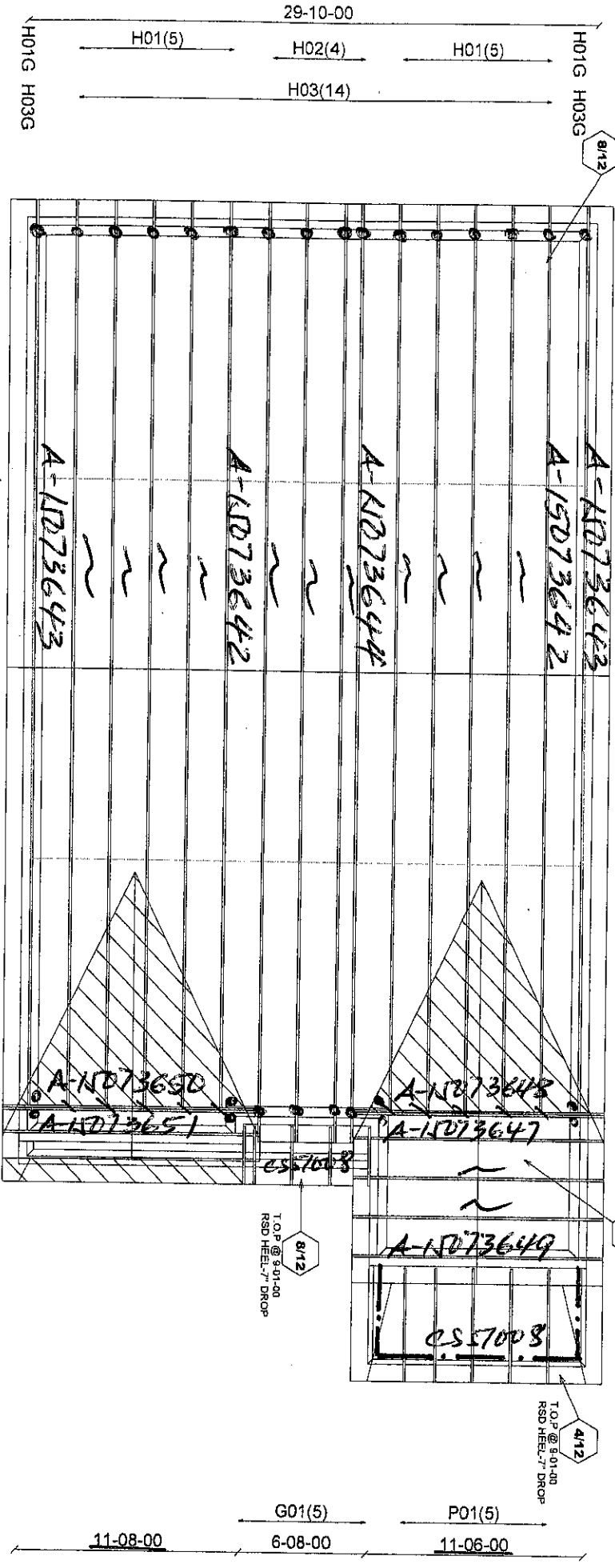


ALL CORN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
 ROOF RAFTERS THAT CROSS MEET TO BE 2x4 SPT #2 ZN/O.C.
 WITH A VERT. HAY 1/2" IN. SPACES UNDERNEATH AT EACH CROSS PT.
 VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO IT DOES NOT EXCEED 6' BETWEEN JOINTS OF BRACING
 DOES NOT EXCEED 6'



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

Piggyback (A-15073645)
 (A-15073646)



Job Track	40297	Builder / Location	GOLD PARK / KLEINBURG	Model / Elevation	38-3 / A
Layout ID	253434	Project	HUNTINGTON & NASHVILLE	THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC. AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC. IF UTILIZED FOR ANY OTHER PURPOSE.	
Plan Log	79711	Date	4/23/2015	Designer	cheyle

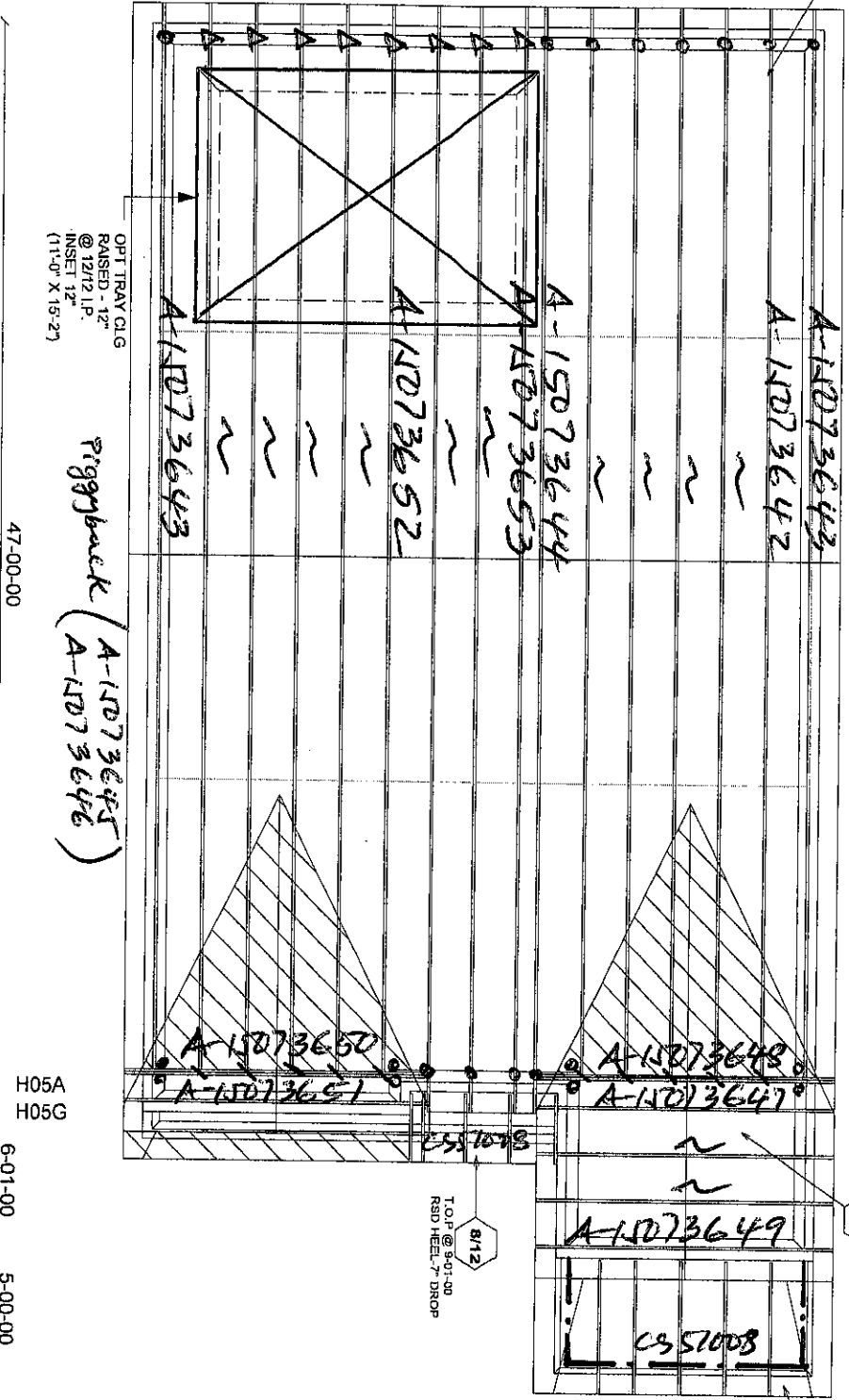
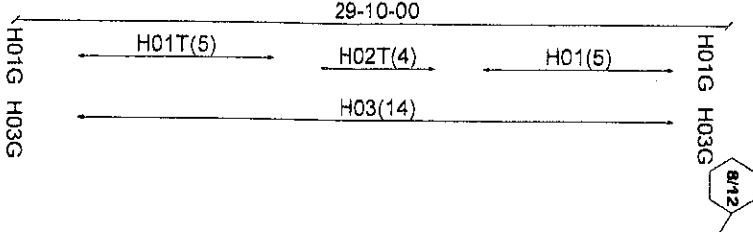
CONVENTIONAL
 FRAMING BY
 OTHERS

ALPHA ROOF TRUSSES INC.

Millk Ver. 7.5.0

ALL CON. FRAMING TO CONFORM WITH THE ROOF TRUSS MANUFACTURER'S RECOMMENDATIONS. ROOF TRUSSES TO BE 24" SP @ 24" O.C. WITH A CENTRAL POST TO THE TRUSS UNDERPINNING AS SHOWN ON P1. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. BRACING IS NOT GREATER THAN 16'-0" DOES NOT EXCEED 8'

12" FIN. CH.
RSD. HEEL - 0" DROP
(2" x 6" FASCLA) - FM
ASPHALT SHINGLES
2" x 6" BRG/BRICK
PIGGYBACK TRS
PURLINS BY OTHERS



OPT TRAY CLG
RAISED - 12"
@ 12/12 I.P.
INSET 12"
(11'-0" X 15'-2")
Piggyback (A-15073645)
(A-15073646)

HANGERS
/ LJS26DS
H25A
ATC26

CONVENTIONAL
FRAMING BY
OTHERS

Minik Ver 7.5.0



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

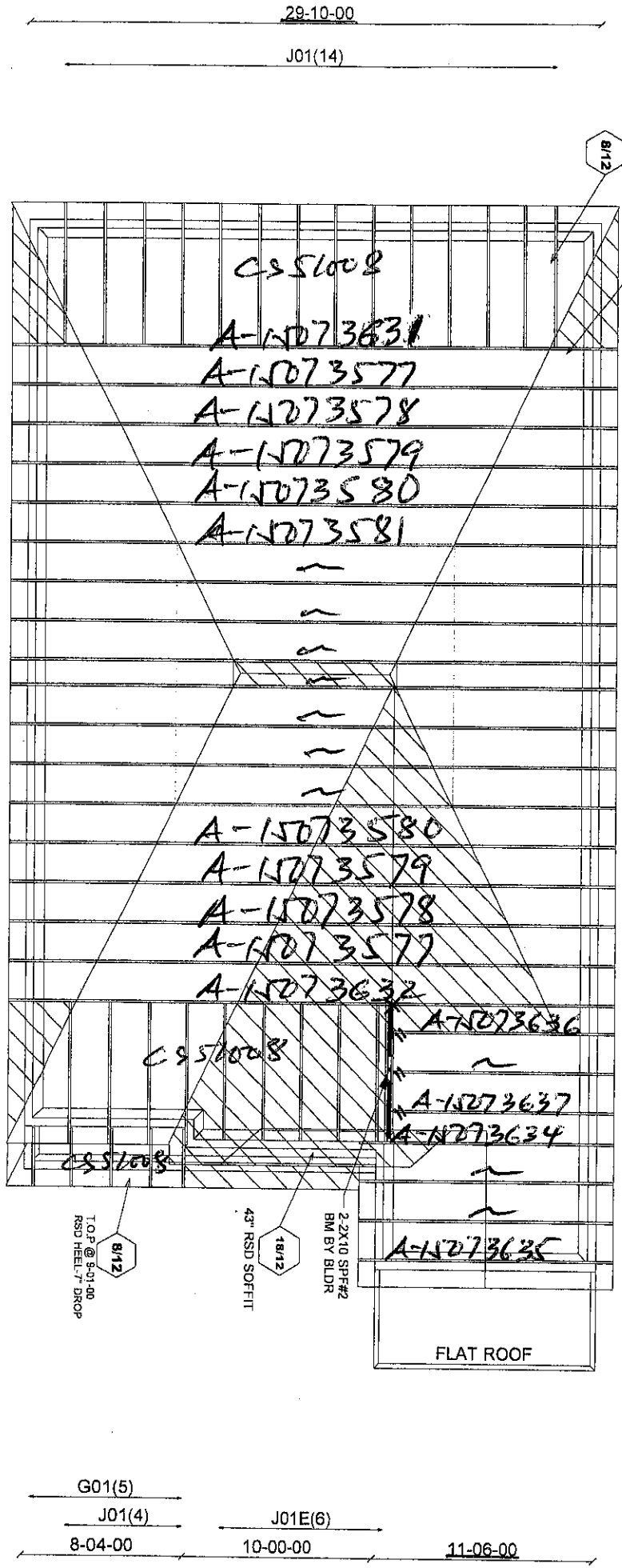
Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/23/2015
Designer: Cheryl

Model / Elevation: 38-3 / A OPT TRAY

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

ALL CONN. FRAMING TO CONFORM WITH PART 9 OF A.C.I. 302. ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SP#2 240.C. WITH A VENT POST TO THE TRUSS WITH A MIN. 1" DIA. 12' FT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO 6" BETWEEN MOMS OF BRACING DOES NOT EXCEED 6"

53-01-00
5-00-00
H01
H02
H03
H04
H05
H06(8)
H07
H08
H08
H07
H05
H04
H03
H02
H01
H11
H11
H11SG
H10(3)
H10G



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

Piggyback
(A-15073582
A-15073633)

47-00-00

6-01-00 5-00-00

HANGERS
// LUS24
X HHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS

Mitek Ver. 7.5.0



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

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

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.



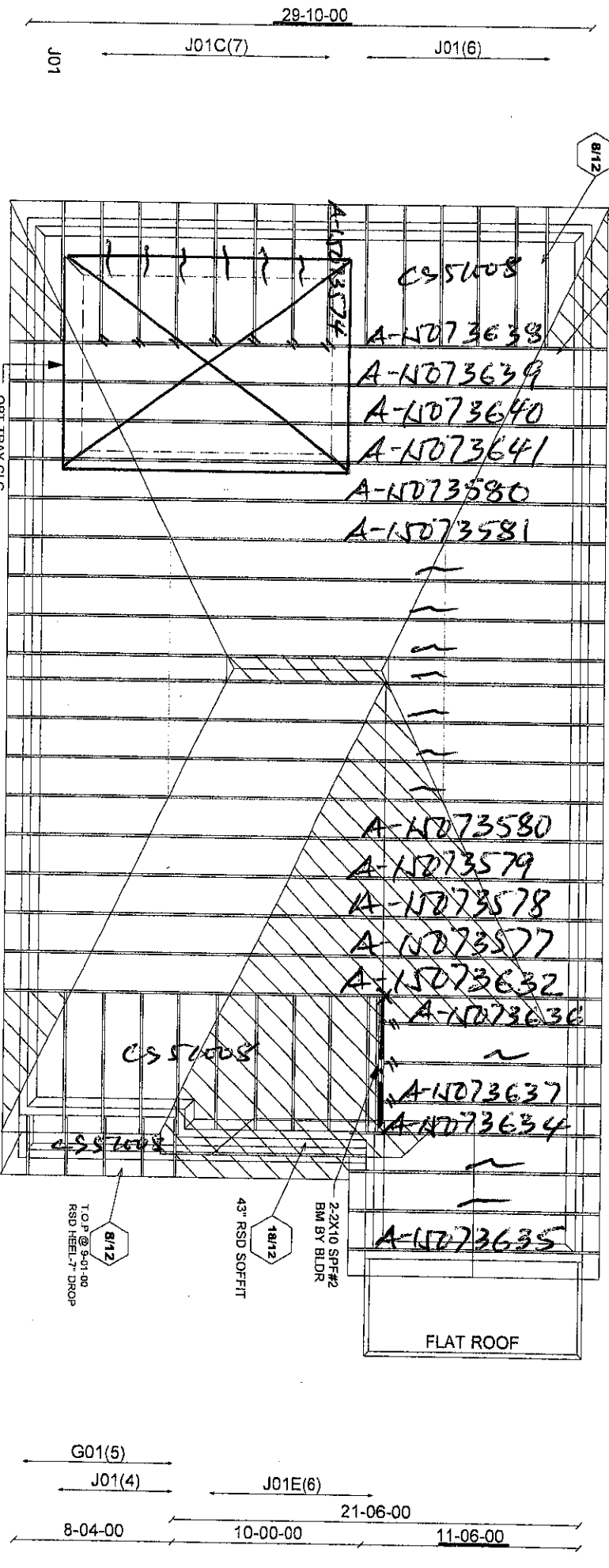
Job Track: 40297
Layout ID: 253437
Plan Log: 79711

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

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.

CONVENTIONAL FRAMING BY OTHERS
Milek Ver 7.5.0

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



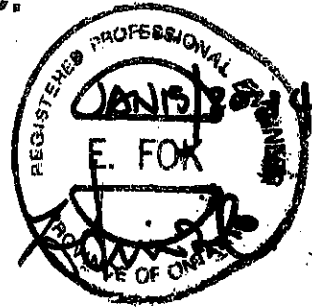
ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF PARTS THAT CROSS MEET SHALL BE REINFORCED WITH 2" X 6" POSTS TO THE TRUSS VERT. POST LONGER THAN 6". HAVE LATERAL BRACING SO THAT TRUSSES REMAIN STABLE & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'.

H01T H02T H03T H04T H05
H07 H08 H08 H07
H06(8)
H05 H04 H03 H02 H01 H11 H11SG
H10(3) H10G
53-01-00 5-00-00

ALPA-PAVING

Stracon Engineering Inc.

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



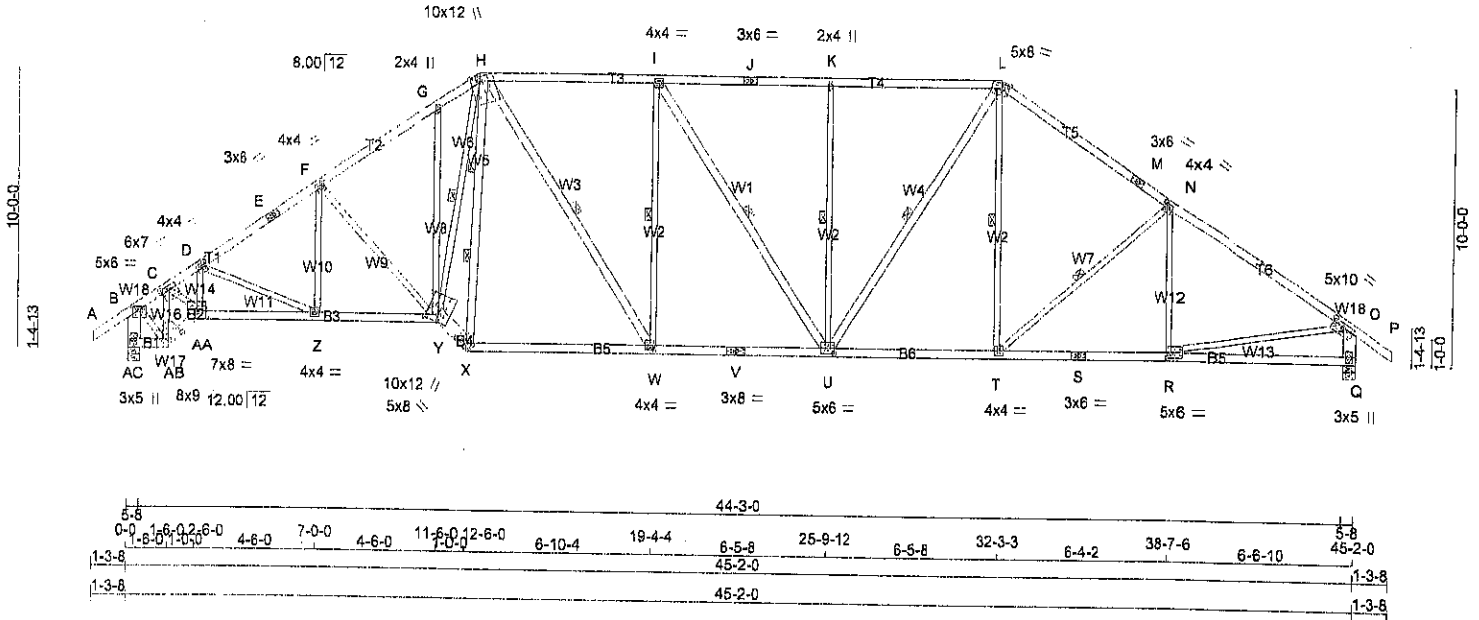
RESPONSIBILITIES

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



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
H - J	2x4	DRY	1650F 1.5E
J - L	2x4	DRY	1650F 1.5E
L - M	2x4	DRY	1650F 1.5E
M - P	2x4	DRY	1650F 1.5E
AC - B	2x6	DRY	No.2
Q - O	2x6	DRY	No.2
AC - AB	2x4	DRY	No.2
AB - AA	2x4	DRY	No.2
AA - Y	2x4	DRY	No.2
Y - X	2x6	DRY	No.2
X - V	2x4	DRY	No.2
V - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
X - H	2x4	DRY	No.2
H - W	2x4	DRY	No.2
I - U	2x4	DRY	No.2
U - L	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.25	3.25
C	TMVW-I	MT20	6.0	7.0	1.75	3.50
D, F, N						
D	TMVW-I	MT20	4.0	4.0	2.00	1.50
E, J, M						
E	TS-4	MT20	3.0	6.0		
G	TMVW-w	MT20	2.0	4.0		
H	TTVWW+m	MT20	10.0	12.0	Edge	4.00
I	TMVW-I	MT20	4.0	4.0		
K	TMVW-w	MT20	2.0	4.0		
L	TTVWW-m	MT20	5.0	8.0	2.00	3.25
O	TMVW-I	MT20	5.0	10.0	1.75	5.00
Q	BMV1-p	MT20	3.0	5.0		
R	BMVW-I	MT20	5.0	6.0	2.25	1.75

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	DOWN	UP	IN-SX
AC	2976	0	2976	-300
Q	2672	0	2672	-397

PROVIDE ANCHORAGE AT BEARING JOINT AC FOR 402 LBS FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 397 LBS FACTORED UPLIFT

PROVIDE FOR 300 LBS FACTORED HORIZONTAL REACTION AT JOINT AC

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
AC	2409	1282 / 0	474 / 0	0 / 0	217 / -707	653 / 0
Q	2406	1279 / 0	474 / 0	0 / 0	215 / -703	652 / 0

HORIZONTAL REACTIONS

AC	Q
0 / 0	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.98FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.

2 LATERAL BRACE(S) REQUIRED AT 1/3 LENGTH OF H-X.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF H-W, I-W, I-U, K-U, L-U, L-T, N-T, H-Y.
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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	0 / 38	-92.7	-92.7 0.13 (2)	AB-C	-3066 / 488	10.00	0.47 (1)
B-C	-2383 / 336	-92.7	-92.7 0.22 (1)	C-AA	-452 / 2865	4.24	0.64 (1)
C-D	-4608 / 695	-92.7	-92.7 0.38 (1)	AA-D	-108 / 136	2.98	0.03 (11)
D-E	-4320 / 585	-92.7	-92.7 0.62 (1)	D-Z	-380 / 224	2.96	0.13 (2)
E-F	-4320 / 585	-92.7	-92.7 0.62 (1)	Z-F	0 / 289	2.96	0.07 (17)
F-G	-3904 / 564	-92.7	-92.7 0.62 (1)	F-Y	-597 / 238	3.16	0.46 (2)
G-H	-3863 / 679	-92.7	-92.7 0.21 (1)	Y-G	-281 / 188	3.45	0.34 (7)
H-I	-3371 / 491	-105.2	-105.2 0.72 (2)	G-X	-2535 / 232	3.65	0.58 (1)
I-J	-3367 / 486	-105.2	-105.2 0.72 (1)	X-H	-125 / 1091	3.65	0.18 (1)
J-K	-3367 / 486	-105.2	-105.2 0.72 (1)	H-W	-765 / 198	3.65	0.61 (8)
K-L	-3367 / 486	-105.2	-105.2 0.71 (1)	W-I	-804 / 588	3.68	0.46 (2)
L-M	-3355 / 491	-92.7	-92.7 0.88 (1)	I-U	-801 / 196	3.58	0.54 (3)
M-N	-3355 / 491	-92.7	-92.7 0.88 (1)	U-K	-141 / 1098	3.44	0.18 (1)
N-O	-3625 / 464	-92.7	-92.7 0.96 (1)	T-L	-111 / 499	3.44	0.11 (6)
O-P	0 / 38	-92.7	-92.7 0.11 (3)	L-N	-490 / 291	10.00	0.24 (3)
AC-B	-2955 / 415	0.0	0.0 0.20 (1)	R-N	-350 / 137	6.12	0.17 (8)
Q-O	-2895 / 429	0.0	0.0 0.19 (1)	B-N	-230 / 2339	6.17	0.53 (1)
AC-AB	-286 / 294	-28.0	-28.0 0.05 (11)	R-O	-281 / 3089	6.17	0.70 (1)
AB-AA	-454 / 2483	-28.0	-28.0 0.40 (1)	Y-H	-543 / 3485	6.17	0.78 (1)
AA-Z	-650 / 3901	-28.0	-28.0 0.70 (1)				
Z-Y	-452 / 3609	-28.0	-28.0 0.65 (1)				
Y-X	-275 / 3764	-28.0	-28.0 0.45 (1)				
X-W	-204 / 2766	-28.0	-28.0 0.64 (4)				
W-V	-197 / 3371	-28.0	-28.0 0.71 (4)				
V-U	-197 / 3371	-28.0	-28.0 0.71 (4)				
U-T	-44 / 2760	-28.0	-28.0 0.57 (1)				

TOTAL WEIGHT = 4 X 238 = 951 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 26.7	PSF
	DL	= 6.0	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, NBC 2010

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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 (1.51")
CALCULATED VERT. DEFL.(LL) = L/999 (0.28")
ALLOWABLE DEFL.(TL) = L/180 (3.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.44")

CSI: TC=0.96 (N-O:1), BC=0.71 (U-W:4),
WB=0.78 (H-Y:1), SS=0.36 (H: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	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1887
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-15073653 CONTINUED ON PAGE 2



Alpa Roof Truss, Maple

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	BMWW-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	BBWW+m	MT20	10.0	12.0	3.25	5.00
Z	BMWW-I	MT20	4.0	4.0		
AA	BSWW-I	MT20	7.0	8.0	3.00	4.00
AB	BSWW-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.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. FACTORED MEMB. FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED 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		

JSI GRIP= 0.90 (AA) (INPUT = 0.90)
JSI METAL= 0.93 (V) (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-15073653(2)

A-10073652 CONTINUED ON PAGE 2

Alps Roof Truss, Maple

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
R	BMWW-t	MT20	4.0	4.0		
S	BMWWW-t	MT20	5.0	6.0	2.00	3.00
T	BS-t	MT20	3.0	8.0		
U	BMWW-t	MT20	4.0	4.0	1.75	1.75
V	BMWW-h	MT20	5.0	8.0	1.25	4.50
W	BBWWW+m	MT20	10.0	12.0	3.25	5.00
X	BMWW-t	MT20	4.0	4.0		
Y	BBWW-t	MT20	7.0	8.0	3.00	4.00
Z	BBWW-h	MT20	10.0	12.0	Edge	2.50
AA	BMV-t	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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
R-O	-246 / 2861	-28.0	-28.0	0.60 (4)	8.25		
Q-P	-246 / 2861	-28.0	-28.0	0.60 (4)	8.25		
P-O	-9 / 18	-28.0	-28.0	0.28 (17)	10.00		

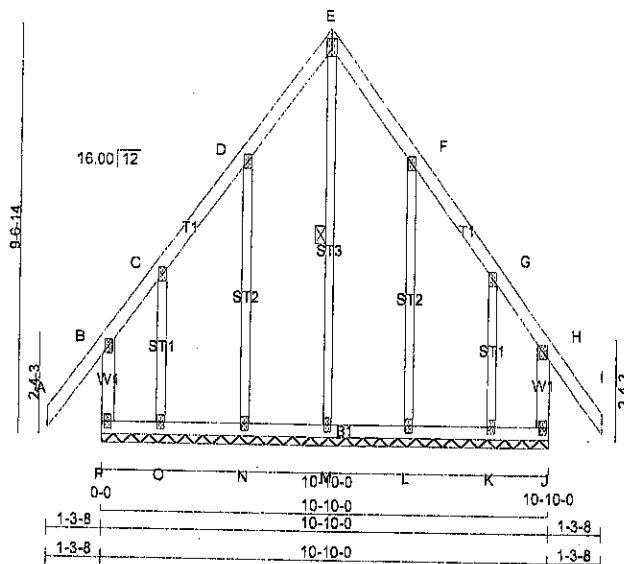
JSI GRIP= 0.90 (C) (INPUT = 0.90)
 JSI METAL= 0.92 (T) (INPUT = 1.00)

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-1073652(2)



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" 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. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
P-B	-181 / 0	0.0	0.0 0.03 (1)	M-E	-181 / 0		0.10 (1)
A-B	0 / 40	-70.5	-70.5 0.10 (1)	N-D	-154 / 0		0.12 (1)
B-C	-8 / 0	-70.5	-70.5 0.06 (1)	O-C	-75 / 0		0.02 (1)
C-D	0 / 27	-70.5	-70.5 0.04 (1)	L-F	-154 / 0		0.12 (1)
D-E	0 / 21	-70.5	-70.5 0.04 (1)	K-G	-75 / 0		0.02 (1)
E-F	0 / 21	-70.5	-70.5 0.04 (1)				
F-G	0 / 27	-70.5	-70.5 0.04 (1)				
G-H	-8 / 0	-70.5	-70.5 0.06 (1)				
H-I	0 / 40	-70.5	-70.5 0.10 (1)				
J-H	-181 / 0	0.0	0.0 0.03 (1)				
P-O	-9 / 0	-17.5	-17.5 0.01 (4)				
O-N	-12 / 0	-17.5	-17.5 0.01 (4)				
N-M	-14 / 0	-17.5	-17.5 0.01 (4)				
M-L	-14 / 0	-17.5	-17.5 0.01 (4)				
L-K	-12 / 0	-17.5	-17.5 0.01 (4)				
K-J	-9 / 0	-17.5	-17.5 0.01 (4)				

TOTAL WEIGHT = 66 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

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 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

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

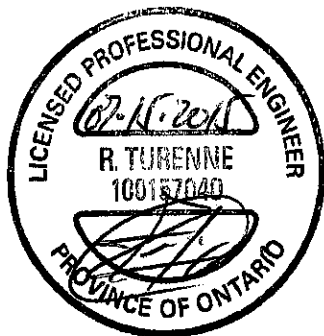
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 354 1667 822 2284 1656

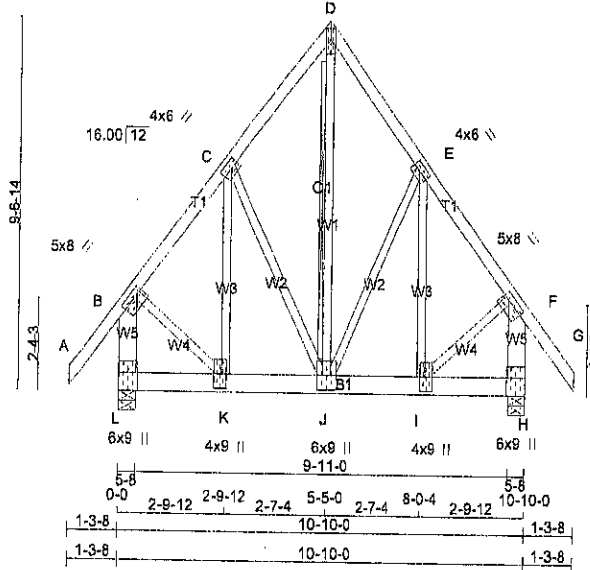
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073651



CHORDS	SIZE	LUMBER	DESCR.
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 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS: (0.122"x3") SPIRAL NAILS		
A - 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 (848.3)
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)	W	LEN	Y	X
JT TYPE PLATES				
B TMVW-4 MT20	5.0	8.0	1.75	2.00
C TMVW-4 MT20	4.0	6.0	2.00	2.50

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	GROSS REACTION	DOWN	HORZ	BRG	BRG	IN-SX	IN-SX
L	7770	0	7798	-341	-983	5-8	5-8	5-8	5-8
H	7770	0	7798	0	-983	5-8	5-8	5-8	5-8

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 BLDG. DESIGNER

PROVIDE FOR 341 LBS FACTORED HORIZONTAL REACTION AT JOINT L

UNFACTORED REACTIONS		1ST CASE		MAX MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
L	6322	3469 / 0	1329 / 0	0 / 0	1731 / -1888
H	6322	3469 / 0	1329 / 0	0 / 0	1731 / -1888

HORIZONTAL REACTIONS
 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 = 4.24 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		WEBS	
MEMB.	FACTORED FORCE (LBS)	MEMB.	FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 52	J-D	-1036 / 6028
B-C	-4928 / 700	J-E	-1476 / 442
C-D	-3934 / 701	I-E	-275 / 1933
D-E	-3934 / 701	C-J	-1475 / 441
E-F	-4928 / 700	K-C	-274 / 1933
F-G	0 / 52	B-K	-455 / 3562
L-B	-8174 / 805	I-F	-454 / 3562
H-F	-8174 / 805		
L-K	-316 / 329		
K-J	-501 / 2995		
J-I	-390 / 2963		
I-H	-12 / 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) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM OPEN TERRAIN. AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

TOTAL WEIGHT = 2 X 83 = 166 lb

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 26.7 PSF
 DL = 6.0 PSF
 BOT CH. LL = 10.5 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 49.2 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSD Girder
 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.
 - 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, 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")

CSI: TC=0.27 (F-H:1), BC=0.42 (I-J:1), WB=0.74 (D-J:1), SSI=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 1658

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg

CONTINUED ON PAGE 2



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

Alpa Roof Truss, Maple

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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	TMWW-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	BMWWWW+I	MT20	6.0	9.0		
K	BMWW+I	MT20	4.0	8.0	4.50	1.50
L	BMV1+I	MT20	6.0	9.0	5.50	

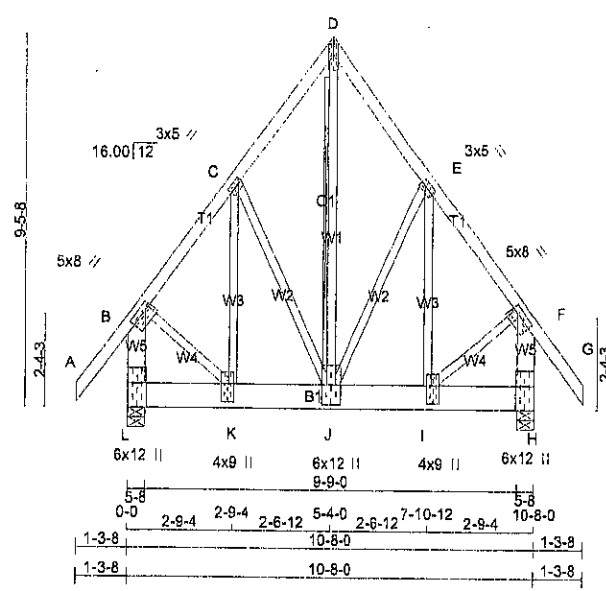
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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= 0.56 (D) (INPUT = 1.00)



A-11073650(2)



LUMBER

N.L.G.A. RULES	SIZE	DRY	LUMBER	DESCR.
CHORDS				
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	2x8	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - 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(648.3)
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 TMWW-H	MT20	5.0	8.0	1.75	2.00
C TMWW-H	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				
L	7653	0	-968	5-8
H	7653	0	-968	5-8

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

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	6226	3407 / 0	1309 / 0	0 / 0	1704 / -1862	1510 / 0	0 / 0
H	6226	3407 / 0	1309 / 0	0 / 0	1704 / -1862	1510 / 0	0 / 0

HORIZONTAL REACTIONS

L	---	0 / 0	0 / 0	0 / 0	239 / -239	0 / 0	0 / 0
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BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, H

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 4.32FT.
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				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 / 52	-92.7 -92.7	0.07 (1)	J-D	-1016 / 5939	0.73 (1)	
B-C	-4749 / 675	-92.7 -92.7	0.17 (1)	J-E	-1294 / 410	0.40 (3)	
C-D	-3876 / 688	-92.7 -92.7	0.12 (1)	I-E	-237 / 1675	0.21 (2)	
D-E	-3876 / 688	-92.7 -92.7	0.12 (1)	C-J	-1293 / 410	0.40 (2)	
E-F	-4749 / 674	-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 / 2867	-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, CpCp, 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 87 = 174 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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 44-9-0
END DISTANCE = 10-8-0
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 (0.71")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

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 = 0.60

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 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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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-t	MT20	3.0	5.0	1.50	1.25
F	TMVV-t	MT20	5.0	8.0	1.75	2.00
H	BMV1-t	MT20	6.0	12.0	Edge	0.50
I	BMWW-t	MT20	4.0	9.0	5.50	1.50
J	BMWWWW-t	MT20	6.0	12.0		
K	BMWW-t	MT20	4.0	9.0	5.50	1.50
L	BMV1-t	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= 0.69 (K) (INPUT = 0.90)
JSI METAL= 0.55 (D) (INPUT = 1.00)



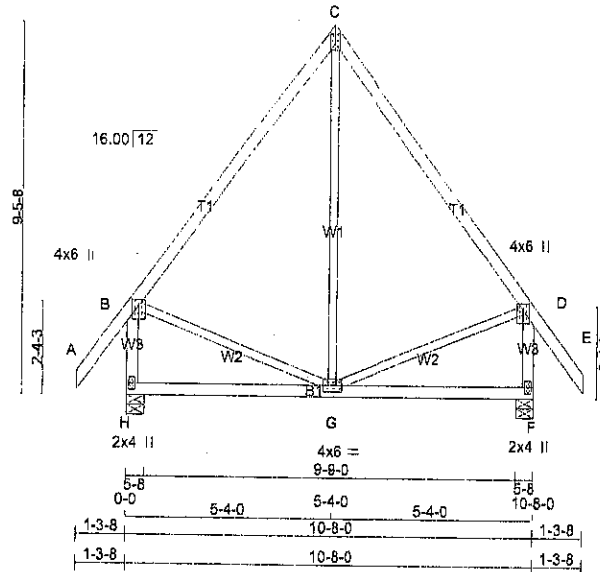
A-15073648(2)

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

Alpa Roof Truss, Maple

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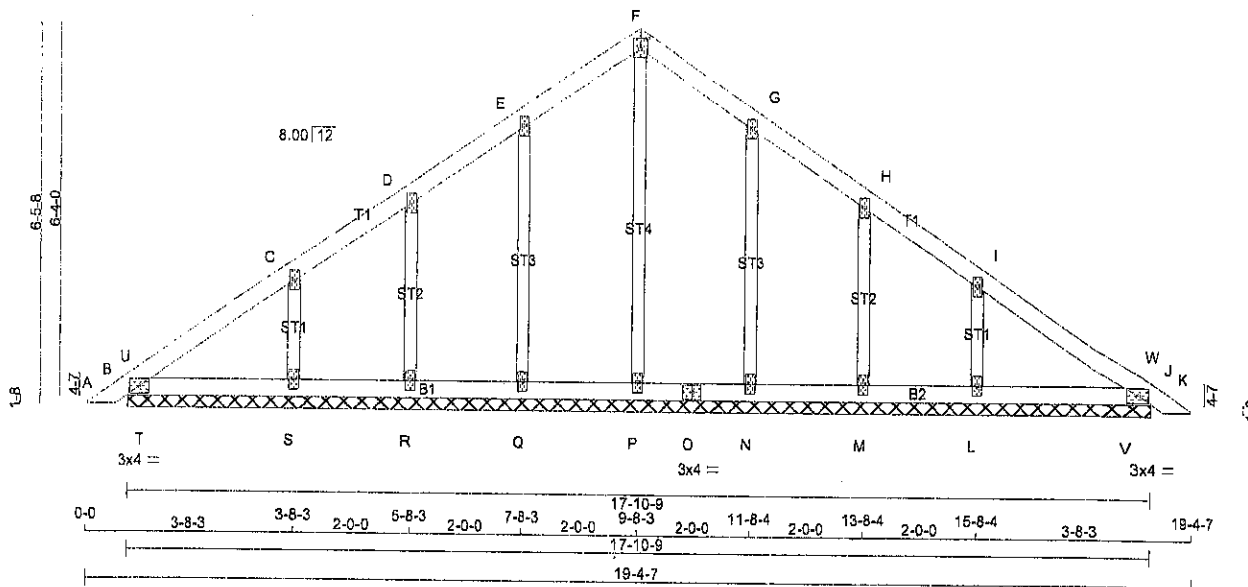
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3x5 II
Scale = 1:59.0



Alpa Roof Truss, Maple

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3x4 II
Scale = 1:39.6



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
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-I	MT20	3.0	4.0		
C, D, E, G, H, I					
C TMW+w	MT20	2.0	4.0		
F TTW+p	MT20	3.0	4.0	2.25	1.50
J TMB1-I	MT20	3.0	4.0		
L, M, N, P, Q, R, S					
L BMW1+w	MT20	2.0	4.0		
O BS-I	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)

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

TOTAL WEIGHT = 2 X 67 = 133 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

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=0.06 (C-U:1), BC=0.05 (S-T:1), WB=0.06 (E-Q:1), SSI=0.08 (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.

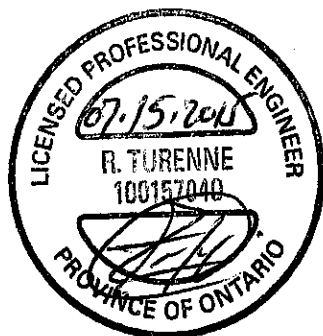
NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2264 1656

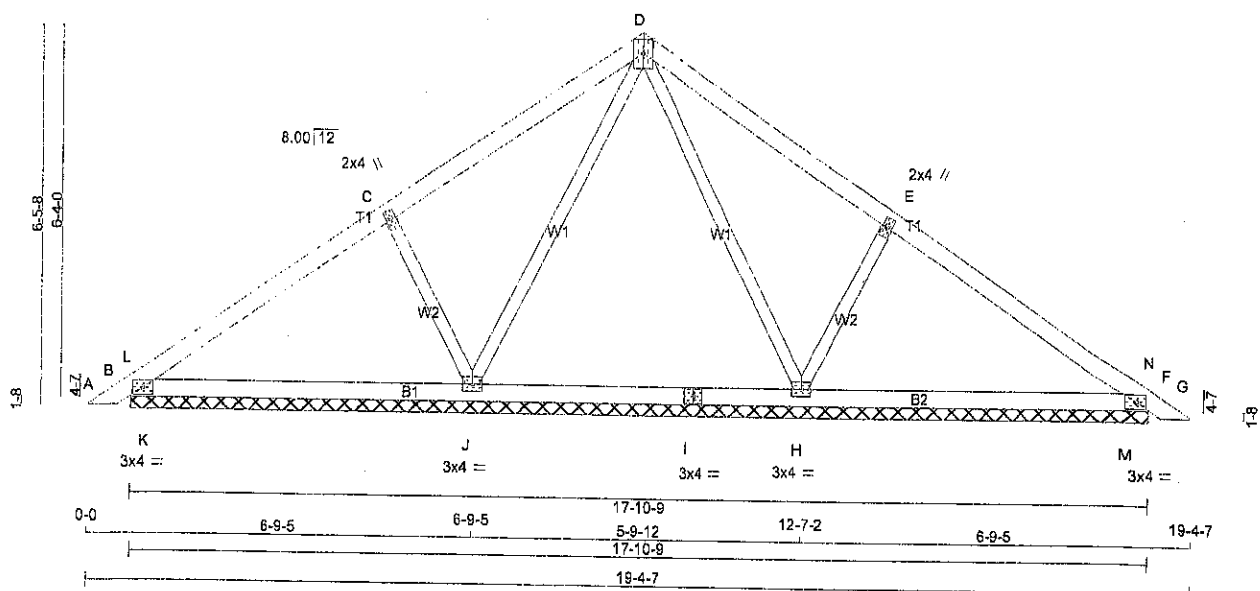
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.54 (F) (INPUT = 0.50)
JSI METAL = 0.05 (I) (INPUT = 1.00)



A-15073646



LUMBER

N. L. G. A. RULES

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	
C	TTWW+w	MT20	2.0	4.0	
D	TTWW+p	MT20	4.0	6.0	Edge
E	TTWW+w	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.

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	300	0	300	0	17-10-9 (9-1140)	17-10-9 (9-1140)
H	532	0	532	0	17-10-9 (9-1140)	17-10-9 (9-1140)
J	532	0	532	0	17-10-9 (9-1140)	17-10-9 (9-1140)
F	300	0	300	0	17-10-9 (9-1140)	17-10-9 (9-1140)

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS							
	1ST CASE	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	282 / 0	0 / 0	0 / 0	0 / 0	123 / 0	0 / 0
J	375	282 / 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 11	-70.5 -70.5	0.02 (1)	10.00	D-H	-140 / 0	0.12 (1)
B-L	-193 / 0	-70.5 -70.5	0.06 (4)	6.25	H-E	-322 / 0	0.07 (1)
L-C	-137 / 0	-70.5 -70.5	0.23 (1)	6.25	J-D	-140 / 0	0.12 (1)
C-D	-12 / 0	-70.5 -70.5	0.23 (1)	6.25	C-J	-322 / 0	0.07 (1)
D-E	-12 / 0	-70.5 -70.5	0.23 (1)	6.25	K-L	-64 / 100	0.00 (1)
E-N	-137 / 0	-70.5 -70.5	0.23 (1)	6.25	M-N	-64 / 100	0.00 (1)
N-F	-193 / 0	-70.5 -70.5	0.06 (4)	6.25			
F-G	0 / 11	-70.5 -70.5	0.02 (1)	10.00			
B-K	0 / 134	-17.5 -17.5	0.06 (1)	10.00			
K-J	0 / 134	-17.5 -17.5	0.14 (4)	10.00			
J-I	0 / 50	-17.5 -17.5	0.13 (4)	10.00			
I-H	0 / 50	-17.5 -17.5	0.13 (4)	10.00			
H-M	0 / 134	-17.5 -17.5	0.14 (4)	10.00			
M-F	0 / 134	-17.5 -17.5	0.06 (1)	10.00			

TOTAL WEIGHT = 14 X 62 = 874 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

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 616 354 1667 822 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

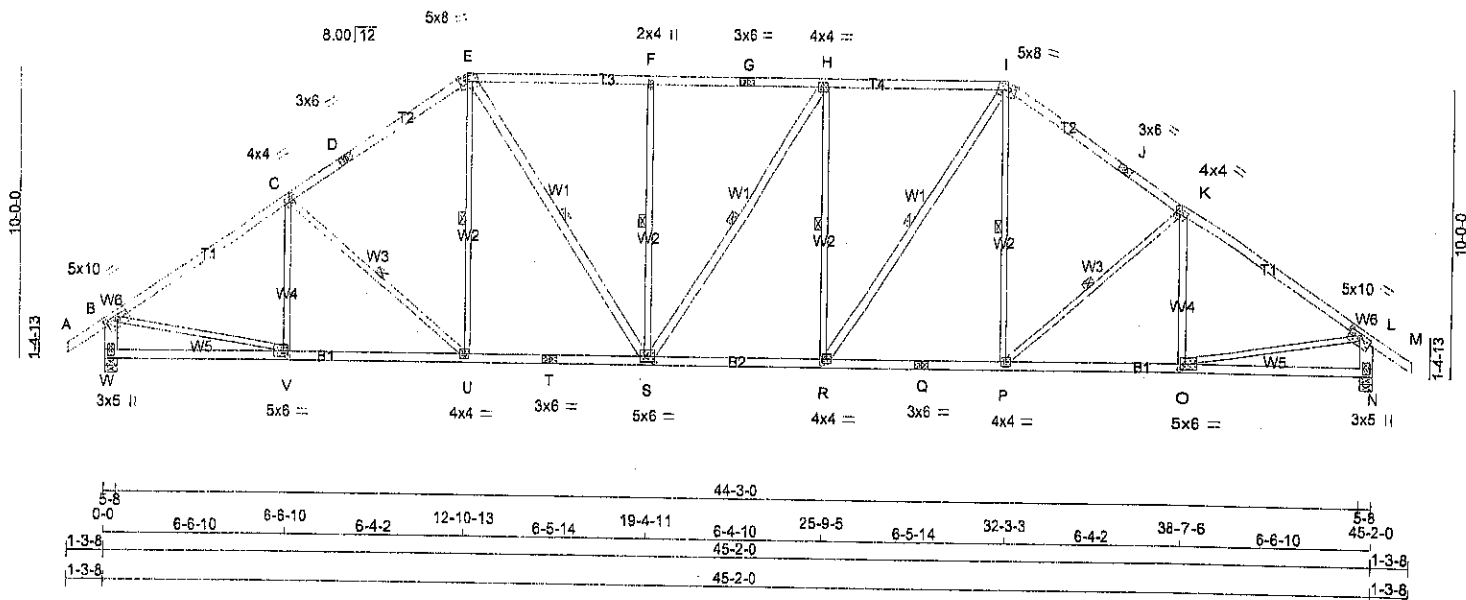
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (H) (INPUT = 0.80)
JSI METAL= 0.06 (F) (INPUT = 1.00)



A-1073645

Alpa Roof Truss, Maple



LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE
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 EXCEPT	2x3	DRY	No.2	SPF	
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 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, G, J					
E TS-t	MT20	3.0	6.0		
F TTWW-m	MT20	5.0	8.0	2.00	3.25
H TMW-w	MT20	2.0	4.0		
I TMVW-t	MT20	4.0	4.0		
J TTWW-m	MT20	5.0	8.0	2.00	3.25
K TMVW-t	MT20	4.0	4.0	2.00	1.50
L TMVW-t	MT20	5.0	10.0	1.75	5.00
N BMV1+p	MT20	3.0	5.0		
O BMVW-t	MT20	5.0	6.0	2.25	1.75
P BMVW-t	MT20	4.0	4.0		
Q BS-t	MT20	3.0	6.0		
R BMVW-t	MT20	4.0	4.0	1.75	1.75
S BMVW-t	MT20	5.0	6.0	2.25	3.00
T BS-t	MT20	3.0	6.0		
U BMVW-t	MT20	4.0	4.0		
V BMVW-t	MT20	5.0	6.0	2.25	1.75

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQ'D BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	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

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2407	1280 / 0	474 / 0	0 / 0	217 / -706	653 / 0	0 / 0
N	2407	1280 / 0	474 / 0	0 / 0	215 / -703	653 / 0	0 / 0

HORIZONTAL REACTIONS

W	0 / 0	0 / 0	0 / 0	215 / -215	0 / 0	0 / 0
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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: (16)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MAX CS1 (LC)	MEMB.	FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM TO		LENGTH FR-TO	FR-TO		
A-B	0 / 38	-92.7	-92.7	0.11 (2)	10.00	V-C	-350 / 138
B-C	-3628 / 470	-92.7	-92.7	0.97 (1)	3.44	C-U	-487 / 290
C-D	-3358 / 498	-92.7	-92.7	0.88 (1)	3.58	U-E	-111 / 496
D-E	-3358 / 498	-92.7	-92.7	0.88 (1)	3.58	E-S	-136 / 1098
E-F	-3373 / 495	-105.2	-105.2	0.72 (2)	3.67	S-F	-825 / 201
F-G	-3373 / 495	-105.2	-105.2	0.71 (1)	3.65	S-H	-600 / 596
G-H	-3373 / 495	-105.2	-105.2	0.71 (1)	3.65	H-R	-765 / 199
H-I	-3375 / 487	-105.2	-105.2	0.72 (1)	3.65	R-I	-142 / 1101
I-J	-3358 / 492	-92.7	-92.7	0.88 (1)	3.58	P-I	-111 / 496
J-K	-3358 / 492	-92.7	-92.7	0.88 (1)	3.58	P-K	-491 / 291
K-L	-3628 / 484	-92.7	-92.7	0.87 (1)	3.44	C-K	-350 / 137
L-M	0 / 38	-92.7	-92.7	0.11 (3)	10.00	B-V	-266 / 3092
W-B	-2897 / 433	0.0	0.0	0.19 (1)	6.16	O-L	-261 / 3092
N-L	-2897 / 429	0.0	0.0	0.19 (1)	6.16		
W-V	-286 / 284	-28.0	-28.0	0.30 (17)	6.25		
V-U	-420 / 3051	-28.0	-28.0	0.64 (4)	6.25		
U-T	-199 / 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	0.87 (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.(6)

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 = 48.2 PSF

SPACING = 24.0 IN./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/360 (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")

CS1: 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 SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1867 522 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-15073644

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H02	4	1	TRUSS DESC.	
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ID:1QNszwvSM1ls7Hy6zUWvPuozNqBL-ubBRxl7EgtZpkNZm2BEtn5WnguwowyKfIS6bgxstE					

PLATES (table is in inches)

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

NOTES- (1)

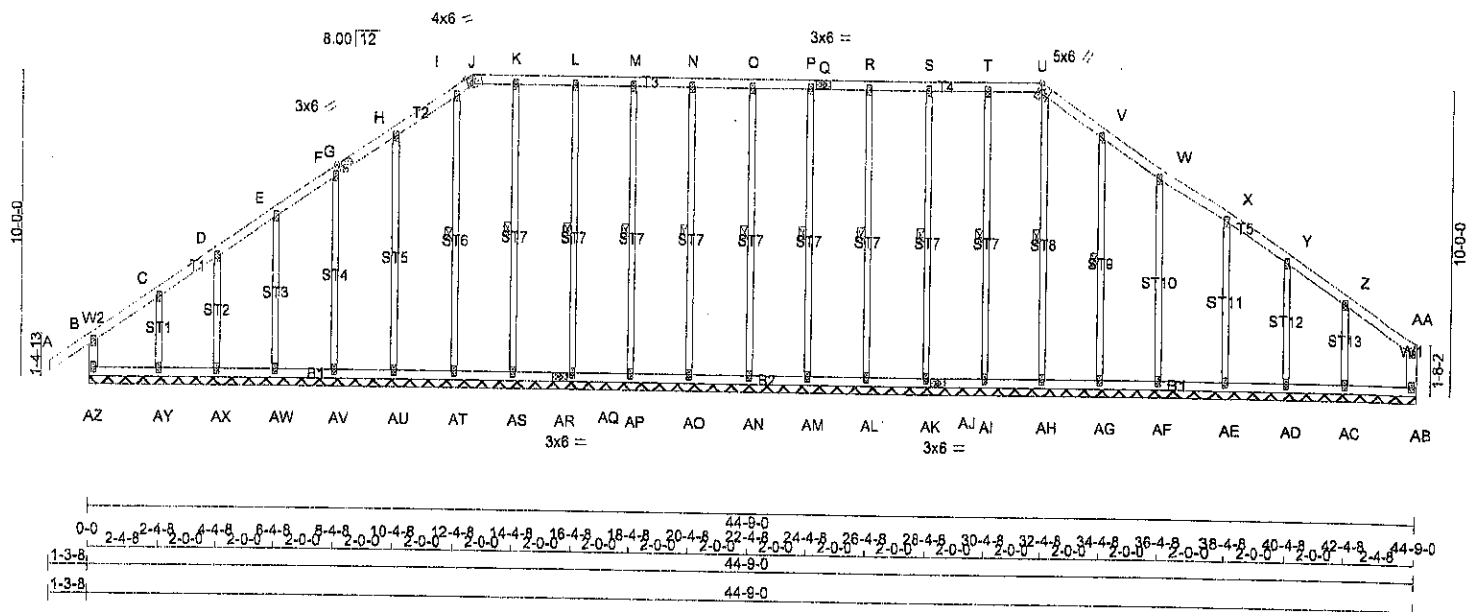
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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-H073644(2)



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - G	2x4	DRY	No.2	SPF
G - J	2x4	DRY	No.2	SPF
J - Q	2x4	DRY	No.2	SPF
Q - U	2x4	DRY	No.2	SPF
U - AA	2x4	DRY	No.2	SPF
AZ - B	2x4	DRY	No.2	SPF
AB - AA	2x4	DRY	No.2	SPF
AZ - AR	2x4	DRY	No.2	SPF
AR - AJ	2x4	DRY	No.2	SPF
AJ - AB	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT	2-0-0	OC.		

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
C, D, E, F, H, I, K, L, M, N, O, P, R, S, T, V, W, X, Y, Z					
C TMW+w	MT20	2.0	4.0		
G TS-t	MT20	3.0	6.0	Edge	1.75
J TT-m	MT20	4.0	6.0	Edge	2.00
Q TS-t	MT20	3.0	6.0		
U TTW+h	MT20	5.0	6.0	3.00	Edge
AA TMV+p	MT20	2.0	4.0		
AB BMV1+p	MT20	2.0	4.0		
AC, AD, AE, AF, AG, AH, AI, AK, AL, AM, AN, AO, AP, AQ, AS, AT, AU, AV, AW, AX, AY					
AC BMW1+w	MT20	2.0	4.0		
AJ BS-t	MT20	3.0	6.0		
AR BS-t	MT20	3.0	6.0		
AZ 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
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.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF O-AN, N-AO, M-AP, L-AQ, K-AS, I-AT, P-AM, R-AL, S-AK, T-AI, U-AH, V-AG.
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 (PLF)	MAX CS (LC)	MEMB.	FORCE (LBS)	MAX CS (LC)	MAX CS (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 27	-70.5 -70.5	0.09 (1)	10.00	AN-O	-156 / 0	0.11 (1)
B-C	-36 / 0	-70.5 -70.5	0.05 (1)	6.25	AO-N	-156 / 0	0.11 (1)
C-D	-30 / 0	-70.5 -70.5	0.04 (1)	6.25	AP-M	-156 / 0	0.11 (1)
D-E	-26 / 0	-70.5 -70.5	0.03 (1)	6.25	AQ-L	-156 / 0	0.11 (1)
E-F	-23 / 0	-70.5 -70.5	0.03 (1)	6.25	AS-K	-156 / 0	0.11 (1)
F-G	-21 / 0	-70.5 -70.5	0.03 (1)	6.25	AT-I	-139 / 0	0.09 (1)
G-H	-21 / 0	-70.5 -70.5	0.03 (1)	6.25	AU-H	-140 / 0	0.19 (1)
H-I	-18 / 0	-70.5 -70.5	0.03 (1)	6.25	AV-F	-140 / 0	0.12 (1)
I-J	-46 / 0	-70.5 -70.5	0.03 (1)	6.25	AW-E	-140 / 0	0.07 (1)
J-K	-14 / 0	-78.0 -78.0	0.03 (1)	6.25	AX-D	-137 / 0	0.04 (1)
K-L	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AY-C	-147 / 0	0.03 (1)
L-M	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AM-P	-156 / 0	0.11 (1)
M-N	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AL-R	-156 / 0	0.11 (1)
N-O	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AK-S	-157 / 0	0.11 (1)
O-P	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AT-T	-149 / 0	0.10 (1)
P-Q	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AH-U	-143 / 0	0.10 (1)
Q-R	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AG-V	-148 / 0	0.07 (1)
R-S	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AF-W	-138 / 0	0.13 (1)
S-T	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AE-X	-141 / 0	0.08 (1)
T-U	-15 / 0	-78.0 -78.0	0.04 (1)	6.25	AD-Y	-136 / 0	0.04 (1)
U-V	-16 / 0	-70.5 -70.5	0.04 (1)	6.25	AC-Z	-154 / 0	0.03 (1)
V-W	-17 / 0	-70.5 -70.5	0.04 (1)	6.25			
W-X	-20 / 0	-70.5 -70.5	0.03 (1)	6.25			
X-Y	-22 / 0	-70.5 -70.5	0.03 (1)	6.25			
Y-Z	-27 / 0	-70.5 -70.5	0.04 (1)	6.25			
Z-AA	-29 / 0	-70.5 -70.5	0.04 (1)	6.25			
AZ-B	-200 / 0	0.0 0.0	0.02 (1)	7.81			
AB-AA	-95 / 0	0.0 0.0	0.03 (1)	7.81			
AZ-AY	0 / 29	-17.5 -17.5	0.02 (1)	10.00			
AY-AX	0 / 24	-17.5 -17.5	0.02 (4)	10.00			
AX-AW	0 / 21	-17.5 -17.5	0.02 (4)	10.00			
AW-AV	0 / 19	-17.5 -17.5	0.02 (4)	10.00			
AV-AU	0 / 17	-17.5 -17.5	0.02 (4)	10.00			
AU-AT	0 / 16	-17.5 -17.5	0.02 (4)	10.00			
AT-AS	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AS-AR	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AR-AQ	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AQ-AP	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AP-AO	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AO-AN	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AN-AM	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AM-AL	0 / 15	-17.5 -17.5	0.02 (4)	10.00			
AL-AK	0 / 15	-17.5 -17.5	0.02 (4)	10.00			

TOTAL WEIGHT = 2 X 239 = 478 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 PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND 8.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 5.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.09 (A-B:1), BC=0.02 (AY-AZ:1), WB=0.19 (H-AU:1), SSI=0.06 (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.

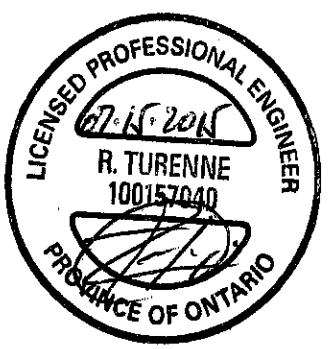
NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

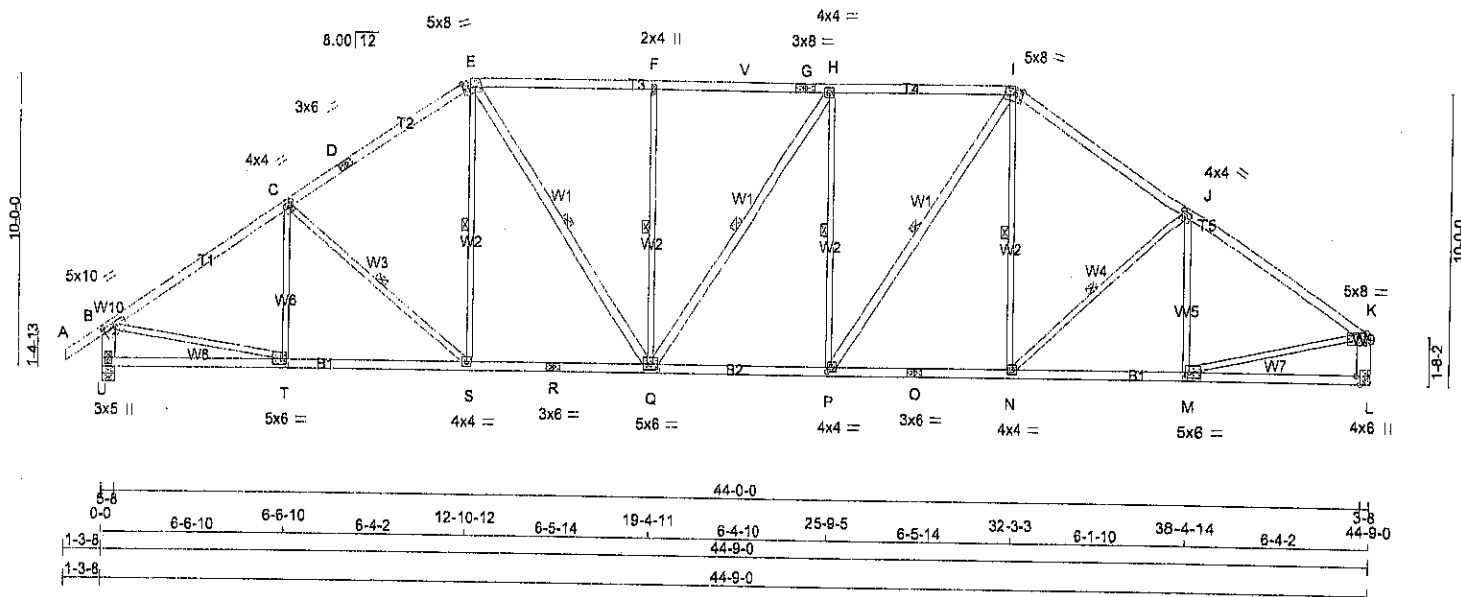
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.78 (U) (INPUT = 0.80)
JSI METAL=0.06 (B) (INPUT = 1.00)



A-15073643

Alpa Roof Truss, Maple



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
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-I	MT20	5.0	10.0	1.75	5.00
C	TMVW-I	MT20	4.0	4.0	2.00	1.50
D	TS-I	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-I	MT20	3.0	8.0		
H	TMVW-I	MT20	4.0	4.0		
I	TTVW-m	MT20	5.0	8.0	2.00	3.25
J	TMVW-I	MT20	4.0	4.0	2.00	1.50
K	TMVW-p	MT20	5.0	8.0	Edge	
L	BMV1-t	MT20	4.0	8.0	Edge	1.50
M	BMVW-t	MT20	5.0	6.0	2.25	1.75
N	BMVW-t	MT20	4.0	4.0		
O	BS-I	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-I	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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
U	2947	0	2947	286	-397	5-8	4-1
L	2822	0	2822	0	-356	HANGER BY OTHERS	MIN. SEAT SIZE: 3-6

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 387 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 LCASE		MAX./MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	COMBINED	SOIL
U	2386	1269 / 0	470 / 0	0 / 0	216 / -689	647 / 0	0 / 0	0 / 0	0 / 0
L	2301	1196 / 0	470 / 0	0 / 0	202 / -662	635 / 0	0 / 0	0 / 0	0 / 0

HORIZONTAL REACTIONS

JT	U	0 / 0	0 / 0	0 / 0	212 / -202	0 / 0	0 / 0
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BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.45FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.26FT. 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: (18)

C H O R D S		W E B S	
MEMB.	MAX. FACTORED	MEMB.	MAX. FACTORED
FORCE (LBS)	VERT. LOAD LC1 MAX (PLP)	FORCE (LBS)	MAX. FACTORED (LBS)
FR-TO	FROM TO	FR-TO	LENGTH FR-TO
A-B	0 / 38	T-C	-345 / 137
B-C	-3590 / 464	C-S	-491 / 291
C-D	-3316 / 491	S-E	-111 / 498
D-E	-3316 / 491	E-Q	-133 / 1066
E-F	-3321 / 486	Q-F	-813 / 198
F-V	-3321 / 486	Q-H	-572 / 614
V-G	-3321 / 486	P-H	-789 / 199
G-H	-3321 / 486	P-I	-142 / 1133
H-I	-3305 / 480	N-I	-102 / 438
I-J	-3252 / 481	N-J	-376 / 267
J-K	-3404 / 435	M-J	-457 / 146
U-B	-2871 / 429	B-T	-281 / 3080
L-K	-2748 / 387	M-K	-271 / 2929
U-T	-282 / 277		
T-S	-432 / 3020		
S-R	-211 / 2727		
R-Q	-211 / 2727		
Q-P	-131 / 3305		
P-O	-52 / 2674		
O-N	-52 / 2674		
N-M	-246 / 2864		
M-L	-9 / 18		

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(6)

TOTAL WEIGHT = 10 X 215 = 2152 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 5.0 PSF
BOT CH. LL = 10.6 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
- TPC 2011

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

(80 % OF 23.0 P.S.F. G.S.I. 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")

CSI: TC=0.86 (B-C:1), BC=0.66 (P-Q:1), WB=0.69 (B-T:1), SS=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 1687 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

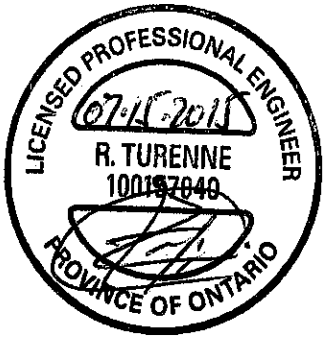
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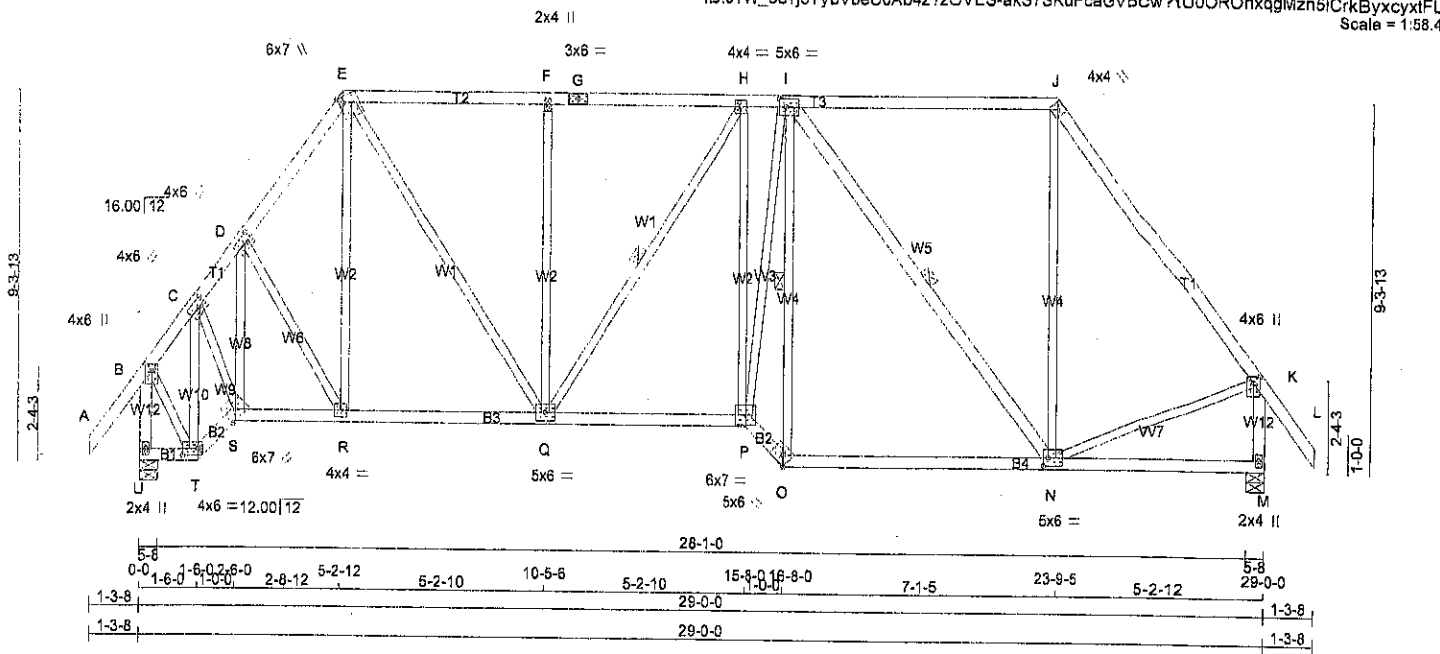


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253434	H01	10	1	TRUSS DESC.	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD. NOTES- (1) 1) Lateral brace(s) shown shall be 1x4 for Part 8 design as per OSC 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)
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A-15073642(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2 SPF
E - G	2x4	DRY	No.2 SPF
G - 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 - P	2x4	DRY	No.2 SPF
P - O	2x4	DRY	No.2 SPF
O - M	2x4	DRY	No.2 SPF
ALL WEBS EXCEPT I - N	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 TMWW-t	MT20	4.0	6.0	2.00	2.50
D TMWW-t	MT20	4.0	6.0	2.00	2.50
E TTWW+m	MT20	6.0	7.0	Edge	1.50
F TMW+w	MT20	2.0	4.0		
G TS-l	MT20	3.0	6.0		
H TMWW-t	MT20	4.0	4.0		
I TMWWW-t	MT20	5.0	6.0	2.50	2.00
J TTW-h	MT20	4.0	4.0		
K TMVW+p	MT20	4.0	6.0	2.00	2.00
M BMV1+p	MT20	2.0	4.0		
N BMWWW-t	MT20	5.0	6.0	2.50	1.50
O BBW-h	MT20	5.0	6.0	Edge	2.50
P BBWW-t	MT20	6.0	7.0		
Q BMWWW-t	MT20	5.0	6.0		
R BMWW-t	MT20	4.0	4.0		
S BBWW-h	MT20	6.0	7.0	Edge	
T BBWW-t	MT20	4.0	6.0	2.00	4.50
U BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD BRG	IN-SX
U	1377	0	1377	0	0	5-8	1-8	1-8
M	1372	0	1372	0	0	5-8	1-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX	MIN	COMPONENT REACTIONS
U	968	689 / 0	0 / 0	PERM LIVE WIND DEAD SOIL
M	964	666 / 0	0 / 0	0 / 0 299 / 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 = 5.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	MAX LC1 (LC)
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	T-C	-954 / 0	0.25 (1)	0.25 (1)
B-C	-784 / 0	-70.5	-70.5 0.10 (1)	C-S	0 / 715	0.16 (1)	0.16 (1)
C-D	-1084 / 0	-70.5	-70.5 0.08 (1)	S-D	-222 / 0	0.07 (1)	0.07 (1)
D-E	-1156 / 0	-70.5	-70.5 0.08 (1)	D-R	0 / 7	0.00 (4)	0.00 (4)
E-F	-1088 / 0	-70.5	-70.5 0.33 (1)	R-E	0 / 75	0.03 (4)	0.03 (4)
F-G	-1089 / 0	-70.5	-70.5 0.33 (1)	E-Q	0 / 743	0.17 (1)	0.17 (1)
G-H	-1089 / 0	-70.5	-70.5 0.33 (1)	Q-F	-429 / 0	0.58 (1)	0.58 (1)
H-I	-1153 / 0	-70.5	-70.5 0.52 (1)	Q-H	-118 / 0	0.07 (1)	0.07 (1)
I-J	-623 / 0	-70.5	-70.5 0.54 (1)	H-P	0 / 179	0.04 (1)	0.04 (1)
J-K	-1035 / 0	-70.5	-70.5 0.43 (1)	P-I	0 / 910	0.20 (1)	0.20 (1)
K-L	0 / 40	-70.5	-70.5 0.10 (1)	I-N	-886 / 0	0.55 (1)	0.55 (1)
U-B	-1364 / 0	0.0	0.0 0.17 (1)	B-T	0 / 714	0.16 (1)	0.16 (1)
M-K	-1340 / 0	0.0	0.0 0.17 (1)	T-N	0 / 659	0.15 (1)	0.15 (1)
U-T	0 / 0	-17.5	-17.5 0.01 (4)	N-K			
T-S	0 / 582	-17.5	-17.5 0.10 (1)				
S-R	0 / 680	-17.5	-17.5 0.15 (1)				
R-Q	0 / 682	-17.5	-17.5 0.17 (4)				
Q-P	0 / 1151	-17.5	-17.5 0.25 (1)				
P-O	0 / 1455	-17.5	-17.5 0.24 (1)				
O-N	0 / 1040	-17.5	-17.5 0.28 (4)				
N-M	0 / 0	-17.5	-17.5 0.20 (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 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.

(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 (0.13")

CSI: TC=0.54 (I-J:1), BC=0.28 (N-O:4), WB=0.58 (F-Q:1), SSI=0.24 (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.

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

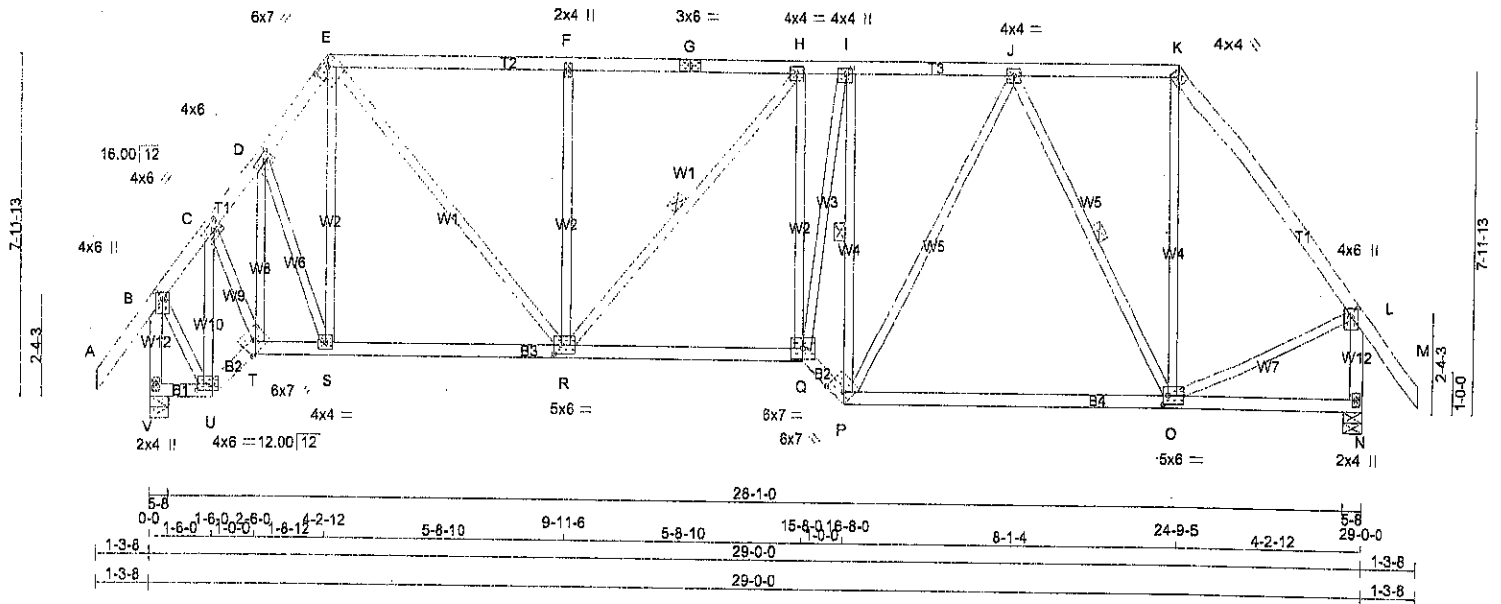
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (I) (INPUT = 0.90)
JSI METAL= 0.27 (J) (INPUT = 1.00)



A-15073641



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESC
A - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
G - K	2x4	DRY	No.2
K - M	2x4	DRY	No.2
V - B	2x4	DRY	No.2
N - L	2x4	DRY	No.2
V - U	2x4	DRY	No.2
U - T	2x4	DRY	No.2
T - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TMVW-l	MT20	4.0	6.0	2.00	2.50
D	TMVW-l	MT20	4.0	6.0	2.00	2.50
E	TTWV-h	MT20	6.0	7.0	1.50	3.75
F	TMW+h	MT20	2.0	4.0		
G	TS-l	MT20	3.0	6.0		
H	TMVW-l	MT20	4.0	4.0		
I	TMVW+h	MT20	4.0	4.0	1.50	1.50
J	TMVW-l	MT20	4.0	4.0		
K	TTW-h	MT20	4.0	4.0		
L	TMVW+p	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	2.0	4.0		
O	BMVWV-l	MT20	5.0	6.0	2.50	1.50
P	BBVW-h	MT20	6.0	7.0	2.25	4.50
Q	BBVW-l	MT20	6.0	7.0		
R	BMVWV-l	MT20	5.0	6.0	2.50	2.00
S	BMVW-l	MT20	4.0	4.0		
T	BBVW-h	MT20	6.0	7.0	Edge	
U	BBVW-l	MT20	4.0	6.0	1.75	4.25
V	BMV1+p	MT20	2.0	4.0		

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

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

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	968	669 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0
N	964	666 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.18FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 40	-70.5	-70.5 0.10 (1)	6.25	U-C	-957 / 0	0.25 (1)
B-C	-784 / 0	-70.5	-70.5 0.10 (1)	10.00	C-T	0 / 694	0.16 (1)
C-D	-1097 / 0	-70.5	-70.5 0.04 (1)	6.00	T-D	-215 / 0	0.07 (1)
D-E	-1169 / 0	-70.5	-70.5 0.04 (1)	5.87	D-S	0 / 44	0.01 (1)
E-F	-1284 / 0	-70.5	-70.5 0.40 (1)	5.19	S-E	0 / 61	0.02 (4)
F-G	-1284 / 0	-70.5	-70.5 0.40 (1)	5.19	E-R	0 / 910	0.20 (1)
G-H	-1284 / 0	-70.5	-70.5 0.40 (1)	5.19	R-F	-462 / 0	0.39 (1)
H-I	-1386 / 0	-70.5	-70.5 0.13 (1)	5.36	H-R	-161 / 0	0.08 (1)
I-J	-1185 / 0	-70.5	-70.5 0.20 (1)	5.63	Q-H	-111 / 13	0.09 (1)
J-K	-625 / 0	-70.5	-70.5 0.18 (1)	6.25	Q-I	0 / 1350	0.30 (1)
K-L	-1034 / 0	-70.5	-70.5 0.26 (1)	5.87	P-I	-1472 / 0	0.59 (1)
L-M	0 / 40	-70.5	-70.5 0.10 (1)	10.00	P-J	0 / 427	0.10 (1)
V-B	-1364 / 0	0.0	0.0 0.17 (1)	6.95	J-O	-789 / 0	0.41 (1)
N-L	-1357 / 0	0.0	0.0 0.17 (1)	6.97	O-K	0 / 583	0.13 (1)
					B-U	0 / 716	0.16 (1)
V-U	0 / 0	-17.5	-17.5 0.01 (4)	10.00	O-L	0 / 677	0.15 (1)
U-T	0 / 585	-17.5	-17.5 0.10 (1)	10.00			
T-S	0 / 873	-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 / 865	-17.5	-17.5 0.32 (4)	10.00			
O-N	0 / 0	-17.5	-17.5 0.24 (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

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 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI; TC=0.40 (E-F:1), BC=0.32 (O-P:4), WB=0.59 (I-P:1), SSI=0.19 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

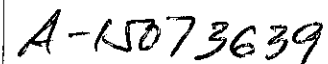
PLATE PLACEMENT TOL. = 0.250 inches

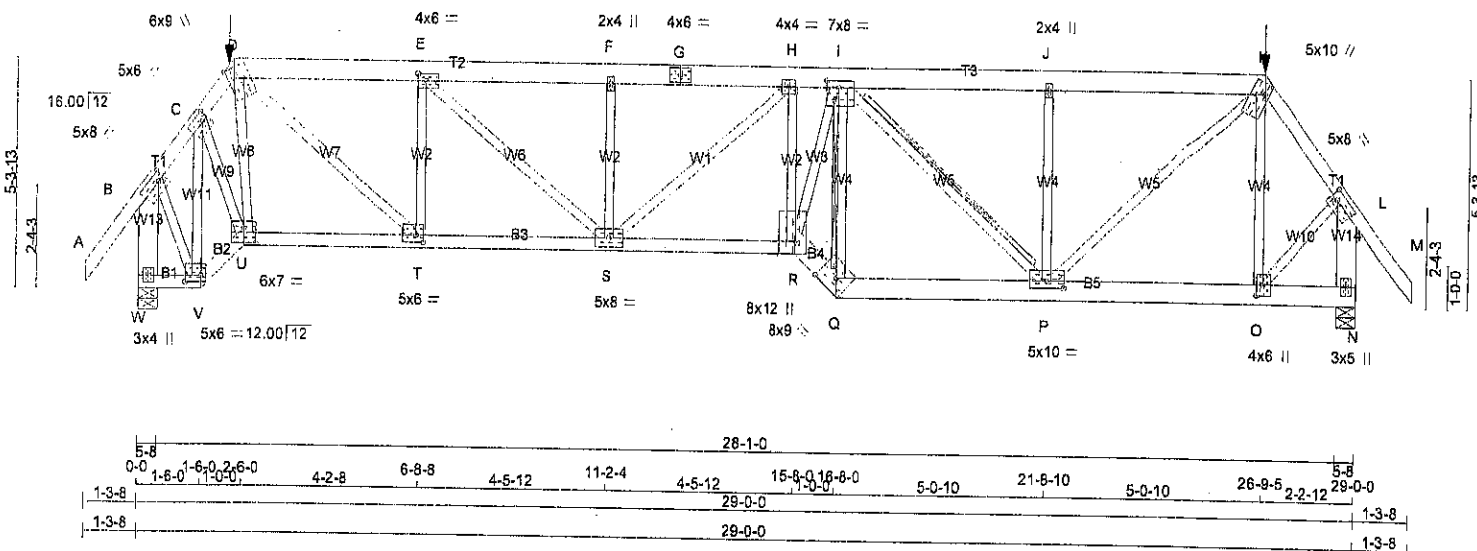
PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073640





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	JT	COMBINED	JT	COMBINED	JT	COMBINED	JT	COMBINED
W	1803	1228 / 0	0 / 0	0 / 0	0 / 0	575 / 0	0 / 0	0 / 0	0 / 0
N	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0	0 / 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	FORCE (LBS)	MAX. CS (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	-1294 / 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 0.35 (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 / 3536	0.88 (1)
I-J	-2689 / 0	-138.7	-138.7 0.28 (1)	4.64	Q-I	-3387 / 0	0.74 (1)
J-K	-2988 / 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 / 2466	0.61 (1)
W-B	-2535 / 0	0.0	0.0 0.24 (1)	6.47	Q-K	-894 / 0	0.26 (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	0.66 (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 0.68 (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: CPrimeHlp
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: CStdGirder
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: CPrimeHlp
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, 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.

(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)

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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
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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) 114.6 lbs FACTORED DOWN AT 2-2-12,
AND 114.6 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
OBC 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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		822	2284
			1656

PLATE PLACEMENT TOL. = 0.250 inches

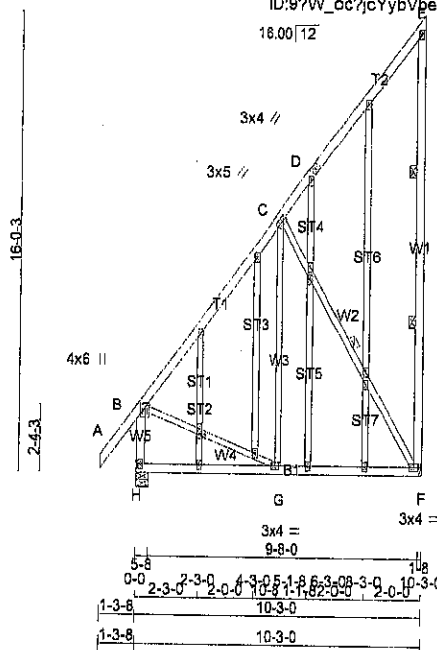
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.69 (R) (INPUT = 1.00)



A-15073638(2)

Alpa Roof Truss, Maple



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" 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	TMWW-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	BMVW-l	MT20	3.0	4.0		
G	BMWW-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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
H	550	0	550	0	5-8	1-8
F	451	0	451	0	5-8	1-8

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)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO		
H-B	-515 / 0	0.0	0.07 (1)	7.81	B-G	0 / 175
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	G-C	0 / 105
B-C	-237 / 0	-70.5	-70.5 0.25 (1)	6.25	C-F	-325 / 0
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	0.09 (1)	6.25		
H-G	0 / 0	-17.5	-17.5 0.13 (4)	10.00		
G-F	0 / 184	-17.5	-17.5 0.14 (4)	10.00		

TOTAL WEIGHT = 101 lb (M/JF)

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

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 (0.34")
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 1667 522 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

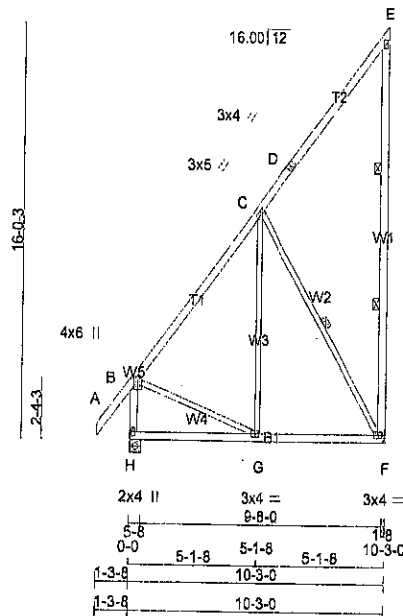
PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073637

Alpe Roof Truss, Maple



LUMBER				
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	SPF
CHORDS	2x4	DRY	No.2	SPF
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	TMWW-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	BMVW-t	MT20	3.0	4.0
G	BMWW-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
H	550	0	550	0	5-8	1-8
F	451	0	451	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX /MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
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)	VERT. LOAD (PLF)	LC1 MAX	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO	CSI (LC)		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 / 40	-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 = 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, 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 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 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

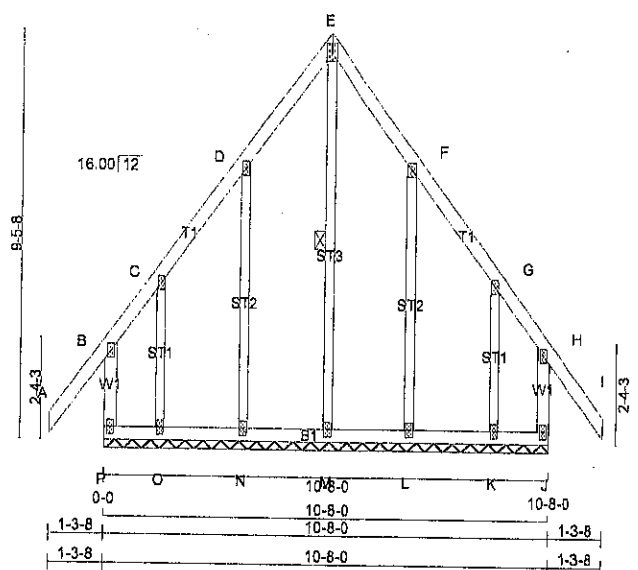
PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073636

Alpa Roof Truss, Maple



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR
P - B	2x4	DRY	No.2
A - E	2x4	DRY	No.2
E - I	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - J	2x4	DRY	No.2

ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY; SEASONED LUMBER.				

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	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	TMW+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 LC1 (PLF)	MAX UNBRACED LENGTH FR-TO (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH FR-TO (LC)	
FR-TO		FROM TO		FR-TO			
P-B	-161 / 0	0.0 0.0 0.03 (1)	7.81	M-E	-181 / 0	0.10 (1)	
A-B	0 / 40	-70.5 -70.5 0.10 (1)	10.00	N-D	-154 / 0	0.12 (1)	
B-C	-9 / 0	-70.5 -70.5 0.07 (1)	10.00	O-C	-70 / 0	0.02 (1)	
C-D	0 / 27	-70.5 -70.5 0.04 (1)	10.00	L-F	-154 / 0	0.12 (1)	
D-E	0 / 21	-70.5 -70.5 0.04 (1)	10.00	K-G	-70 / 0	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	-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)	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)	6.25				
K-J	-9 / 0	-17.5 -17.5 0.01 (4)	10.00				

TOTAL WEIGHT = 65 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.

(55% OF 23.0 P.S.F. G.S.L. PLUS 5.4 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 (PSI)	SECTION (PLI)
MT20	816	354	1867
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.80)

JSI METAL= 0.05 (D) (INPUT = 1.00)

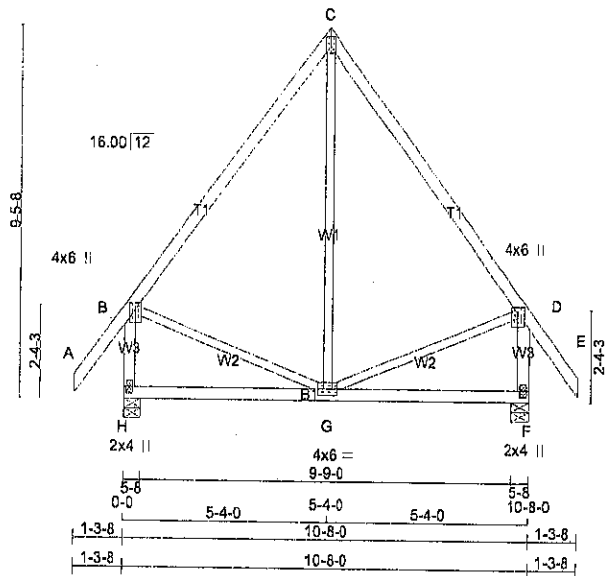


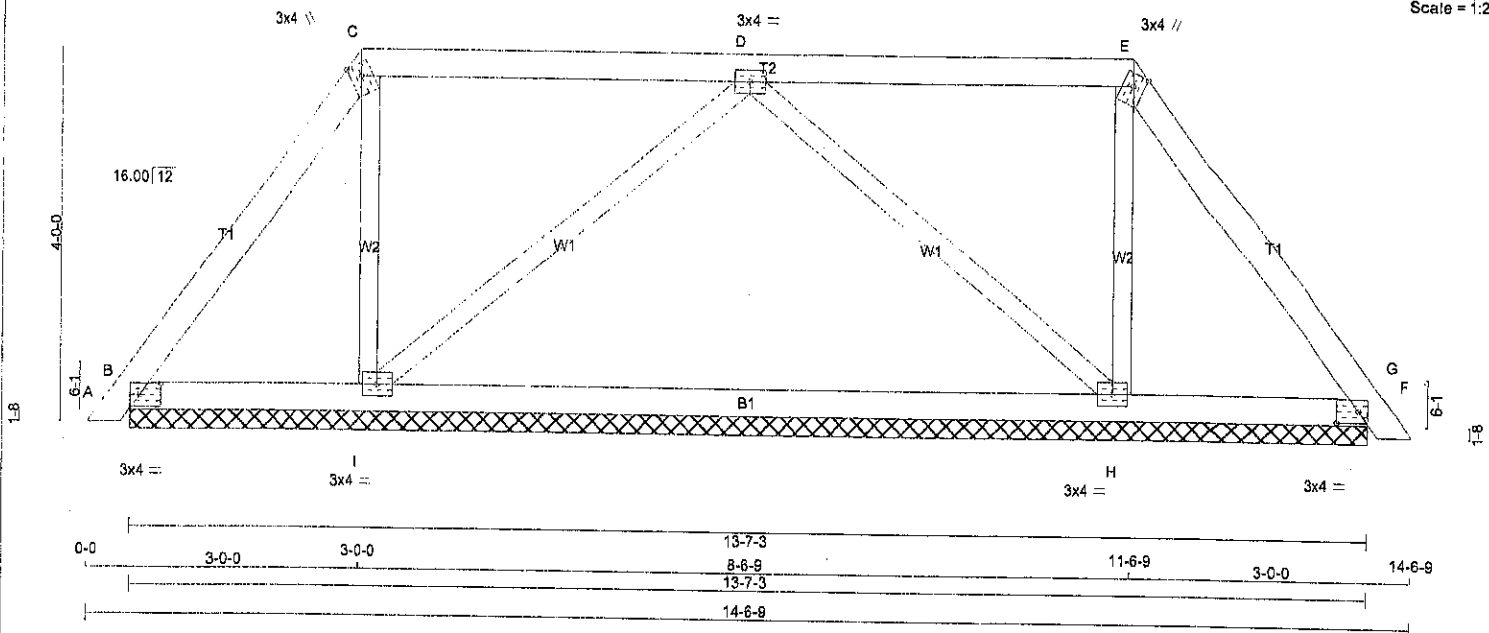
A-15073635

JOB 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
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3x5 ||
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	TMBW1-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 B design as per OBC 9.2.3.13.11, 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 LC1	MAX CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)		
FR-TO		FROM TO			FR-TO				
A-B	0/9	-70.5	-70.5	0.01 (1)	10.00	I-C	-180/0	0.04 (1)	
B-C	-28/0	-70.5	-70.5	0.08 (1)	6.25	I-D	-287/0	0.15 (1)	
C-D	-11/0	-70.5	-70.5	0.21 (1)	6.25	D-H	-287/0	0.15 (1)	
D-E	-11/0	-70.5	-70.5	0.21 (1)	6.25	H-E	-180/0	0.04 (1)	
E-F	-28/0	-70.5	-70.5	0.08 (1)	6.25				
F-G	0/9	-70.5	-70.5	0.01 (1)	10.00				
B-I	0/16	-17.5	-17.5	0.20 (4)	10.00				
I-H	0/229	-17.5	-17.5	0.21 (4)	10.00				
H-F	0/16	-17.5	-17.5	0.20 (4)	10.00				

TOTAL WEIGHT = 2 X 51 = 101 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
- TPC 2011

(55 % 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

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) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1687
	822	2284	1656

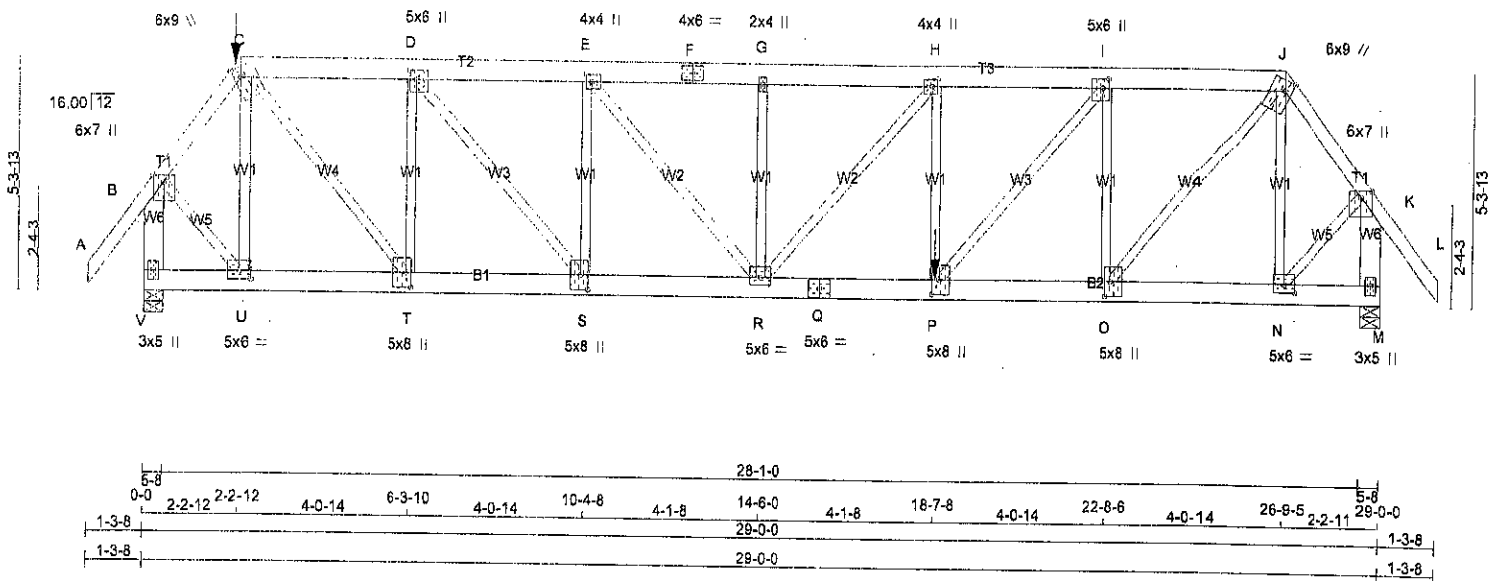
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-10073633



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
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	2x6	DRY	No.2
Q - M	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
V	3007	0	3007	0	5-8	4-4
M	2613	0	2613	0	5-8	3-0

UNFACTORED REACTIONS

JT	1ST CASE		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW+p	MT20	6.0	7.0	1.75	3.00
C	TTWW+m	MT20	6.0	9.0	2.75	1.75
D	TMWW+H	MT20	5.0	6.0	2.50	1.75
E	TMWW+H	MT20	4.0	4.0	2.00	1.50
F	TS4	MT20	4.0	6.0		
G	TMWW+w	MT20	2.0	4.0		
H	TMWW+H	MT20	4.0	4.0	2.00	1.50
I	TMWW+H	MT20	5.0	6.0	2.50	1.75
J	TTWW+m	MT20	6.0	9.0	2.75	1.75
K	TMWW+p	MT20	6.0	7.0	1.75	3.00
M	BMV1+p	MT20	3.0	5.0		
N	BMWW+H	MT20	5.0	8.0	2.25	3.00
O	BMWW+H	MT20	5.0	8.0	4.00	1.50
P	BMWW+H	MT20	5.0	8.0	4.00	2.00
Q	BS4	MT20	5.0	6.0		
R	BMWW+H	MT20	5.0	6.0	2.00	3.00
S	BMWW+H	MT20	5.0	8.0	4.00	2.00
T	BMWW+H	MT20	5.0	8.0	4.00	1.50
U	BMWW+H	MT20	5.0	6.0	2.25	3.00
V	BMV1+p	MT20	3.0	5.0		

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 (PLF)	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	U-C -866 / 0	0.33 (1)
B-C	-2208 / 0	-70.5	-70.5	0.14 (1)	4.46	C-T 0 / 2797	0.69 (1)
C-D	-3103 / 0	-156.3	-156.3	0.24 (1)	4.57	T-D -2012 / 0	0.78 (1)
D-E	-4205 / 0	-156.3	-156.3	0.28 (1)	3.89	D-S 0 / 1716	0.42 (1)
E-F	-4659 / 0	-156.3	-156.3	0.28 (1)	3.81	S-E -1156 / 0	0.44 (1)
F-G	-4659 / 0	-156.3	-156.3	0.28 (1)	3.81	E-R 0 / 700	0.17 (1)
G-H	-4659 / 0	-156.3	-156.3	0.30 (1)	3.78	R-G -672 / 0	0.26 (1)
H-I	-4397 / 0	-70.5	-70.5	0.19 (1)	4.00	G-H 0 / 404	0.10 (1)
I-J	-2913 / 0	-70.5	-70.5	0.15 (1)	4.79	H-I -756 / 0	0.29 (1)
J-K	-1913 / 0	-70.5	-70.5	0.12 (1)	4.74	I-J 0 / 2309	0.57 (1)
K-L	0 / 40	-70.5	-70.5	0.11 (1)	10.00	O-I -2082 / 0	0.78 (1)
L-M	-3011 / 0	0.0	0.0	0.27 (1)	6.03	O-J 0 / 2775	0.69 (1)
M-K	-2632 / 0	0.0	0.0	0.23 (1)	6.37	N-J -806 / 0	0.31 (1)
V-U	0 / 0	-38.8	-38.8	0.08 (1)	10.00	B-U 0 / 1696	0.42 (1)
U-T	0 / 1304	-38.8	-38.8	0.25 (1)	10.00	N-K 0 / 1471	0.36 (1)
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 / 2913	-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		

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 18'-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

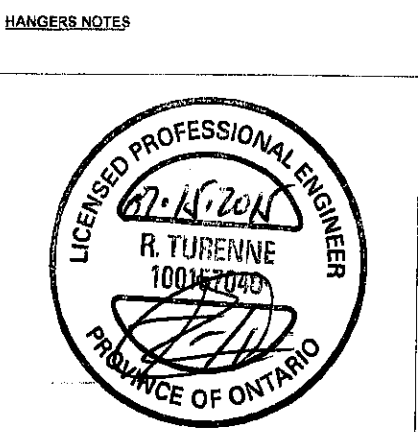
ALLOWABLE DEFL.(LL) = L/360 (0.97")

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:1), BC=0.66 (P-R:1), WB=0.78 (I-O:1), SSI=0.25 (C-D:1)



FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-12	-141	-141		FRONT	VERT	TOTAL
P	18-7-8	-925	-925		FRONT	VERT	TOTAL

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 16 2015 Mitek Industries, Inc. Wed Jul 15 09:12:46 2015 Page 2
ID:9?W oc?icYybVbeU0Ab4z?zOVES-zMNRmU d0PBsEgvZActBH6rrQfL35WZ90Z8p_vxtcm

HANGERS NOTES

- 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)

- 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 1656

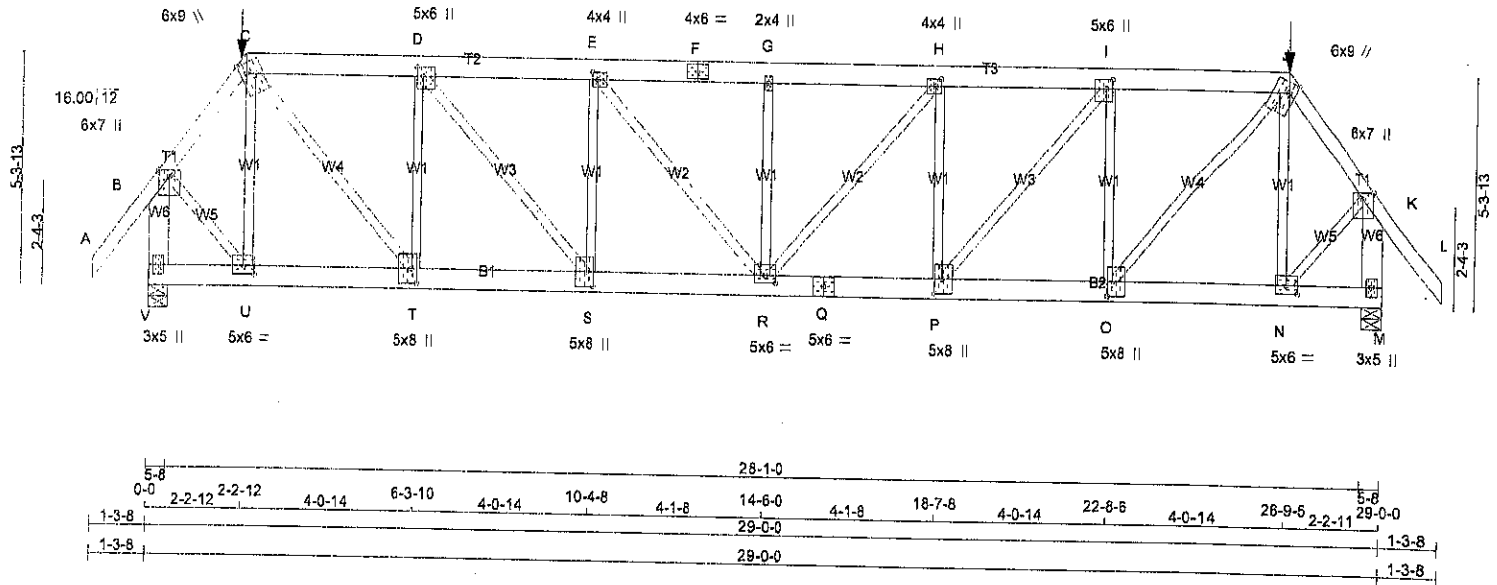
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (E) (INPUT = 0.90)
JSI METAL= 0.74 (Q) (INPUT = 1.00)



A-15073632(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
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	2x6	DRY	No.2
Q - M	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
V	2572	0	2572	0	0	2-14
M	2572	0	2572	0	0	2-14

UNFACTORED REACTIONS

1ST CASE MAX/MIN COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0
M	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) 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			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.11 (1)	U-C	-727 / 0	0.28 (1)	
B-C	-1868 / 0	-70.5 -70.5	0.12 (1)	C-T	0 / 2334	0.58 (1)	
C-D	-2604 / 0	-138.7 -138.7	0.20 (1)	T-D	-1672 / 0	0.63 (1)	
D-E	-3489 / 0	-138.7 -138.7	0.22 (1)	D-S	0 / 1378	0.34 (1)	
E-F	-3787 / 0	-138.7 -138.7	0.21 (1)	S-E	-909 / 0	0.35 (1)	
F-G	-3787 / 0	-138.7 -138.7	0.21 (1)	E-R	0 / 460	0.11 (1)	
G-H	-3787 / 0	-138.7 -138.7	0.21 (1)	R-G	-571 / 0	0.22 (1)	
H-I	-3489 / 0	-138.7 -138.7	0.20 (1)	G-R	0 / 460	0.11 (1)	
I-J	-2604 / 0	-138.7 -138.7	0.22 (1)	R-H	0 / 460	0.11 (1)	
J-K	-1868 / 0	-70.5 -70.5	0.12 (1)	P-H	-909 / 0	0.35 (1)	
K-L	0 / 40	-70.5 -70.5	0.11 (1)	P-I	0 / 1378	0.34 (1)	
V-B	-2574 / 0	0.0 0.0	0.23 (1)	O-I	-1672 / 0	0.63 (1)	
M-K	-2574 / 0	0.0 0.0	0.23 (1)	O-J	0 / 2334	0.58 (1)	
				N-J	-727 / 0	0.28 (1)	
				B-U	0 / 1437	0.36 (1)	
				N-K	0 / 1437	0.36 (1)	
V-U	0 / 0	-34.5 -34.5	0.07 (1)				
U-T	0 / 1103	-34.5 -34.5	0.22 (1)				
T-S	0 / 2604	-34.5 -34.5	0.39 (1)				
S-R	0 / 3489	-34.5 -34.5	0.52 (1)				
R-Q	0 / 3489	-34.5 -34.5	0.52 (1)				
Q-P	0 / 3489	-34.5 -34.5	0.52 (1)				
P-O	0 / 2604	-34.5 -34.5	0.39 (1)				
O-N	0 / 1103	-34.5 -34.5	0.22 (1)				
N-M	0 / 0	-34.5 -34.5	0.07 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	2-2-12	-115	-115	---	FRONT	VERT	TOTAL
J	26-9-6	-114	-114	---	FRONT	VERT	TOTAL

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
- ADD'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010

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 (0.13")
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), SS=0.22 (I-J:1)

DOL LUMBER=1.00 NAIL=1.00 LS WBD=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 818 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.69 (B) (INPUT = 0.80)
JSI METAL = 0.58 (C) (INPUT = 1.00)

A-1073631



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

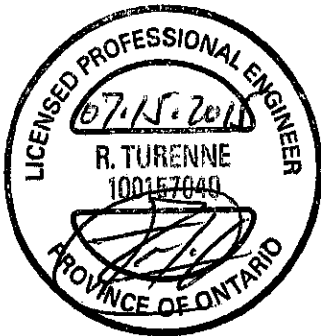
Alpa Roof Truss, Maple

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 26-9-5, AND 114.5 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.

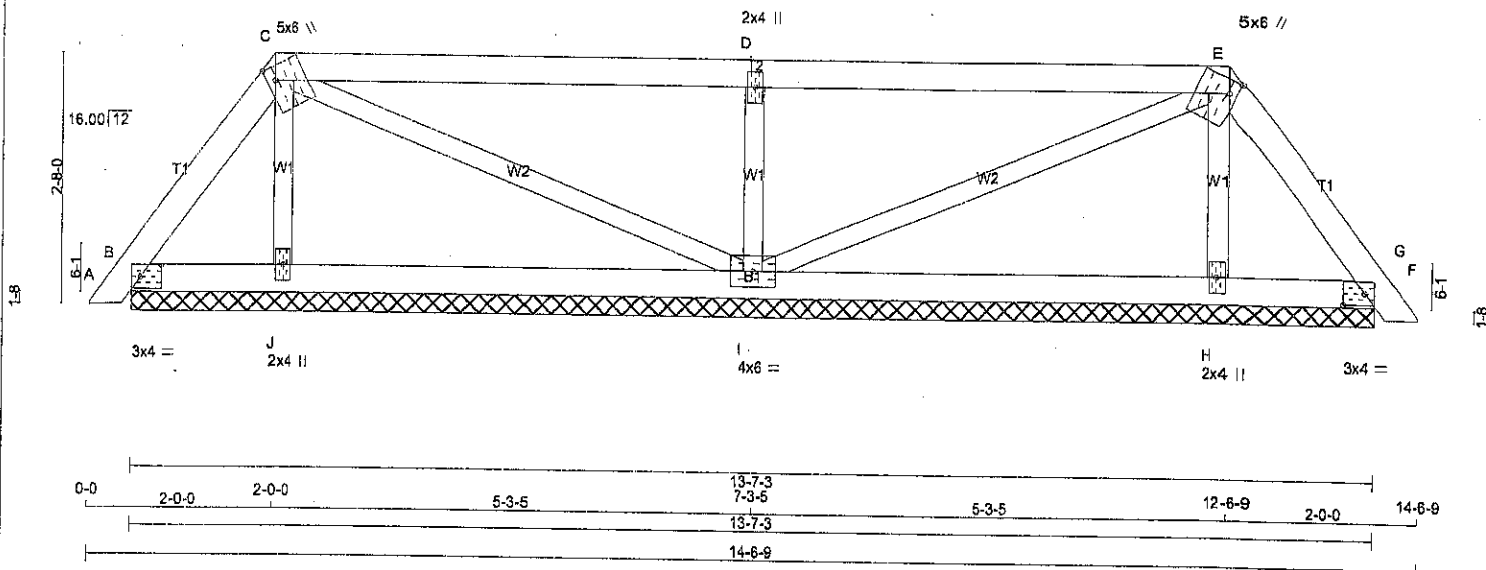


A-15073631(2)

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

Alpa Roof Truss, Maple

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ID:97W_oc?jcYybVbeU0Ab4z?zOVES-XHBIZIUJ2TZU3263LJBYzLICfQ?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	No.2	SPF		
DRY: SEASONED LUMBER.					

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
B	TMB1-I	MT20	3.0	4.0	1.50	2.75	
C	TTWW+m	MT20	5.0	6.0	1.75	1.00	
D	TMW+w	MT20	2.0	4.0			
E	TTWW+m	MT20	5.0	6.0	1.75	1.00	
F	TMB1-I	MT20	3.0	4.0	1.50	2.75	
H	BMW1+w	MT20	2.0	4.0			
I	BMWWWW-t	MT20	4.0	6.0			
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	129	0	129	0	13-7-3	1-8
F	129	0	129	0	13-7-3	1-8
J	205	0	205	0	13-7-3	1-8
I	578	0	578	0	13-7-3	1-8
H	205	0	205	0	13-7-3	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	87	79 / 0	0 / 0	0 / 0	8 / 0	0 / 0
F	87	79 / 0	0 / 0	0 / 0	8 / 0	0 / 0
J	148	78 / 0	0 / 0	0 / 0	71 / 0	0 / 0
I	406	287 / 0	0 / 0	0 / 0	118 / 0	0 / 0
H	148	78 / 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 = 8.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED VERT. LOAD LC1 MAX		MAX. UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
			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	-86 / 0	-70.5	-70.5	0.03 (1)	6.25	C-I	-23 / 0	0.01 (1)
C-D	-9 / 0	-70.5	-70.5	0.33 (1)	10.00	I-D	-464 / 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	-86 / 0	-70.5	-70.5	0.03 (1)	6.25	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 49 = 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

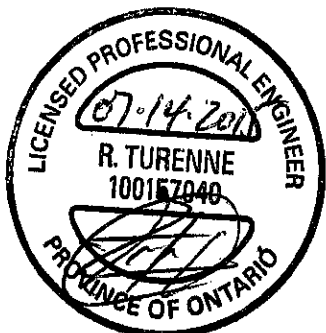
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 822 2284 1666

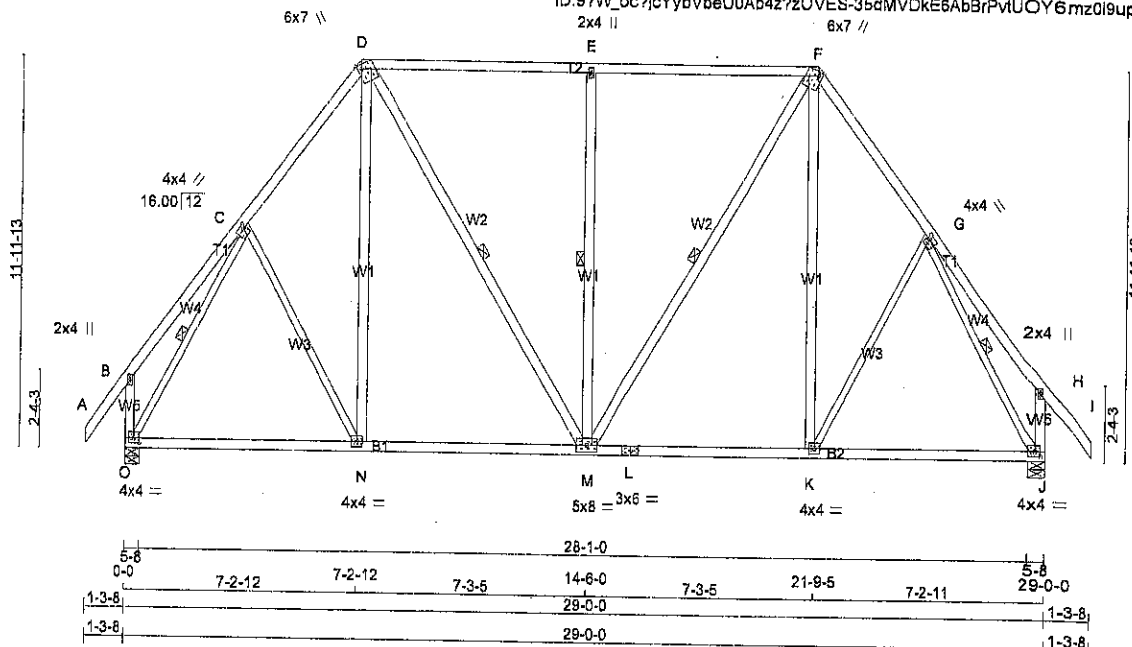
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (F) (INPUT = 0.90)
JSI METAL= 0.09 (D) (INPUT = 1.00)



A-15073582



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 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+w	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	BMWW-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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
O	1429	0	1429	0	5-8	1-9
J	1429	0	1429	0	5-8	1-9

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1010	868 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0
J	1010	868 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-N	0 / 51	0.02 (4)
B-C	0 / 23	-70.5	-70.5 0.14 (1)	10.00	N-D	0 / 130	0.03 (4)
C-D	-1088 / 0	-70.5	-70.5 0.13 (1)	5.93	D-M	0 / 477	0.08 (1)
D-E	-889 / 0	-78.0	-78.0 0.55 (1)	5.67	M-E	-895 / 0	0.54 (1)
E-F	-889 / 0	-78.0	-78.0 0.55 (1)	5.67	M-F	0 / 477	0.08 (1)
F-G	-1088 / 0	-70.5	-70.5 0.13 (1)	5.93	K-F	0 / 130	0.03 (4)
G-H	0 / 23	-70.5	-70.5 0.14 (1)	10.00	K-G	0 / 51	0.02 (4)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-1338 / 0	0.52 (1)
O-B	-195 / 0	0.0	0.0 0.02 (1)	7.81	G-J	-1338 / 0	0.52 (1)
J-H	-195 / 0	0.0	0.0 0.02 (1)	7.81			
O-N	0 / 627	-17.5	-17.5 0.28 (4)	10.00			
N-M	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
M-L	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
L-K	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
K-J	0 / 627	-17.5	-17.5 0.28 (4)	10.00			

TOTAL WEIGHT = 6 X 181 = 1084 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

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 3.0 P.S.F.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 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 (0.03")
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), SSI=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	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

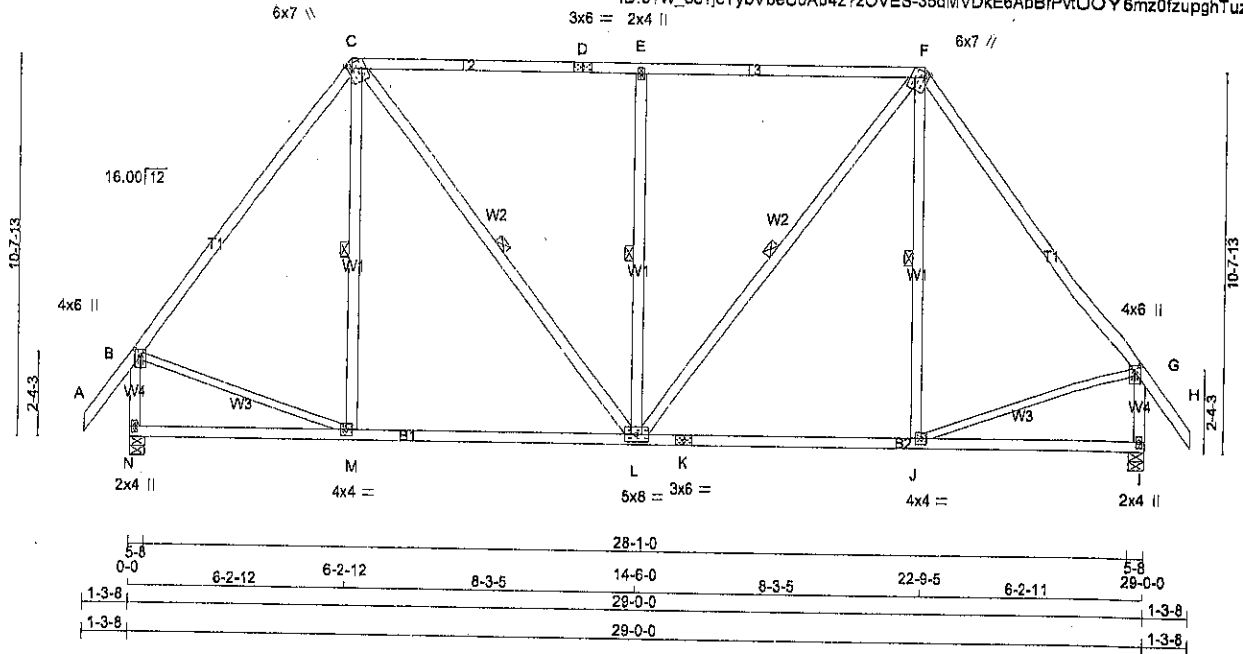
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-14073581



LUMBER

N. L. G. A. RULES

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

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-I	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-I	MT20	4.0	4.0		
K	BS-I	MT20	3.0	6.0		
L	BMVWV-I	MT20	5.0	8.0		
M	BMVW-I	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
N	1375	0	1375	0	5-8	1-8
I	1375	0	1375	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE			
N	988	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
I	988	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 = 4.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. 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)	LC1 MAX	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)	
FR-TO		FROM	TO		FR-TO				
A-B	0 / 40	-70.5	-70.5	0.07 (1)	10.00	M-C	-48 / 95	0.03 (1)	
B-C	-1029 / 0	-70.5	-70.5	0.38 (1)	6.25	C-L	0 / 550	0.09 (1)	
C-D	-959 / 0	-70.5	-70.5	0.95 (1)	4.39	L-E	-715 / 0	0.41 (1)	
D-E	-959 / 0	-70.5	-70.5	0.95 (1)	4.38	L-F	0 / 550	0.09 (1)	
E-F	-958 / 0	-70.5	-70.5	0.95 (1)	4.39	J-F	-48 / 95	0.03 (1)	
F-G	-1029 / 0	-70.5	-70.5	0.38 (1)	6.25	B-M	0 / 644	0.14 (1)	
G-H	0 / 40	-70.5	-70.5	0.07 (1)	10.00	J-G	0 / 644	0.14 (1)	
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				

TOTAL WEIGHT = 2 X 160 = 319 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, 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 (0.03")
ALLOWABLE DEFL. (TL) = L/360 (0.97")
CALCULATED VERT. DEFL. (TL) = L/999 (0.09")

CS1: 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 (PSI)	SECTION (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.

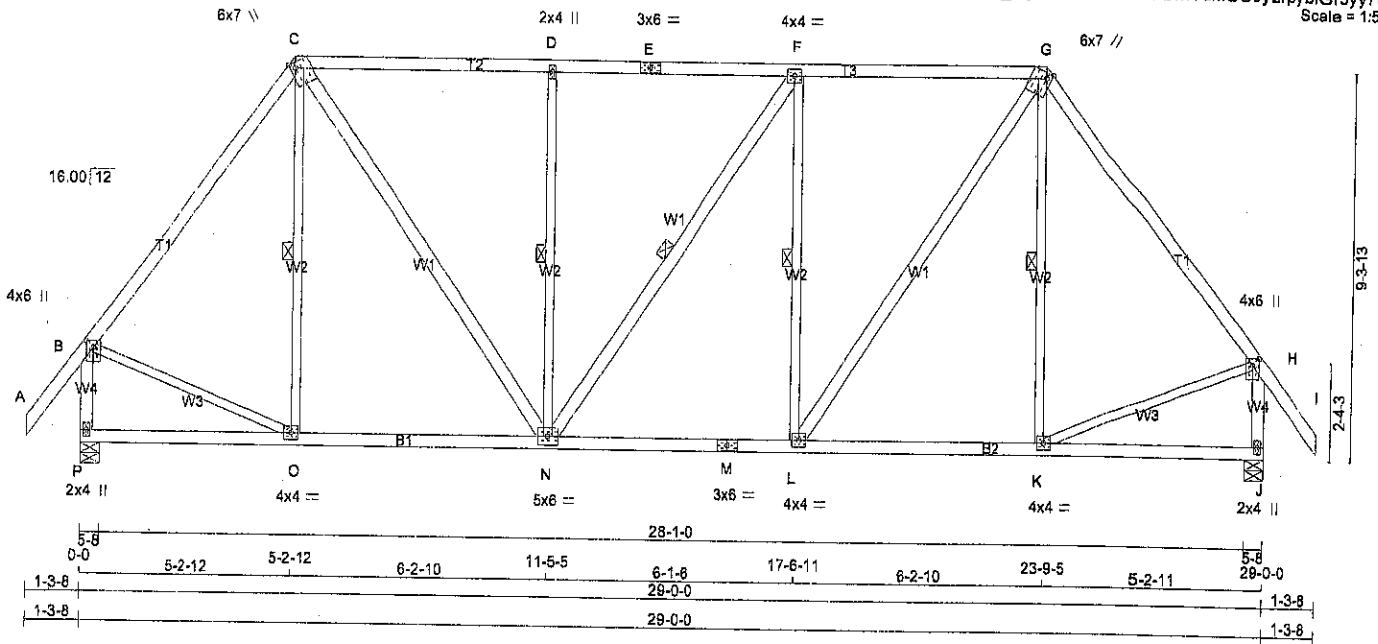
JSI GRIP= 0.81 (M) (INPUT = 0.90)
JSI METAL = 0.26 (B) (INPUT = 1.00)



A-11073580

Alpa Roof Truss, Maple

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

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	1.60
D TMW+w	MT20	2.0	4.0		
E TS-t	MT20	3.0	6.0		
F TMWW-t	MT20	4.0	4.0		
G TTWW+m	MT20	6.0	7.0	Edge	1.60
H TMVW+p	MT20	4.0	6.0	2.00	2.00
J BMV1+p	MT20	2.0	4.0		
K L-O					
K BMWW-t	MT20	4.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMWWW-t	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 BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
P	1375	0	1375	0	5-8
J	1375	0	1375	0	5-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	966	668 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	966	668 / 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) 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				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				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-114 / 51	0.07 (1)
B-C	-1033 / 0	-70.5	-70.5 0.43 (1)	5.66	C-N	0 / 698	0.11 (1)
C-D	-1013 / 0	-70.5	-70.5 0.40 (1)	5.66	N-D	-466 / 0	0.27 (1)
D-E	-1013 / 0	-70.5	-70.5 0.41 (1)	5.66	N-F	-2 / 0	0.00 (1)
E-F	-1013 / 0	-70.5	-70.5 0.41 (1)	5.66	L-F	-468 / 0	0.27 (1)
F-G	-1014 / 0	-70.5	-70.5 0.41 (1)	5.66	L-G	0 / 700	0.11 (1)
G-H	-1033 / 0	-70.5	-70.5 0.43 (1)	5.66	K-G	-116 / 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 158 = 316 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, 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 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

SSI: 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 = 0.50

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

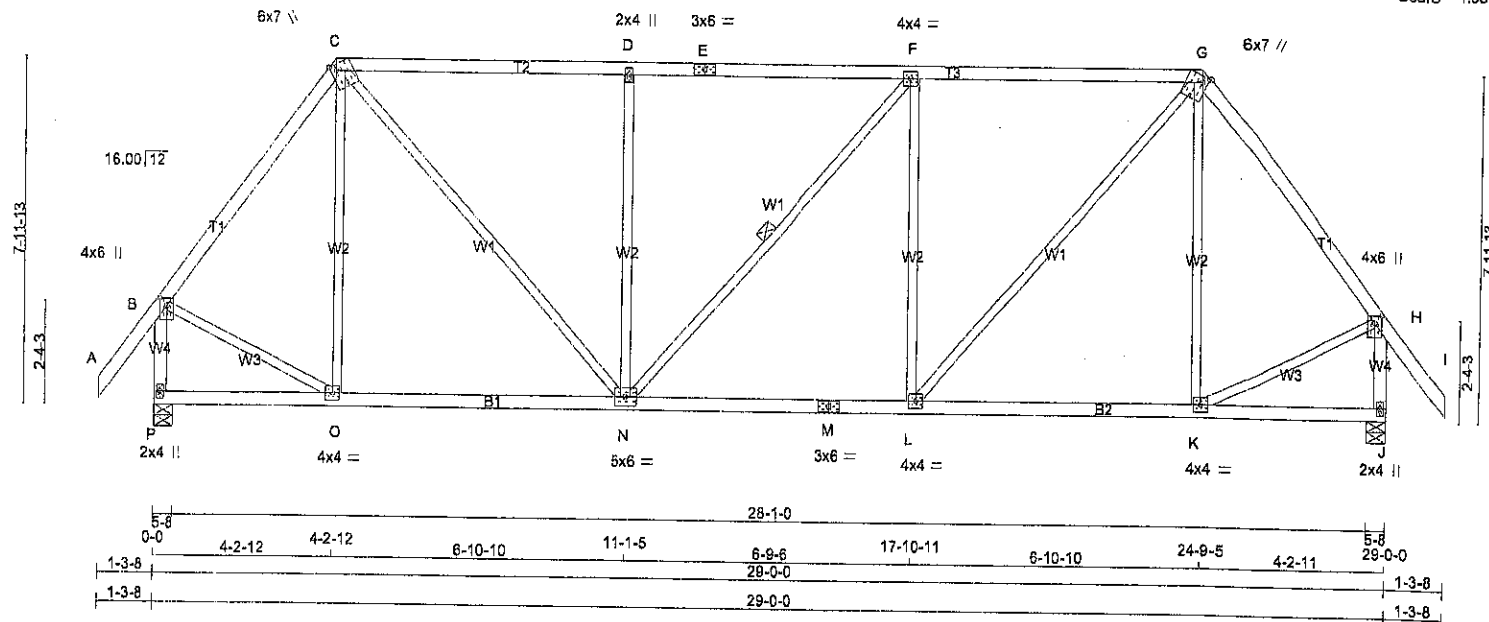
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073579



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

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	4.0	6.0	2.00	2.00
C TTWW+m	MT20	6.0	7.0	Edge	1.50
D TMW+w	MT20	2.0	4.0		
E TS-i	MT20	3.0	6.0		
F TMWW-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 BMWW-i	MT20	4.0	4.0		
M BS-i	MT20	3.0	6.0		
N BMWW-i	MT20	6.0	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 CBC 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		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
P	1375	0	1375	0	0	5-8	1-8	1-8	1-8
J	1375	0	1375	0	0	5-8	1-8	1-8	1-8

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
P	966	688 / 0	0 / 0	0 / 0	0 / 0
J	966	688 / 0	0 / 0	0 / 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 = 5.16FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. 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)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO			
A-B	0 / 40	-70.5 -70.5 0.10 (1)	10.00
B-C	-1027 / 0	-70.5 -70.5 0.26 (1)	5.88
C-D	-1186 / 0	-70.5 -70.5 0.52 (1)	5.18
D-E	-1186 / 0	-70.5 -70.5 0.52 (1)	5.16
E-F	-1186 / 0	-70.5 -70.5 0.52 (1)	5.16
F-G	-1186 / 0	-70.5 -70.5 0.53 (1)	5.16
G-H	-1027 / 0	-70.5 -70.5 0.26 (1)	5.88
H-I	0 / 40	-70.5 -70.5 0.10 (1)	10.00
P-B	-1350 / 0	0.0 0.0 0.17 (1)	6.98
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 / 811	-17.5 -17.5 0.21 (4)	10.00
K-J	0 / 0	-17.5 -17.5 0.13 (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

(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 (0.05")
 ALLOWABLE DEFL.(TL)= L/360 (0.97")
 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 (PSI)	SECTION (PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822	2284 1658

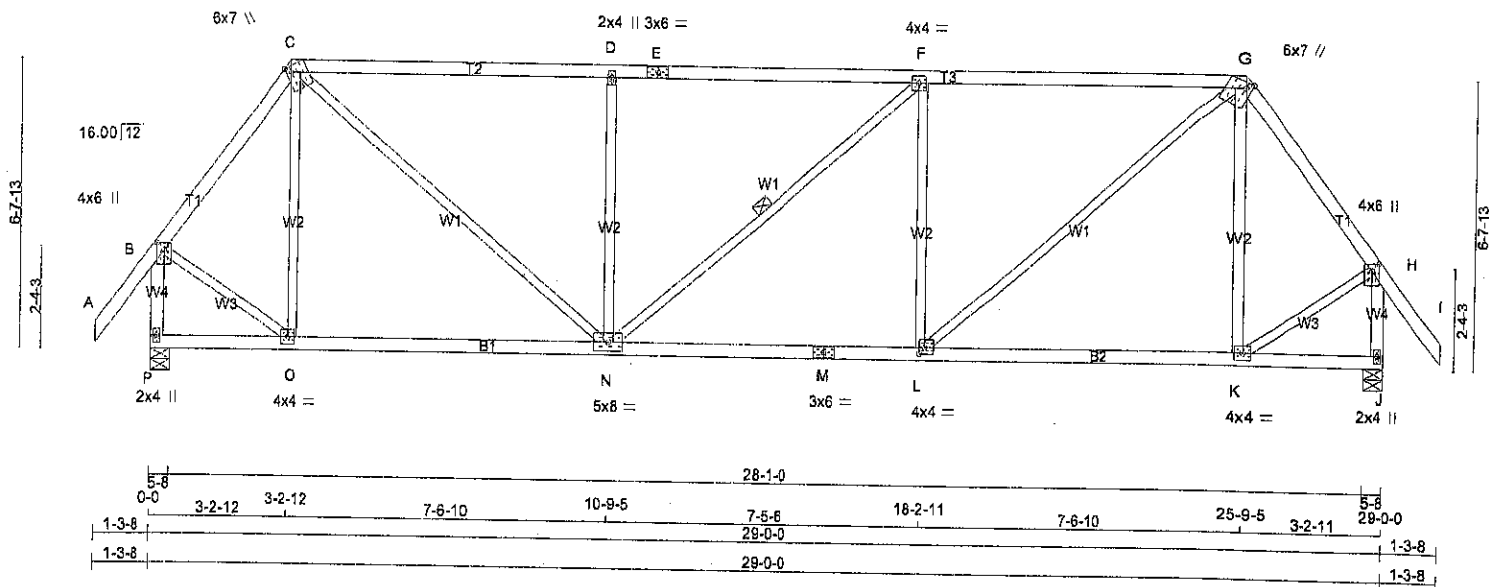
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.80)
 JSI METAL= 0.34 (M) (INPUT = 1.00)



A-11073578



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
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+m	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	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-t	MT20	4.0	4.0		
L	BMVW-t	MT20	4.0	4.0	1.75	1.50
M	BS-t	MT20	3.0	6.0		
N	BMVWVW-t	MT20	5.0	8.0		
O	BMVW-t	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 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	REORD BRG
JT	VERT	HORZ	DOWN	HORZ
P	1375	0	1375	0
J	1375	0	1375	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	968	668 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	968	668 / 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) P, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.58FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. 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 LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	MAX LC1 (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.10 (1)	10.00	C-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	-1430 / 0	-70.5 -70.5	0.88 (1)	4.80	N-D	-570 / 0	0.42 (1)
D-E	-1431 / 0	-70.5 -70.5	0.88 (1)	4.59	N-F	-1 / 0	0.00 (1)
E-F	-1431 / 0	-70.5 -70.5	0.88 (1)	4.59	L-F	-570 / 0	0.42 (1)
F-G	-1431 / 0	-70.5 -70.5	0.88 (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	-1366 / 0	0.0 0.0	0.17 (1)	6.95	K-H	0 / 690	0.16 (1)
J-H	-1366 / 0	0.0 0.0	0.17 (1)	6.95			
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

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, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 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/380 (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=0.25 (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 2284 1656

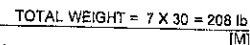
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (E) (INPUT = 0.80)
JSI METAL= 0.42 (M) (INPUT = 1.00)



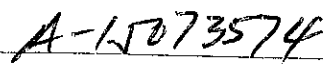
A-1073577



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

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



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 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.

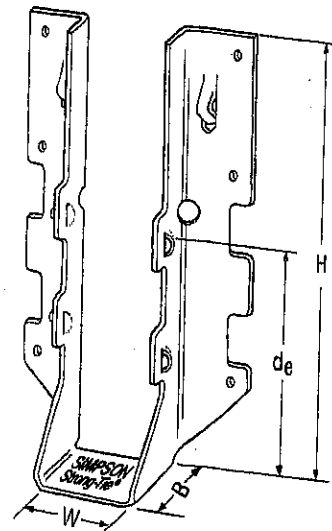
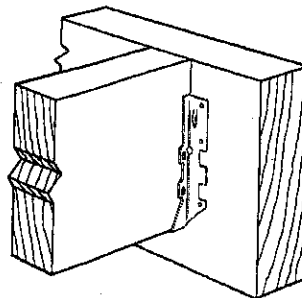
INSTALLATION:

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

OPTIONS:

- These hangers cannot be modified.

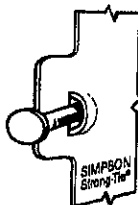
Typical LUS Installation



LUS28

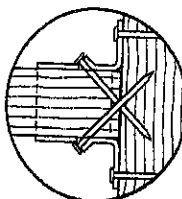
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1¼	1½	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	4-16d	2-16d	835	2020	590	1435
LUS26	18	1½	4¾	1¼	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	1¼	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	6¼	2	3¼	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¼	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	8½	2	5¼	8-16d	6-16d	2580	3345	2320	2375

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

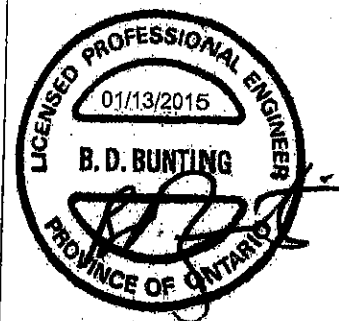


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



Double Shear Nailing Top View.



800-999-5099
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:

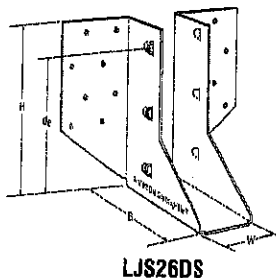
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

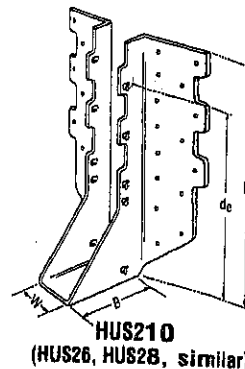
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

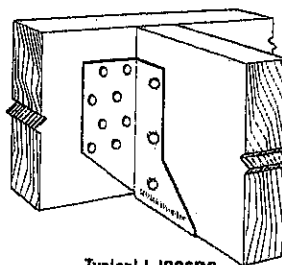
- See current catalogue for options



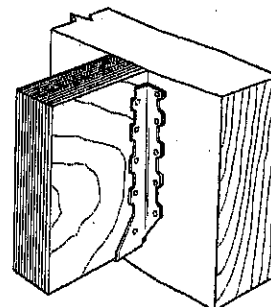
LJS26DS



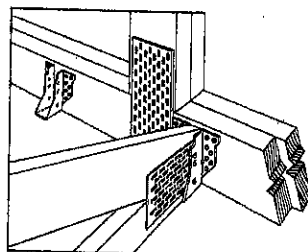
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



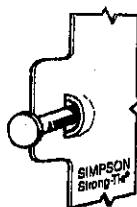
Typical HUS
Installation



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

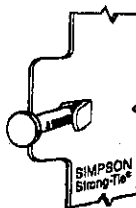
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	dg ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 3/8	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1 1/8	5 3/8	3	3 1/4	14-16d	6-16d	2705	4940	2065	3875
HUS28	16	1 1/8	7 3/8	3	6 3/8	22-16d	8-16d	3605	5365	2675	4345
HUS210	16	1 1/8	9 3/8	3	7 3/8	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1 1/8	9	3	8	30-16d	10-16d	4505	6450	4010	5200

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

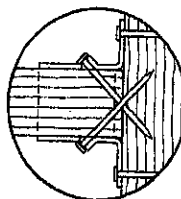


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

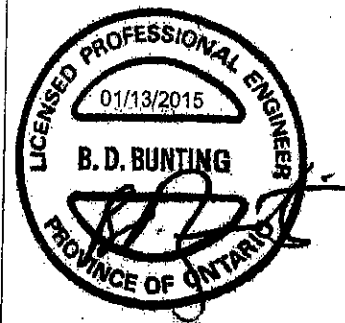
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



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HHUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 14 gauge

FINISH: G90 galvanized

DESIGN:

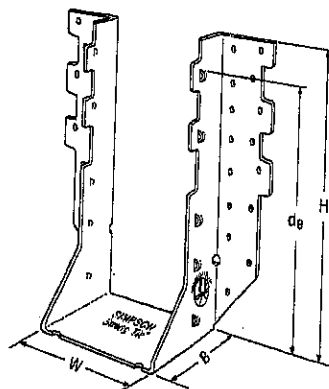
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

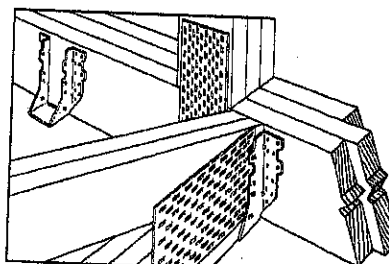
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



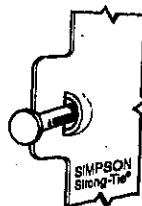
HHUS410



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

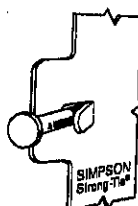
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HHUS26-2	14	3 5/8	5 1/8	3	3 15/16	14-16d	6-16d	2850	7335	2065	5205
HHUS28-2	14	3 5/8	7 1/2	3	6 1/2	22-16d	8-16d	3765	8940	2675	6345
HHUS210-2	14	3 5/8	9 1/2	3	8	30-16d	10-16d	4745	9680	4310	7000
HHUS210-3	14	4 1/8	9	3	7 15/16	30-16d	10-16d	4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 25/32	3	7 7/8	30-16d	10-16d	4745	10545	4310	7485
HHUS46	14	3 5/8	5 1/2	3	3 15/16	14-16d	6-16d	2540	7335	2065	5205
HHUS48	14	3 5/8	7 1/8	3	6 1/8	22-16d	8-16d	3765	8945	2675	6345
HHUS410	14	3 5/8	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 1/8	7 23/32	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.

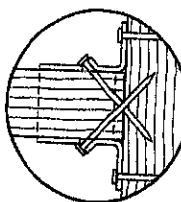


Dome Double
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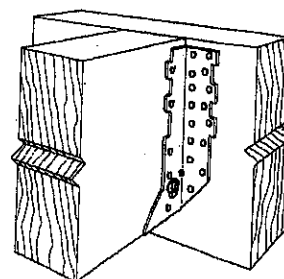
U.S. Patent
5,603,580



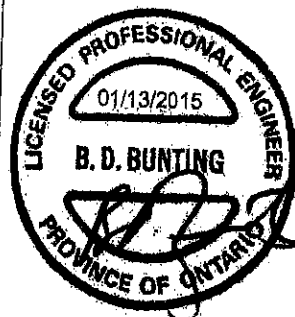
Double
Shear
Nailing
Side
View. Do
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tab back.



Double
Shear
Nailing
Top View.



Typical HHUS
Installation



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TC – Truss Connectors

SIMPSON
Strong-Tie

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

MATERIAL: 16 gauge

FINISH: G90 galvanized

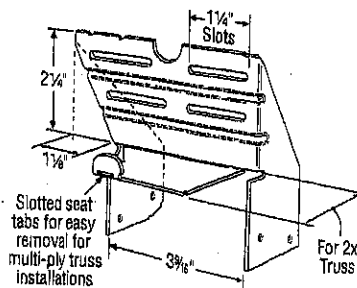
DESIGN: Factored resistances are in accordance with CSA 086-14

INSTALLATION:

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

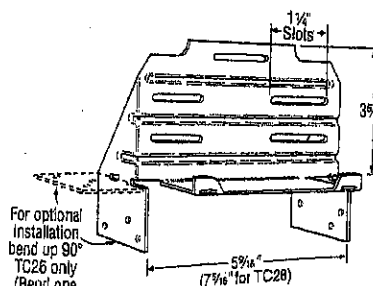
Optional TC Installation

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



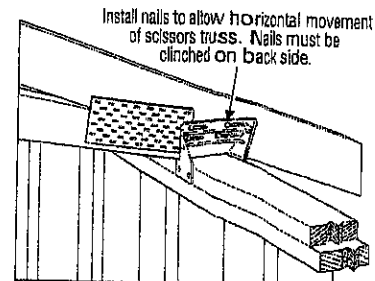
TC24

U.S. Patent 4,932,173

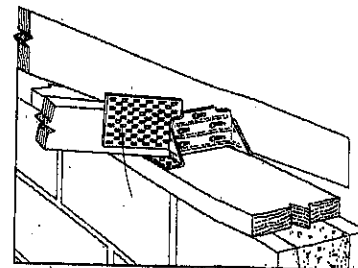


TC26

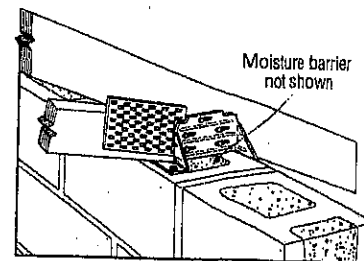
(TC28 Similar)



Typical TC24 Installation



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



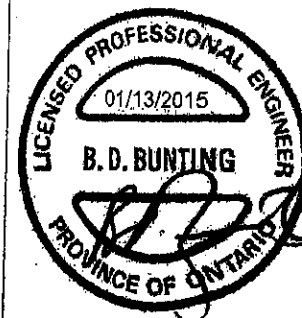
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

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

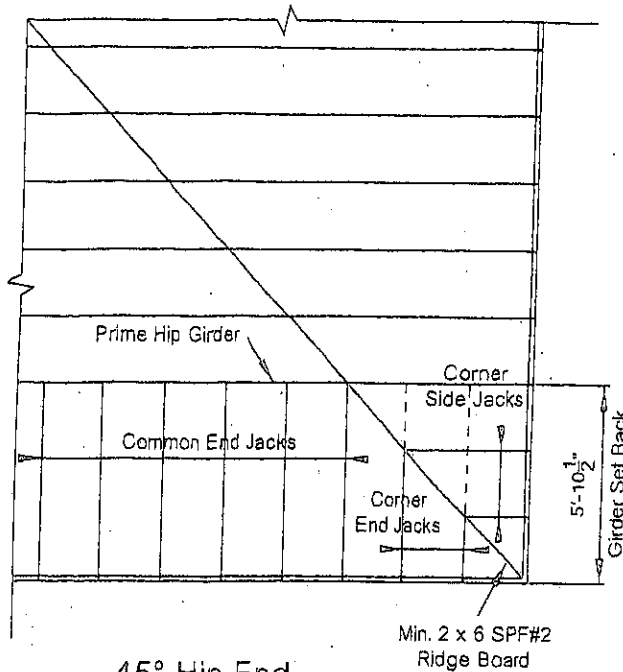
Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K _D = 1.15)
			lbs	lbs
TC26	5-10d	6-10dx1½"	810	660
	5-10d	6-10d	930	660

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.



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STRACON ENGINEERING INC.



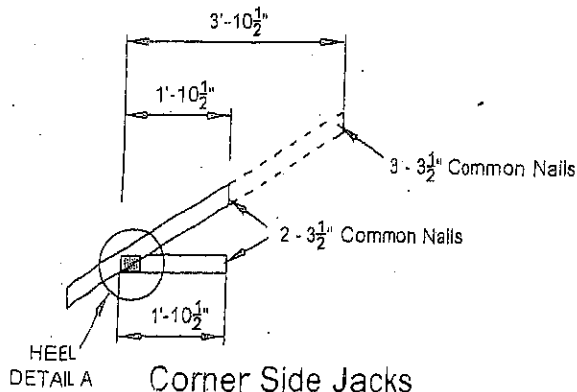
45° Hip End

LUMBER SPECIFICATION

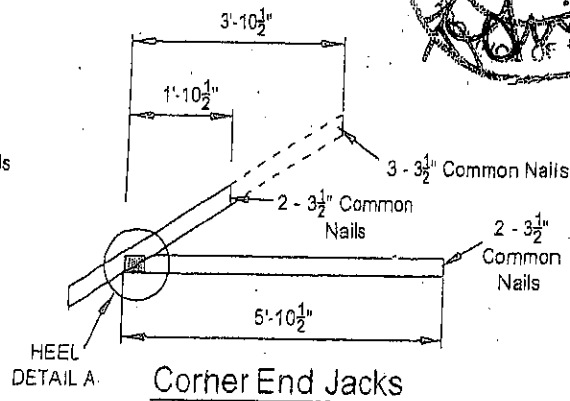
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

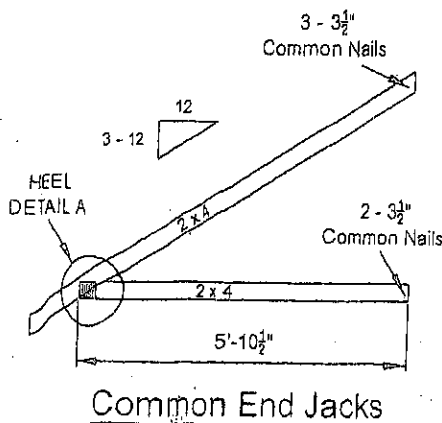
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



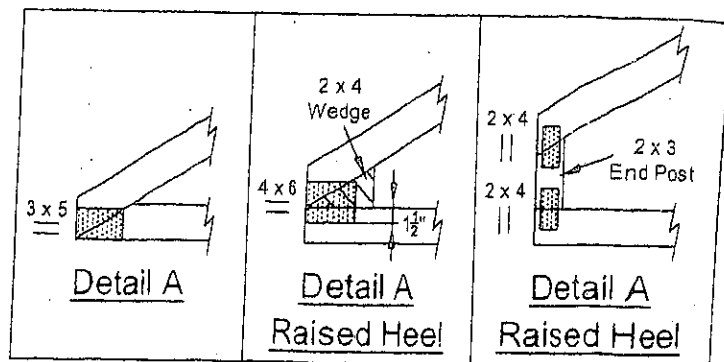
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008