 23	-70.5	-70.5 0.14 (1)	N-D	0 / 130	0.03 (4)	
C-D	-1088 / 0	-70.5	-70.5 0.13 (1)	D-M	0 / 477	0.08 (1)	
D-E	-889 / 0	-78.0	-78.0 0.56 (1)	M-E	-895 / 0	0.54 (1)	
E-F	-889 / 0	-78.0	-78.0 0.56 (1)	M-F	0 / 477	0.08 (1)	
F-G	-1088 / 0	-70.5	-70.5 0.13 (1)	K-F	0 / 130	0.03 (4)	
G-H	0 / 23	-70.5	-70.5 0.14 (1)	K-G	0 / 61	0.02 (4)	
H-I	0 / 40	-70.5	-70.5 0.10 (1)	O-C	-1338 / 0	0.52 (1)	
O-B	-195 / 0	0.0	0.0 0.02 (1)	G-J	-1338 / 0	0.52 (1)	
J-H	-195 / 0	0.0	0.0 0.02 (1)				
O-N	0 / 627	-17.5	-17.5 0.28 (4)				
N-M	0 / 637	-17.5	-17.5 0.29 (4)				
M-L	0 / 637	-17.5	-17.5 0.29 (4)				
L-K	0 / 637	-17.5	-17.5 0.29 (4)				
K-J	0 / 627	-17.5	-17.5 0.28 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 8.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 3-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 2012, ABC 2014
- CSA 066-09
- TPIC 2011

(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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.55 (D-E:1), BC=0.29 (M-N:4), WB=0.54 (E-M:1), SS=0.28 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	818	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (G) (INPUT = 0.90)
JSI METAL= 0.49 (G) (INPUT = 1.00)

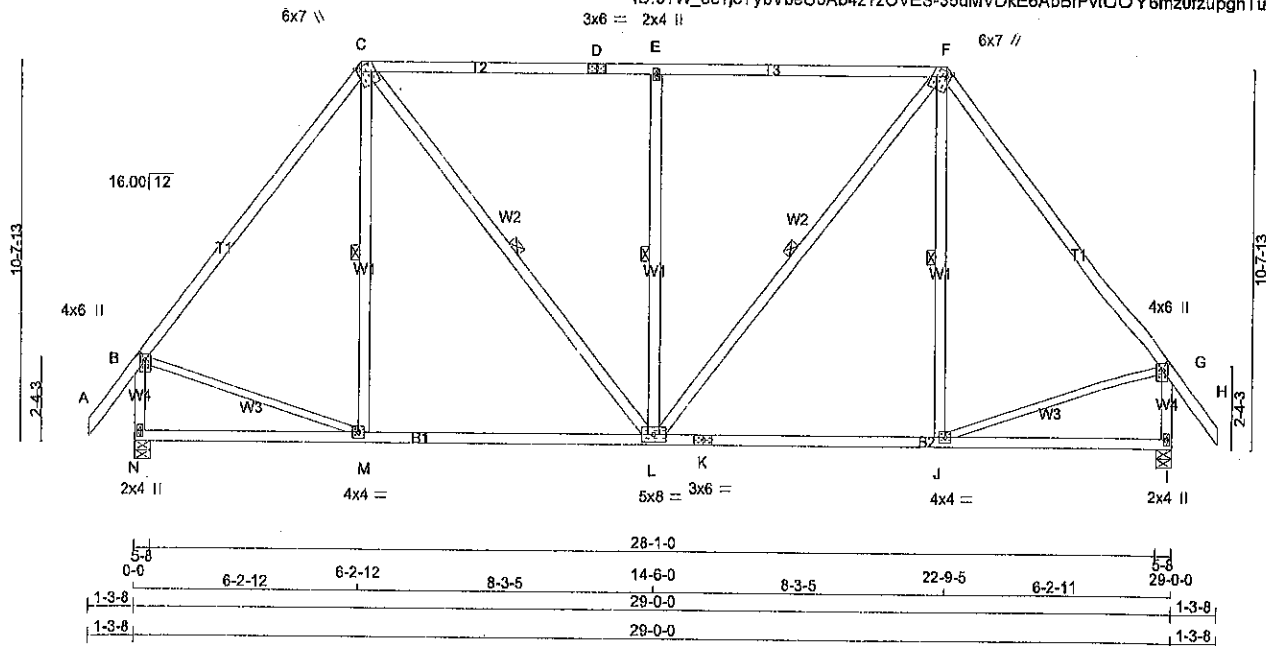


A-11073581

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2016 Mitek Industries, Inc. Tue Jul 14 15:28:32 2016 Page 1

ID:97W_cc7jcYybVbeU0Ab4z7zOVES-35dMVDkE6AbBrPvtUOY6mzfzupghTuzAFRbBVyy7CT
Scale = 1:64.7



TOTAL WEIGHT = 2 X 160 = 319 lb (M)

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	2100F 1.8E	SPF
N - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
B - M	2x3	DRY	No.2	SPF
J - G	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TS-t	MT20	3.0	6.0		
E	TMVW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVWV-t	MT20	5.0	8.0		
M	BMVW-t	MT20	4.0	4.0		
N	BMV1+p	MT20	2.0	4.0		

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS							
FACTORED GROSS REACTION				MAXIMUM FACTORED GROSS REACTION			
JT	VERT	HORZ	DOWN	JT	HORZ	UPLIFT	IN-SX
N	1375	0	1375	0	0	5-8	1-8
I	1375	0	1375	0	0	5-8	1-8

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
I	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.39FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-M, C-L, E-L, F-L, 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MAX. UNBRACED LENGTH
FR-TO					FR-TO				
A-B	0 / 40	-70.5	-70.5	0.07 (1)	10.00	M-C	-48 / 95	0.03 (1)	10.00
B-C	-1029 / 0	-70.5	-70.5	0.36 (1)	6.25	C-L	0 / 650	0.09 (1)	10.00
C-D	-959 / 0	-70.5	-70.5	0.95 (1)	4.39	L-E	-715 / 0	0.41 (1)	10.00
D-E	-959 / 0	-70.5	-70.5	0.95 (1)	4.39	L-F	0 / 650	0.09 (1)	10.00
E-F	-959 / 0	-70.5	-70.5	0.95 (1)	4.39	J-F	-48 / 95	0.03 (1)	10.00
F-G	-1029 / 0	-70.5	-70.5	0.36 (1)	6.25	B-M	0 / 644	0.14 (1)	10.00
G-H	0 / 40	-70.5	-70.5	0.07 (1)	10.00	J-G	0 / 644	0.14 (1)	10.00
N-B	-1333 / 0	0.0	0.0	0.17 (1)	7.01				
I-G	-1333 / 0	0.0	0.0	0.17 (1)	7.01				
N-M	0 / 0	-17.5	-17.5	0.21 (4)	10.00				
M-L	0 / 615	-17.5	-17.5	0.28 (4)	10.00				
L-K	0 / 615	-17.5	-17.5	0.28 (4)	10.00				
K-J	0 / 615	-17.5	-17.5	0.28 (4)	10.00				
J-I	0 / 0	-17.5	-17.5	0.21 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(65 % 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.95 (C-E:1), BC=0.28 (L-M:4), WB=0.41 (E-L:1), SS=0.28 (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 = 0.50

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 618 354 1067 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (M) (INPUT = 0.90)
JSI METAL= 0.26 (B) (INPUT = 1.00)

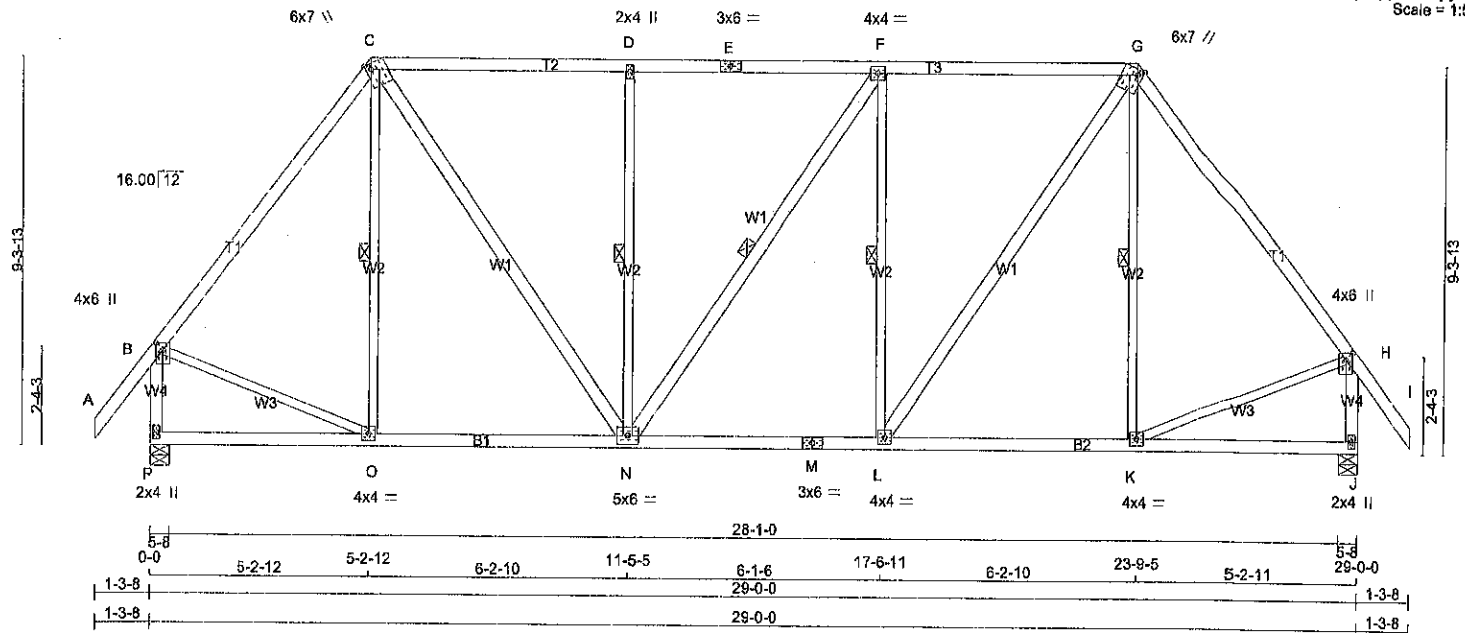


A-11073580

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H04	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 16 2015 MITek Industries, Inc. Tue Jul 14 15:28:31 2015 Page 1
ID:97W_oc7cyYbVbeU0Ab4z?zOVES-bu3_HtjclTKFKHwh1DmTcMUU5y2rpyblGf3yy7CU
Scale = 1:55.6



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
G - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT				
C - N	2x4	DRY	No.2	SPF
N - F	2x4	DRY	No.2	SPF
L - G	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	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TS-I	MT20	3.0	6.0		
F	TMVW-I	MT20	4.0	4.0		
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	2.00	2.00
J	BMV1+p	MT20	2.0	4.0		
K, L, O						
K	BMVW-I	MT20	4.0	4.0		
M	BS-I	MT20	3.0	6.0		
N	BMVW-I	MT20	5.0	6.0		
P	BMV1+p	MT20	2.0	4.0		

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	RECORD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
P	1375	0	1375	0	5-8
J	1375	0	1375	0	5-8

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	968	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	968	668 / 0	0 / 0	0 / 0	0 / 0	298 / 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 = 5.66FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-O, D-N, F-N, F-L, G-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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	MAX	LC1
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-O	-114 / 51	0.07 (1)
B-C	-1033 / 0	-70.5	-70.5 0.43 (1)	5.68	C-N	0 / 698	0.11 (1)
C-D	-1013 / 0	-70.5	-70.5 0.40 (1)	5.68	N-D	-468 / 0	0.27 (1)
D-E	-1013 / 0	-70.5	-70.5 0.41 (1)	5.68	N-F	-2 / 0	0.00 (1)
E-F	-1013 / 0	-70.5	-70.5 0.41 (1)	5.68	L-F	-468 / 0	0.27 (1)
F-G	-1014 / 0	-70.5	-70.5 0.41 (1)	5.68	L-G	0 / 700	0.11 (1)
G-H	-1033 / 0	-70.5	-70.5 0.43 (1)	5.68	K-G	-115 / 51	0.07 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-O	0 / 657	0.15 (1)
P-B	-1339 / 0	0.0	0.0 0.17 (1)	7.00	K-H	0 / 657	0.15 (1)
J-H	-1338 / 0	0.0	0.0 0.17 (1)	7.00			
P-O	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
O-N	0 / 616	-17.5	-17.5 0.18 (4)	10.00			
N-M	0 / 1014	-17.5	-17.5 0.23 (1)	10.00			
M-L	0 / 1014	-17.5	-17.5 0.23 (1)	10.00			
L-K	0 / 616	-17.5	-17.5 0.18 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.13 (4)	10.00			

TOTAL WEIGHT = 2 X 168 = 315 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	21.0	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	31.0	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 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 2012, ABC 2014
- CSA 686-09
- TPIC 2011

(65 % 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.43 (B-C:1), BC=0.23 (L-N:1), WB=0.27 (F-L:1), SSI=0.20 (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 = 0.60

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 616 354 1687 822 2284 1656

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (B) (INPUT = 0.90)
JSI METAL = 0.28 (M) (INPUT = 1.00)

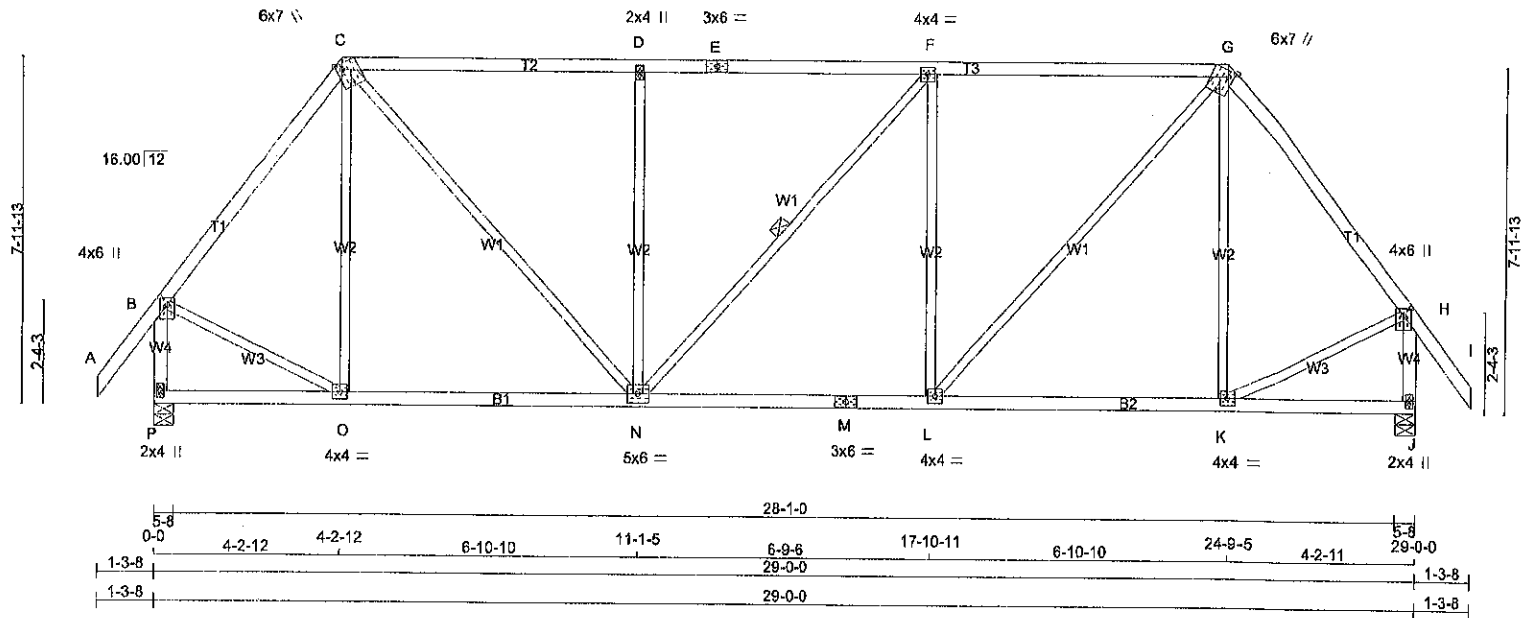


A-11073579

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H03	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.820 S Apr 15 2015 MiTek Industries, Inc. Tue Jul 14 15:28:30 2015 Page 1
ID:97W_oc?jcybVbeU0Ab4z?zOVES-7IVc4X]_aZLTc5IUM_VehYwP448DDVWgixj7dy7CV
Scale = 1:53.3



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
G - I	2x4	DRY	No.2	SPF
I - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
K - L	2x4	DRY	No.2	SPF
L - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.00 2.00
C	TTWW+m	MT20	6.0	7.0	Edge 1.50
D	TMVW+w	MT20	2.0	4.0	
E	TS-i	MT20	3.0	6.0	
F	TMVW-i	MT20	4.0	4.0	
G	TTWW+m	MT20	6.0	7.0	Edge 1.50
H	TMVW+p	MT20	4.0	6.0	2.00 2.00
J	BMV1+p	MT20	2.0	4.0	
K, L, O					
K	BMVW-i	MT20	4.0	4.0	
M	BS-i	MT20	3.0	6.0	
N	BMVW-i	MT20	5.0	6.0	
P	BMV1+p	MT20	2.0	4.0	

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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	BRG	IN-SX
P	1375	0	1375	0	0	5-8	1-8		
J	1375	0	1375	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
P	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0		
J	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 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 = 5.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-N.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX. FACTORED	MAX. (LC)
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-167 / 31	0.20 (1)
B-C	-1027 / 0	-70.5	-70.5 0.26 (1)	5.68	C-N	0 / 659	0.19 (1)
C-D	-1188 / 0	-70.5	-70.5 0.52 (1)	5.16	N-D	-519 / 0	0.63 (1)
D-E	-1188 / 0	-70.5	-70.5 0.52 (1)	5.16	N-F	-1 / 0	0.00 (1)
E-F	-1188 / 0	-70.5	-70.5 0.52 (1)	5.16	L-F	-519 / 0	0.63 (1)
F-G	-1188 / 0	-70.5	-70.5 0.53 (1)	5.16	L-G	0 / 881	0.19 (1)
G-H	-1027 / 0	-70.5	-70.5 0.26 (1)	5.68	K-G	-168 / 31	0.20 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-O	0 / 673	0.15 (1)
P-B	-1350 / 0	0.0	0.0 0.17 (1)	6.98	K-H	0 / 673	0.15 (1)
J-H	-1350 / 0	0.0	0.0 0.17 (1)	6.98			
P-O	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
O-N	0 / 611	-17.5	-17.5 0.21 (4)	10.00			
N-M	0 / 1187	-17.5	-17.5 0.28 (1)	10.00			
M-L	0 / 1187	-17.5	-17.5 0.28 (1)	10.00			
L-K	0 / 611	-17.5	-17.5 0.21 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.13 (4)	10.00			

TOTAL WEIGHT = 2 X 138 = 277 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-08
- TPIC 2011

(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 (0.87")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.87")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.53 (F-G:1), BC=0.28 (L-N:1), WB=0.63 (F-L:1), SSI=0.23 (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 = 0.50

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 618 364 1667 822 2284 1866

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL = 0.34 (M) (INPUT = 1.00)

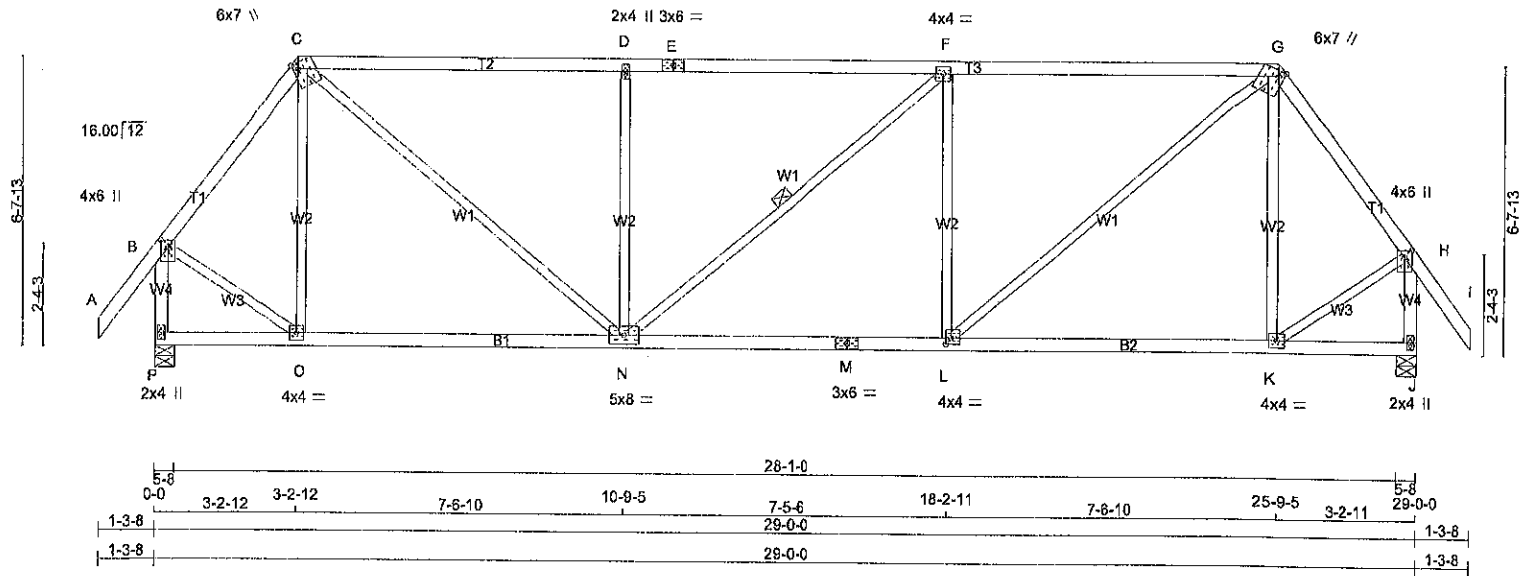


A-11073578

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H02	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 16 2015 MiTek Industries, Inc. Tue Jul 14 16:28:30 2015 Page 1
ID:97W_oc7jYybVbeU0Ab4z?zOVES-7IVc4Xl_aZLTc5lUM_WehYwNb47KDZfgjxj7dyy7CV
Scale = 1:53.3



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
G - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.00 2.00
C	TTWW+m	MT20	6.0	7.0	Edge 1.50
D	TMVW+w	MT20	2.0	4.0	
E	TS-l	MT20	3.0	6.0	
F	TMVW-l	MT20	4.0	4.0	
G	TTWW+m	MT20	6.0	7.0	Edge 1.50
H	TMVW+p	MT20	4.0	6.0	2.00 2.00
J	BMV1+p	MT20	2.0	4.0	
K	BMVW-l	MT20	4.0	4.0	
L	BMVW-l	MT20	4.0	4.0	1.75 1.50
M	BS-l	MT20	3.0	6.0	
N	BMVW-l	MT20	6.0	8.0	
O	BMVW-l	MT20	4.0	4.0	
P	BMV1+p	MT20	2.0	4.0	

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 2 design, as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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	1375	0	1375	0	0	5-8	1-8		
J	1375	0	1375	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 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. PURLINE SPACING = 4.68 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-N.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-237 / 8	0.17 (1)
B-C	-999 / 0	-70.5	-70.5 0.15 (1)	6.09	C-N	0 / 1094	0.25 (1)
C-D	-1436 / 0	-70.5	-70.5 0.68 (1)	4.80	N-D	-570 / 0	0.42 (1)
D-E	-1431 / 0	-70.5	-70.5 0.68 (1)	4.59	N-F	-1 / 0	0.00 (1)
E-F	-1431 / 0	-70.5	-70.5 0.68 (1)	4.59	L-F	-570 / 0	0.42 (1)
F-G	-1431 / 0	-70.5	-70.5 0.68 (1)	4.58	L-G	0 / 1096	0.25 (1)
G-H	-998 / 0	-70.5	-70.5 0.15 (1)	6.09	K-G	-238 / 8	0.17 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-O	0 / 690	0.16 (1)
P-B	-1365 / 0	0.0	0.0 0.17 (1)	6.96	K-H	0 / 690	0.16 (1)
J-H	-1365 / 0	0.0	0.0 0.17 (1)	6.96			
P-O	0 / 0	-17.5	-17.5 0.15 (4)	10.00			
O-N	0 / 591	-17.5	-17.5 0.24 (4)	10.00			
N-M	0 / 1432	-17.5	-17.5 0.34 (1)	10.00			
M-L	0 / 1432	-17.5	-17.5 0.34 (1)	10.00			
L-K	0 / 591	-17.5	-17.5 0.24 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

TOTAL WEIGHT = 2 X 130 = 260 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.68 (F-G:1), BC=0.34 (L-N:1), WB=0.42 (F-L:1), SSI=0.26 (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 = 0.50

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 618 354 1667 822 2294 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (E) (INPUT = 0.90)
JSI METAL = 0.42 (M) (INPUT = 1.00)

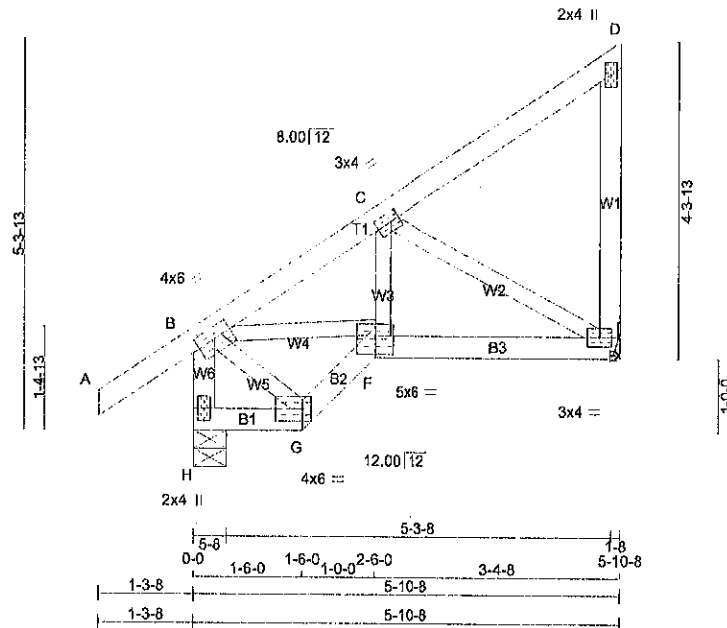


A-11073577

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253427	J01C	7	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Tue Jul 14 14:50:25 2015 Page 1
ID:97W_oc?cYybVbeU0Ab4z?zOVES-W8xnVD3hhVShzZK?b0oah01O_JoLC3LHxyJQZyy7mC
Scale: 3/8"=1'



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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW-1	MT20	4.0	6.0	1.75	3.00
C	TMVWW-1	MT20	3.0	4.0	1.50	1.60
D	TMV+p	MT20	2.0	4.0		
E	BMVWW-1	MT20	3.0	4.0		
F	BBVWW-1	MT20	5.0	6.0	3.00	3.00
G	BBVWW-1	MT20	4.0	6.0	2.00	4.50
H	BMV-1+p	MT20	2.0	4.0		

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
H	355	0	355	0	0	5-8	1-8		
E	258	0	258	0	0				

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	248	181/0	0/0	0/0	0/0	0/0	0/0	67/0	0/0
E	182	123/0	0/0	0/0	0/0	0/0	0/0	59/0	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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
H-B	-342/0	B-G	0/18
A-B	0/27	B-F	0/238
B-C	-287/0	F-C	0/57
C-D	-12/0	C-E	-264/0
E-D	-93/0		
H-G	0/0		
G-F	0/20		
F-E	0/248		



TOTAL WEIGHT = 7 X 30 = 208 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.01")

CSI: TC=0.10 (B-C:1), BC=0.08 (E-F:4), WB=0.07 (C-E:1), SSI=0.09 (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 = 0.50

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 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

A-15073574

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 18 gauge

FINISH: G90 galvanized

DESIGN:

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

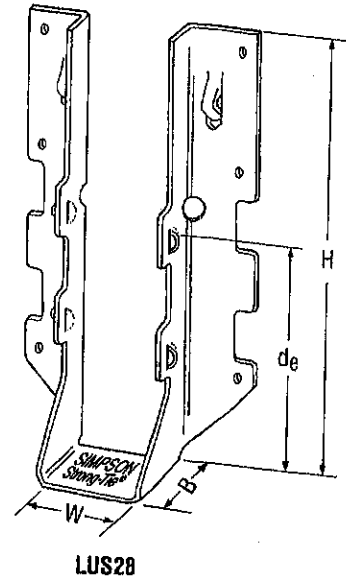
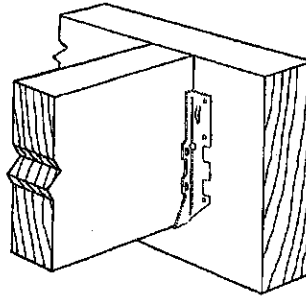
INSTALLATION:

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

OPTIONS:

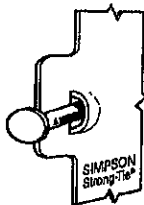
- These hangers cannot be modified.

Typical LUS Installation



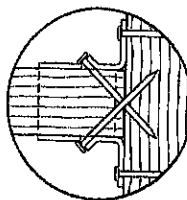
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1¾	1½	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	4-16d	2-16d	835	2020	590	1435
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	4¾	4¾	2	3¼	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	6-10d	4-10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	6-16d	4-16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¾	2	3¼	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1½	7½	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	4¾	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.

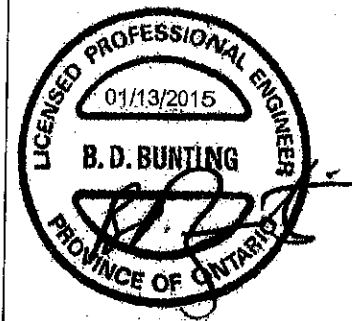


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,803,580



Double Shear Nailing Top View.



800-999-5090
www.strongtie.com

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: See table

FINISH: G90 galvanized

DESIGN:

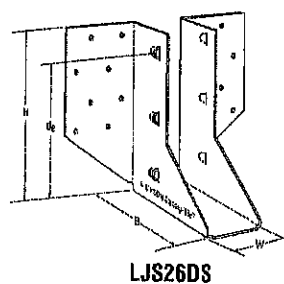
- Factored resistances are in accordance with CSA 086-14
- Uplift resistances have been increased 15%
No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

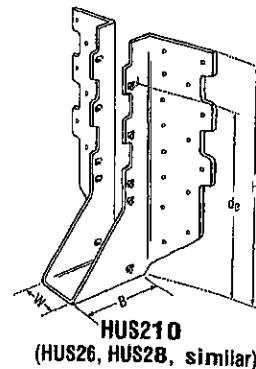
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

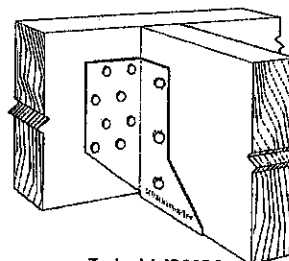
- See current catalogue for options



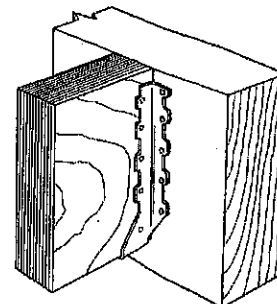
LJS26DS



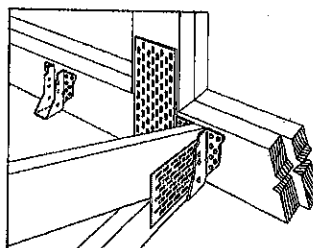
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



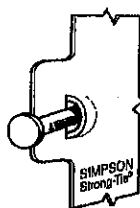
Typical HUS
Installation



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

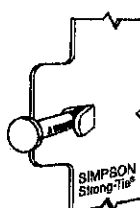
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	dg ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _e =1.15)	Normal (K _e =1.00)	Uplift (K _e =1.15)	Normal (K _e =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1 5/8	5 3/8	3	3 15/16	14-16d	6-16d	2705	4940	2065	3675
HUS28	16	1 5/8	7 3/8	3	6 3/32	22-16d	8-16d	3605	5365	2675	4345
HUS210	16	1 5/8	9 3/8	3	7 81/32	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1 3/16	9	3	8	30-16d	10-16d	4505	6450	4010	5200

1. dg¹ is the distance from the seat of the hanger to the highest joist nail.

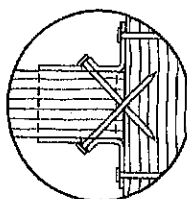


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

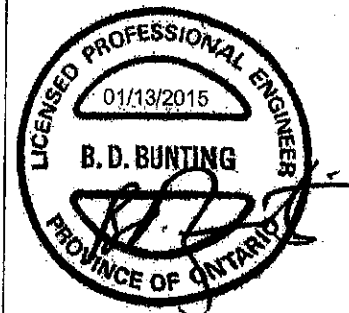
U.S. Patent
5,603,560



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



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

HHUS — Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 14 gauge

FINISH: G90 galvanized

DESIGN:

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

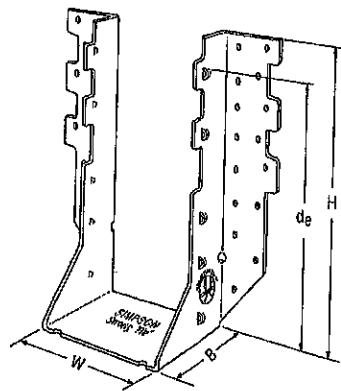
INSTALLATION:

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

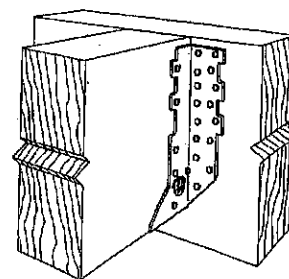
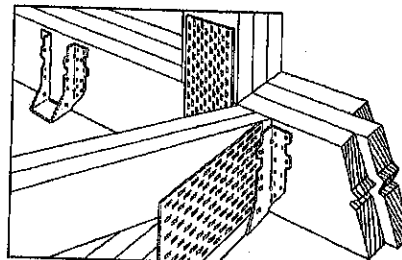
OPTIONS:

- See current catalogue for options

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



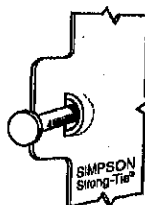
HHUS410



Typical HHUS
Installation

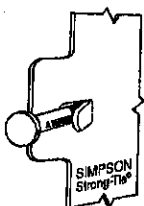
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
HHUS26-2	14	3 ⁵ / ₁₆	5 ¹ / ₁₆	3	3 ¹⁵ / ₁₆	14-16d	6-16d	2850	7335	2065	5205
HHUS28-2	14	3 ⁵ / ₁₆	7 ¹ / ₃₂	3	6 ⁵ / ₃₂	22-16d	8-16d	3765	8940	2675	6345
HHUS210-2	14	3 ⁵ / ₁₆	9 ⁵ / ₃₂	3	8	30-16d	10-16d	4745	9660	4310	7000
HHUS210-3	14	4 ¹ / ₁₆	9	3	7 ¹⁵ / ₁₆	30-16d	10-16d	4745	10545	4310	7485
HHUS210-4	14	6 ¹ / ₁₆	8 ²⁹ / ₃₂	3	7 ²⁷ / ₃₂	30-16d	10-16d	4745	10545	4310	7485
HHUS46	14	3 ⁵ / ₁₆	5 ¹ / ₃₂	3	3 ¹⁵ / ₁₆	14-16d	6-16d	2540	7335	2065	5205
HHUS48	14	3 ⁵ / ₁₆	7 ¹ / ₈	3	6 ¹ / ₈	22-16d	8-16d	3765	8945	2675	6345
HHUS410	14	3 ⁵ / ₁₆	9	3	8	30-16d	10-16d	4745	9855	4310	7000
HHUS5.50/10	14	5 ¹ / ₂	9	3	8	30-16d	10-16d	4745	10545	4310	7485
HHUS7.25/10	14	7 ¹ / ₄	9	3 ⁵ / ₁₆	7 ²⁹ / ₃₂	30-16d	10-16d	4745	10770	4310	7650

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

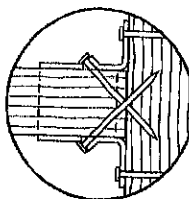


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

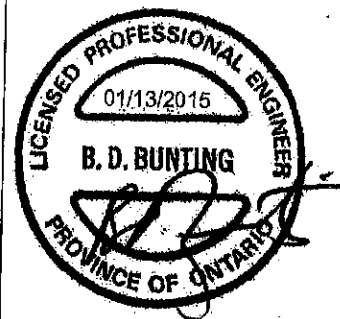
U. S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

H - Seismic and Hurricane Ties

SIMPSON
Strong-Tie

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

MATERIAL: 18 gauge **FINISH:** G90 galvanized

DESIGN: • Factored resistances are in accordance with CSA 086-14

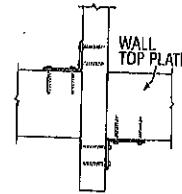
- Factored resistances have been increased 15%. No further increase is permitted.

INSTALLATION: • Use all specified fasteners

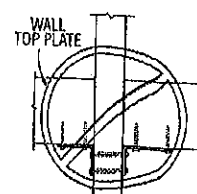
- Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½" long, 10d x 1½" = 0.146" x 1½" long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

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

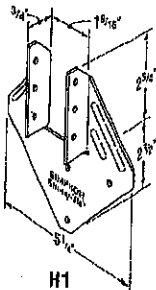
Hurricane Tie Installations to achieve Twice the Load (Top View)



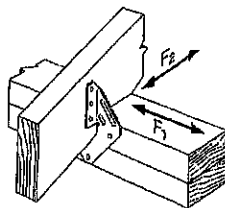
Install diagonally across from each other for minimum 2x truss.



Nailing into both sides of a single ply 2x truss may cause the wood to split.



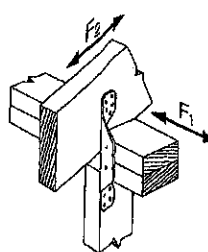
H1



H1 Installation



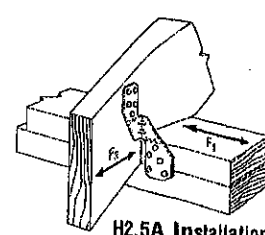
H2A



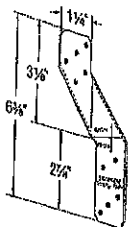
H2A Installation



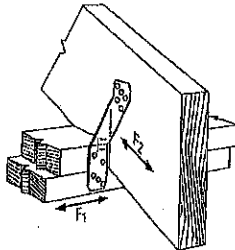
H2.5A



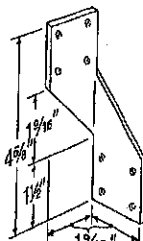
H2.5A Installation



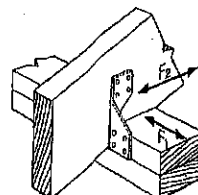
H2.5T



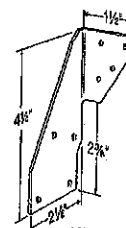
H2.5T Installation
(Nails into both top plates)



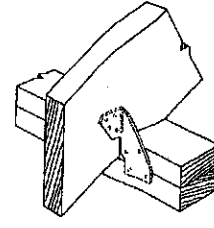
H3



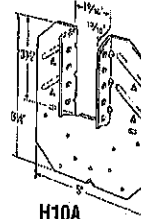
H3 Installation



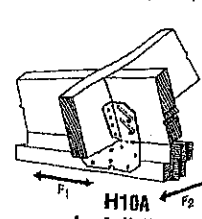
H5



H5 Installation
(Nails into both top plates)



H10A



H10A Installation

Model No.	Ga	Fasteners			Factored Resistance (lbs)					
		To Rafter	To Plates	To Studs	D.Fir-L			S-P-F		
					Uplift	Lateral		Uplift	Lateral	
						F ₁	F ₂		F ₁	F ₂
						(K _D = 1.15)			(K _D = 1.15)	
H1	18	6-8dx1½"	4-8d	—	740	685	300	680	485	215
H2A	18	5-8dx1½"	2-8dx1½"	5-8dx1½"	830	220	75	590	155	55
H2.5A	18	5-8d	5-8d	—	805	160	160	755	160	160
H2.5T	18	5-8d	5-8d	—	835	175	240	740	160	210
H3	18	4-8d	4-8d	—	740	180	265	615	125	190
H5	18	4-8d	4-8d	—	685	180	305	500	130	215
H10A	18	9-10dx1½"	9-10dx1½"	—	1735	795	410	1505	565	290

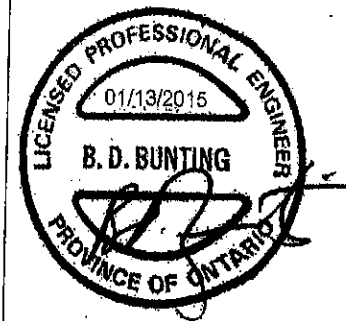
1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.

2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.

3. When cross-grain bending or cross-grain tension cannot

be avoided, mechanical reinforcement to resist such forces should be considered.

4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.



800-999-5099

www.strongtie.com

TC – Truss Connectors

SIMPSON
Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 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

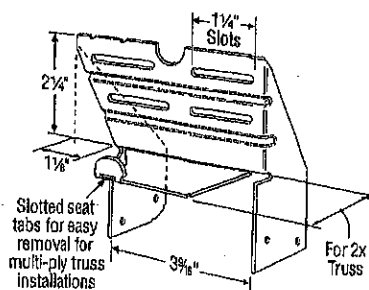
DESIGN: Factored resistances are in accordance with CSA 086-14

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.

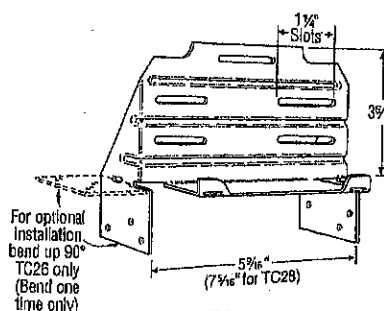
Optional TC Installation

- 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.



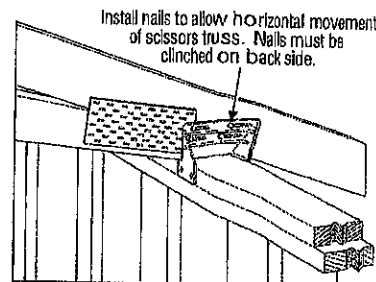
TC24

U.S. Patent 4,932,173

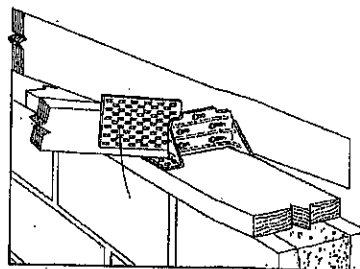


TC26

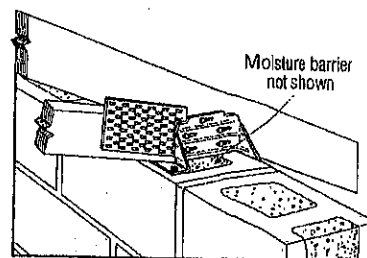
(TC28 Similar)



Typical TC24 Installation



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



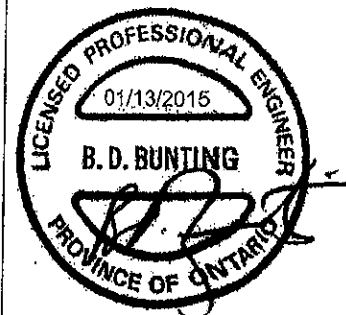
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K = 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

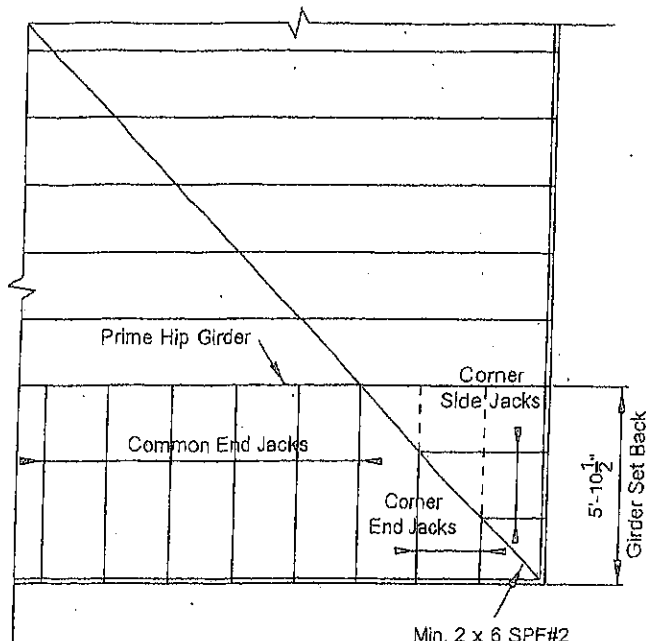
Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K = 1.15)
TC26	5-10d	6-10dx1½"	810	660
	5-10d	6-10d	930	660

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 lbs.



800-999-5099
www.strongtie.com

STRACON ENGINEERING INC.



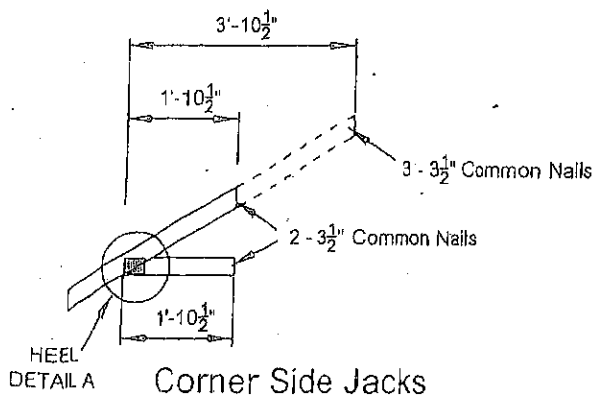
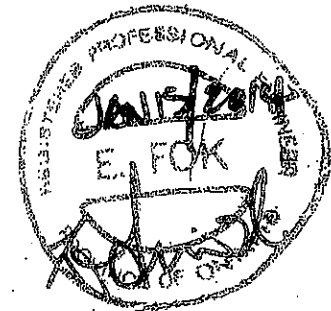
45° Hip End

LUMBER SPECIFICATION

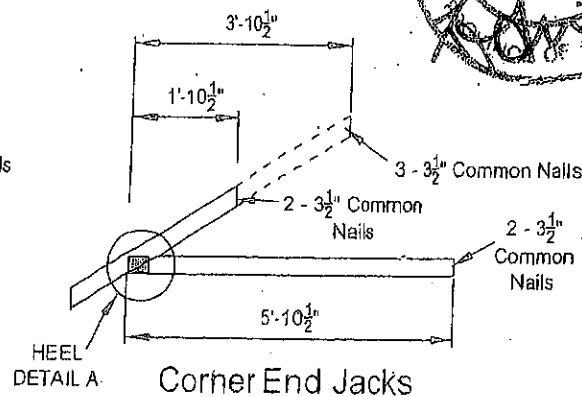
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

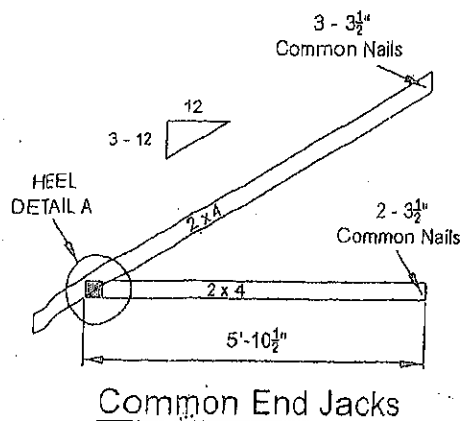
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



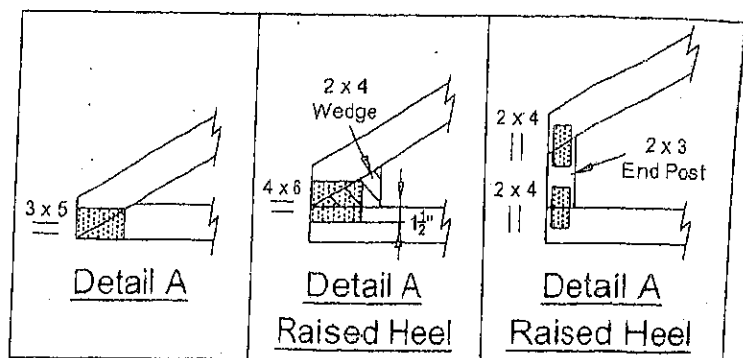
Corner Side Jacks



Corner End Jacks



Common End Jacks



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

CS-51008