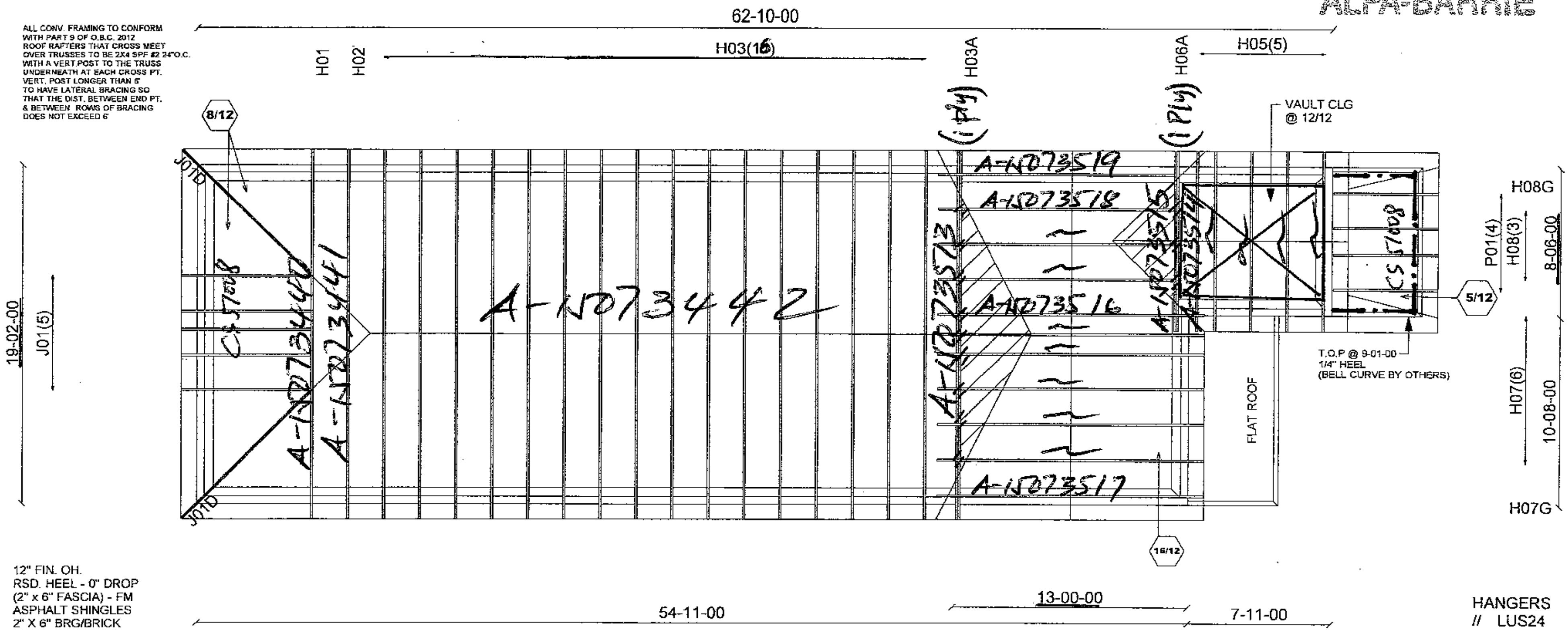
ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2X4 SPF #2 24"O.C.
WITH A VERT POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'



12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

HANGERS
// LUS24

CONVENTIONAL FRAMING BY OTHERS

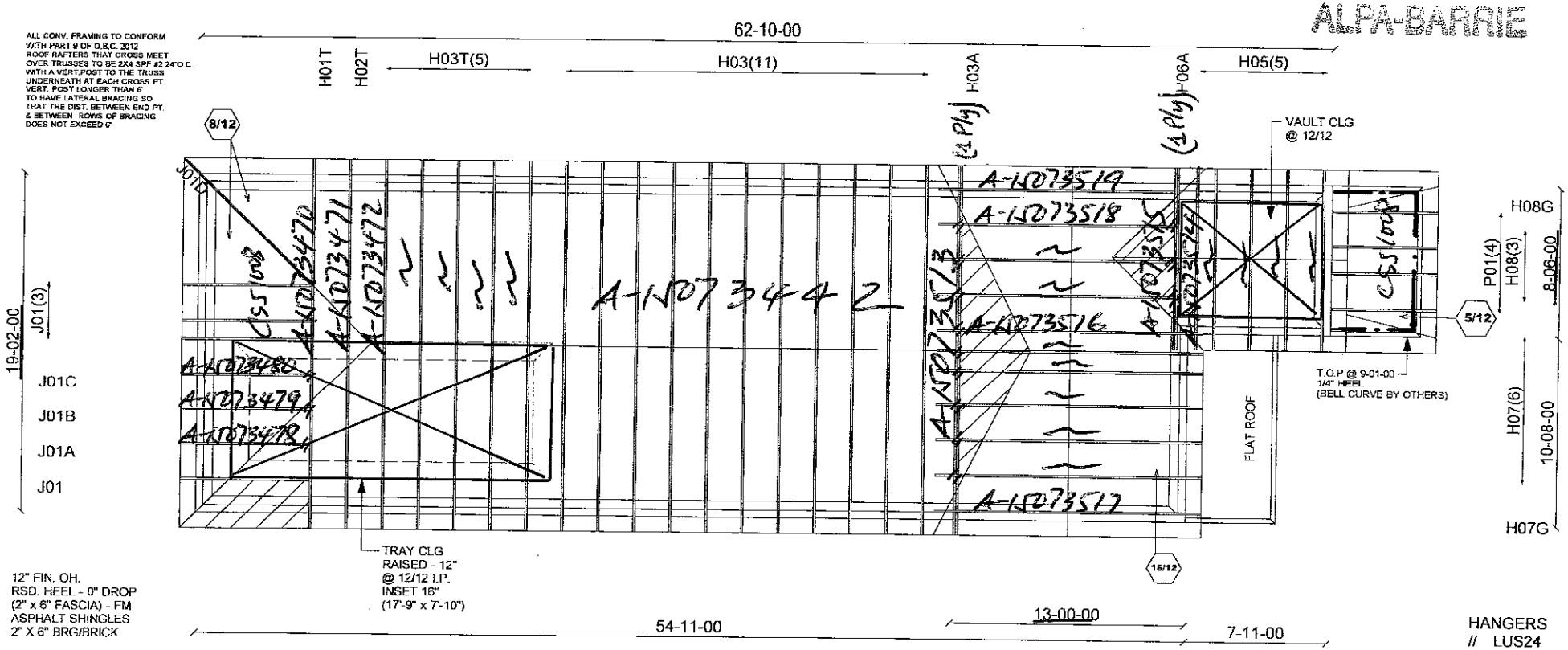
Mitek Ver: 7.5.0

PL 80980

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG	Model / Elevation: 25-5 / A	STD OR OPT 2ND FLR
Layout ID: 252532	Project: HUNTINGTON & NASHVILLE		
Plan Log: 79711	Date: 4/17/2015 Designer:		

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24"O.C. WITH A VERT.POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



CONVENTIONAL FRAMING BY OTHERS

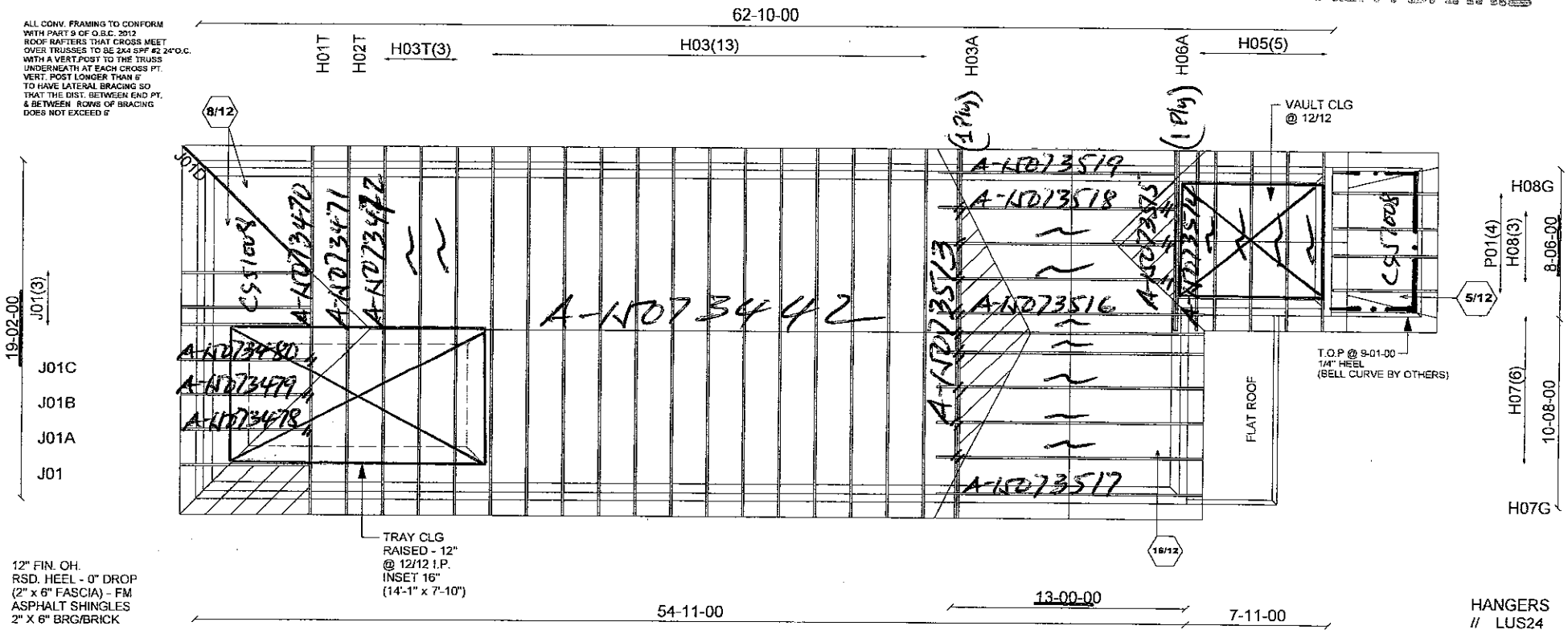
PL 80980

Mitek Ver: 7.5.0

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG	Model / Elevation: 25-5 / A OPT TRAY	
Layout ID: 252533	Project: HUNTINGTON & NASHVILLE		
Plan Log: 79711	Date: 4/17/2015	Designer:	

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 S/P/F #2 24"O.C. WITH A VERT.POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



CONVENTIONAL FRAMING BY OTHERS

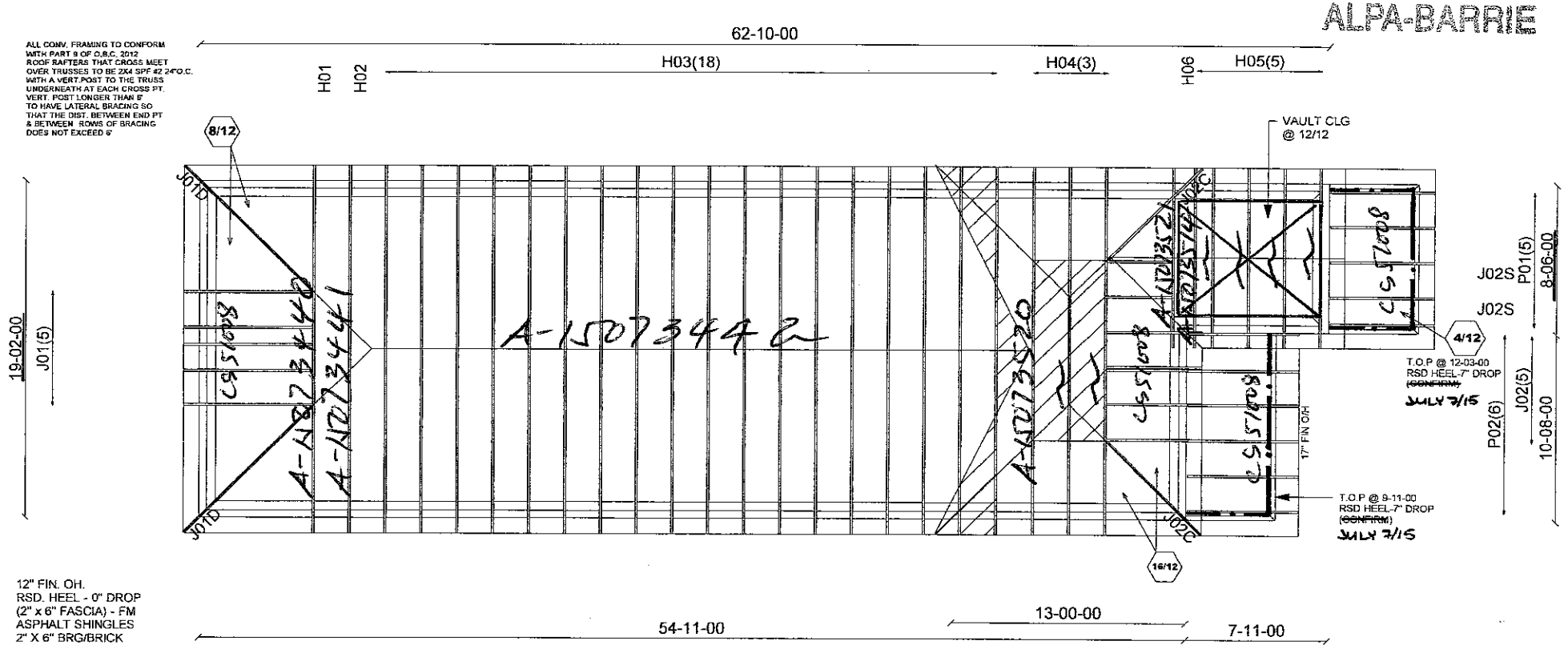
PL 80980

Mitek Ver: 7.5.0

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG	Model / Elevation: 25-5	/ A OPT 2ND W/TRAY
Layout ID: 252534	Project: HUNTINGTON & NASHVILLE		
Plan Log: 79711	Date: 4/17/2015 Designer:		

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24"O.C. WITH A VERT.POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'



12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

CONVENTIONAL FRAMING BY OTHERS

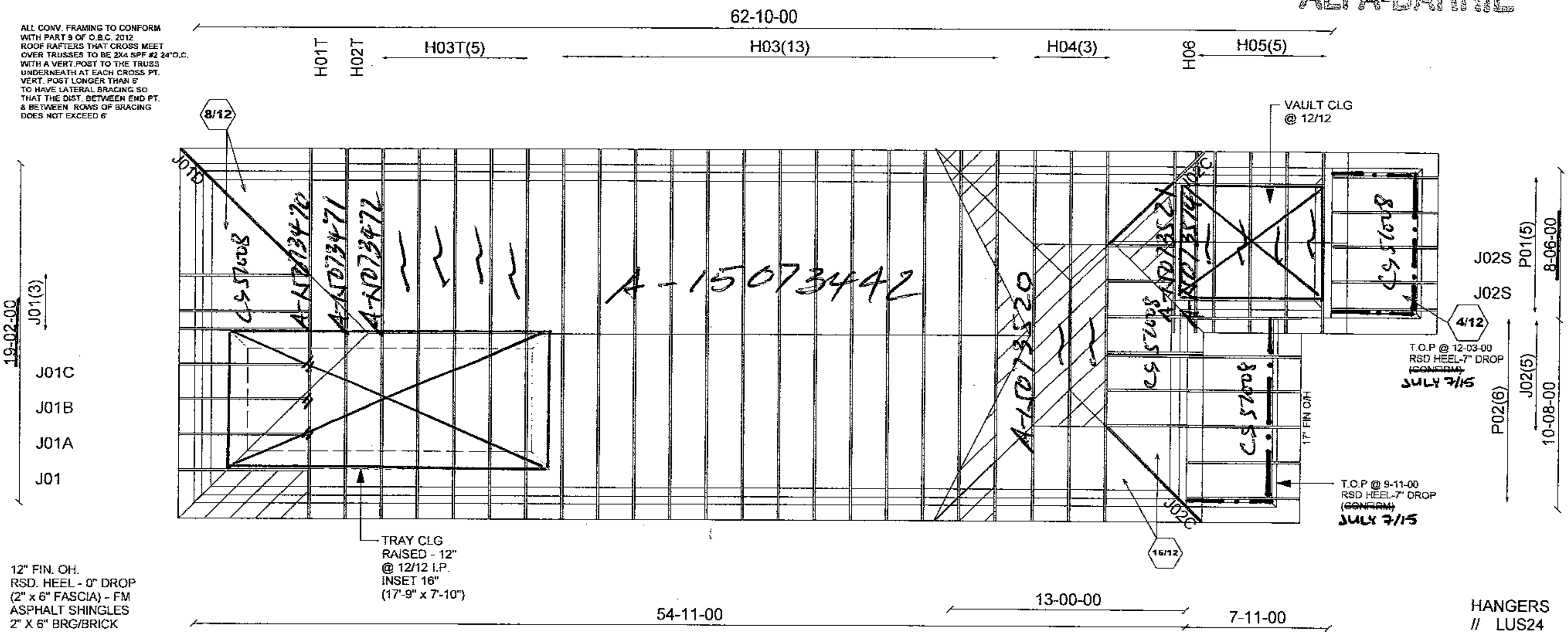
Mitek Ver: 7.5.0

PL 80980

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG	Model / Elevation: 25-5 / B	STD OR OPT 2ND FLR
Layout ID: 252535			
Plan Log: 79711	Project: HUNTINGTON & NASHVILLE		
	Date: 4/17/2015 Designer:		

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24"O.C. WITH A VERT.POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

HANGERS
// LUS24

CONVENTIONAL FRAMING BY OTHERS

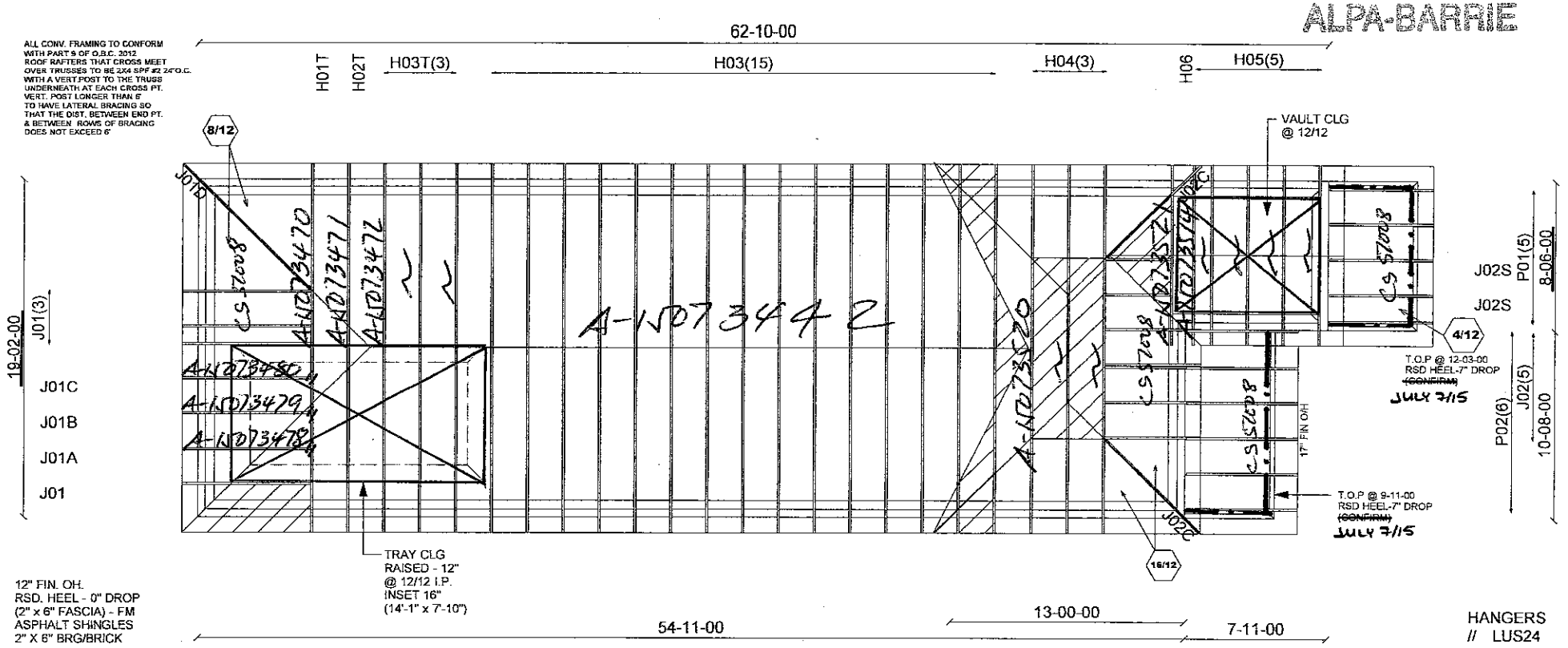
Mitek Ver: 7.5.0

PL 80980

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG		Model / Elevation: 25-5 / B OPT TRAY
Layout ID: 252536			
Plan Log: 79711	Project: HUNTINGTON & NASHVILLE		
	Date: 4/17/2015	Designer:	

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24"O.C. WITH A VERT.POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

HANGERS
// LUS24

CONVENTIONAL FRAMING BY OTHERS

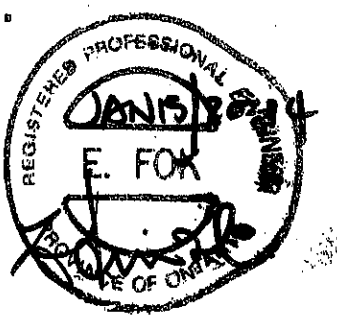
Mitek Ver: 7.5.0

PL 80980

Job Track: 40297	Builder / Location: GOLD PARK / KLEINBURG	Model / Elevation: 25-5	/ B OPT 2ND W/TRAY
Layout ID: 252537	Project: HUNTINGTON & NASHVILLE		
Plan Log: 79711	Date: 4/17/2015 Designer:		

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

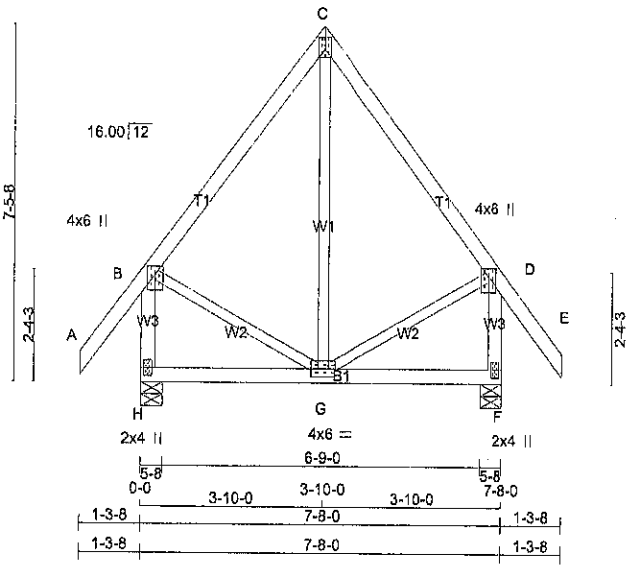
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252535	H06	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-8WYSvRrR_yl45lleiw7_WV2W_DnACJ3SrC0l71yyE?R

3x5 II

Scale: 1/4"=1'



TOTAL WEIGHT = 45 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

NOTES- (1)

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	533	0	533	0	0	5-8	1-8
F	591	0	591	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	373	266 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
F	414	294 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	G- C	0 / 108	0.04 (4)
B- C	-236 / 0	-70.5	-70.5	0.20 (1)	6.25	B- G	0 / 159	0.04 (1)
C- D	-236 / 0	-70.5	-70.5	0.20 (1)	6.25	G- D	0 / 159	0.04 (1)
D- E	0 / 40	-70.5	-70.5	0.11 (1)	10.00			
H- B	-496 / 0	0.0	0.0	0.07 (1)	7.81			
F- D	-496 / 0	0.0	0.0	0.07 (1)	7.81			
H- G	0 / 0	-17.5	-59.9	0.13 (1)	10.00			
G- F	0 / 0	-61.9	-61.9	0.13 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 2-0-0
END DISTANCE = 4-0-4
END SPAN CARRIED = 4-0-4
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 4-0-4
START SPAN CARRIED = 4-0-4
END DISTANCE = 7-8-0
END SPAN CARRIED = 4-0-4
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.20 (C-D:1) , BC=0.13 (G-H:1) , WB=0.04 (B-G:1) , SSI=0.12 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-1507352 1

LICENSED PROFESSIONAL ENGINEER
07/14/2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252535	H04	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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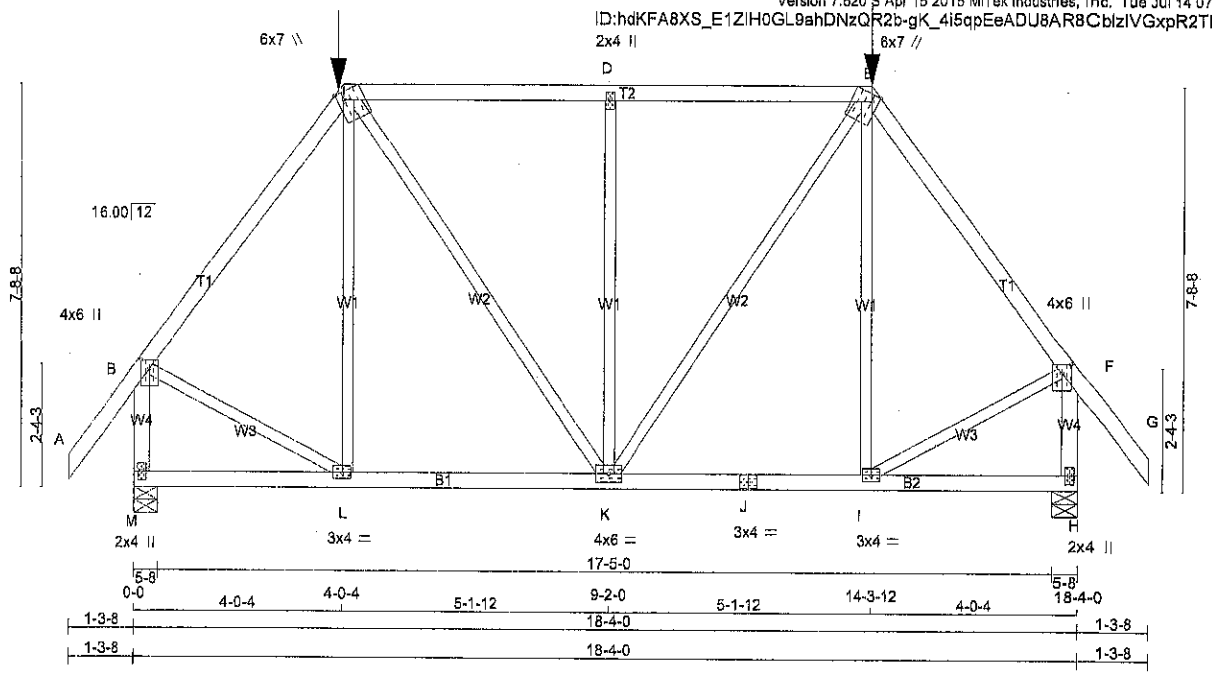

TOTAL WEIGHT = 3 X 96 = 289 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	6.0	7.0	Edge	1.50
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	3.0	4.0		
J	BS-t	MT20	3.0	4.0		
K	BMWWW-t	MT20	4.0	6.0		
L	BMWW-t	MT20	3.0	4.0		
M	BMV1+p	MT20	2.0	4.0		

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) 119.0 lbs FACTORED DOWN AT 14-3-12, AND 119.0 lbs FACTORED DOWN AT 4-0-4 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1289	0	1289	0	0	5-8	1-8
H	1289	0	1289	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	906	624 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0
H	906	624 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.77FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 40	-70.5	-70.5	0.11 (1)	10.00		L- C	-128 / 66	0.14 (1)
B- C	-927 / 0	-70.5	-70.5	0.25 (1)	6.10		C- K	0 / 482	0.12 (1)
C- D	-827 / 0	-106.0	-106.0	0.54 (1)	5.77		K- D	-661 / 0	0.74 (1)
D- E	-827 / 0	-106.0	-106.0	0.54 (1)	5.77		K- E	0 / 482	0.12 (1)
E- F	-927 / 0	-70.5	-70.5	0.25 (1)	6.10		I- E	-126 / 66	0.14 (1)
F- G	0 / 40	-70.5	-70.5	0.11 (1)	10.00		B- L	0 / 612	0.15 (1)
M- B	-1248 / 0	0.0	0.0	0.17 (1)	7.16		I- F	0 / 612	0.15 (1)
H- F	-1248 / 0	0.0	0.0	0.17 (1)	7.16				
M- L	0 / 0	-26.3	-26.3	0.14 (4)	10.00				
L- K	0 / 551	-26.3	-26.3	0.19 (4)	10.00				
K- J	0 / 551	-26.3	-26.3	0.19 (4)	10.00				
J- I	0 / 551	-26.3	-26.3	0.19 (4)	10.00				
I- H	0 / 0	-26.3	-26.3	0.14 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC	MAX-	MAX+	FACE	DIR.	TYPE
C	4-0-4	-119	-119	---	FRONT	VERT	TOTAL
E	14-3-12	-119	-119	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-0-4
END SETBACK = 4-0-4
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.54 (C-D:1) , BC=0.19 (K-L:4) , WB=0.74 (D-K:1) , SSI=0.29 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.23 (M) (INPUT = 1.00)

A-H0735520

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H08G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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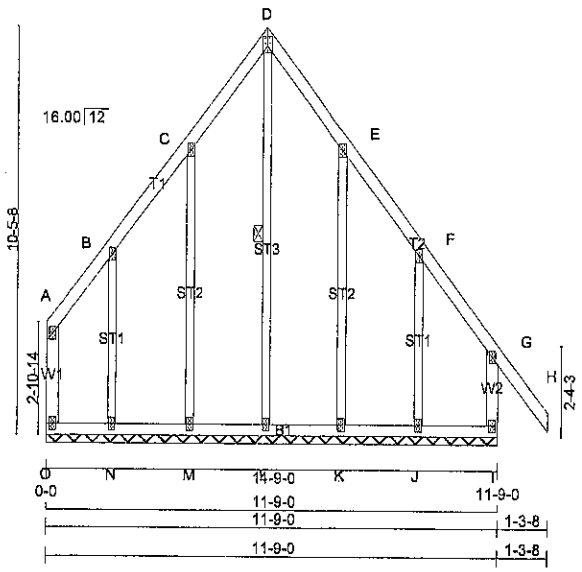
3x5 ||



TOTAL WEIGHT = 71 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
O - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - H	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
O - I	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
A	TMV+p	MT20	2.0	4.0		
B, C, E, F						
B	TMW+w	MT20	2.0	4.0		
D	TTW+p	MT20	3.0	5.0	2.00	Edge
G	TMV+p	MT20	2.0	4.0		
I	BMV1+p	MT20	2.0	4.0		
J, K, L, M, N						
J	BMW1+w	MT20	2.0	4.0		
O	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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- A	-51 / 0	0.0	0.0	0.01 (1)	7.81	L- D	-152 / 0	0.11 (1)
A- B	-2 / 1	-70.5	-70.5	0.03 (1)	10.00	M- C	-146 / 0	0.16 (1)
B- C	-1 / 2	-70.5	-70.5	0.04 (1)	10.00	N- B	-126 / 0	0.05 (1)
C- D	-1 / 3	-70.5	-70.5	0.04 (1)	10.00	K- E	-150 / 0	0.17 (1)
D- E	-1 / 2	-70.5	-70.5	0.04 (1)	10.00	J- F	-106 / 0	0.04 (1)
E- F	-1 / 5	-70.5	-70.5	0.04 (1)	10.00			
F- G	-23 / 0	-70.5	-70.5	0.08 (1)	6.25			
G- H	0 / 40	-70.5	-70.5	0.10 (1)	10.00			
I- G	-195 / 0	0.0	0.0	0.02 (1)	7.81			
O- N	0 / 3	-17.5	-17.5	0.01 (4)	10.00			
N- M	0 / 1	-17.5	-17.5	0.01 (4)	10.00			
M- L	-2 / 0	-17.5	-17.5	0.01 (4)	10.00			
L- K	-2 / 0	-17.5	-17.5	0.01 (4)	10.00			
K- J	0 / 1	-17.5	-17.5	0.02 (4)	10.00			
J- I	0 / 3	-17.5	-17.5	0.02 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/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
8.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10 (G-H:1) , BC=0.02 (I-J:1) , WB=0.17 (E-K:1) , SSI=0.05 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

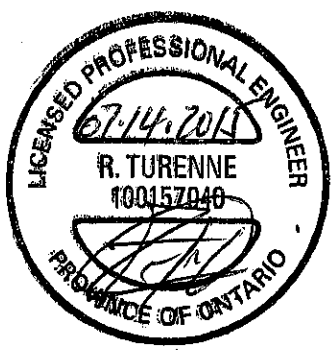
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (G) (INPUT = 0.90)
JSI METAL= 0.06 (G) (INPUT = 1.00)



A-107359

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H08	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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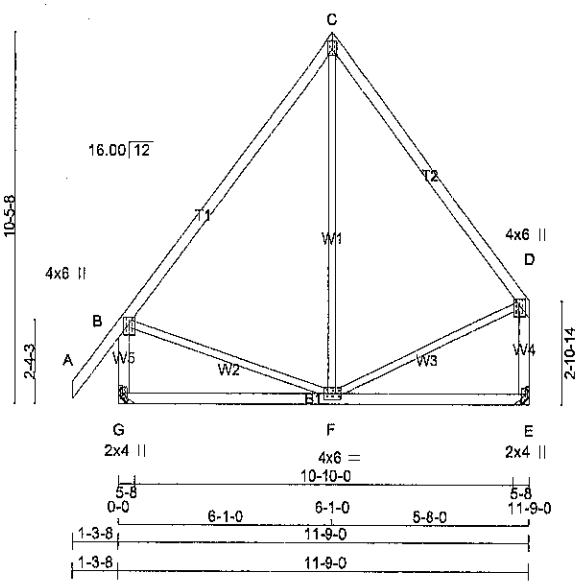
3x5 ||



TOTAL WEIGHT = 3 X 62 = 185 lb
[M][F]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMWWW-t	MT20	4.0	6.0		
G	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	616	0	616	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
E	517	0	517	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	432	306 / 0	0 / 0	0 / 0	0 / 0	126 / 0	0 / 0
E	364	247 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 40	-70.5	-70.5	0.08 (1)		10.00	F- C	0 / 100	0.03 (4)
B- C	-263 / 0	-70.5	-70.5	0.28 (1)		6.25	B- F	0 / 166	0.04 (1)
C- D	-263 / 0	-70.5	-70.5	0.29 (1)		6.25	F- D	0 / 173	0.04 (1)
G- B	-575 / 0	0.0	0.0	0.07 (1)		7.81			
E- D	-460 / 0	0.0	0.0	0.06 (1)		7.81			
G- F	0 / 0	-17.5	-17.5	0.17 (4)		10.00			
F- E	0 / 0	-17.5	-17.5	0.17 (4)		10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- 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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.29 (C-D:1) , BC=0.17 (E-F:4) , WB=0.04 (D-F:1) , SSI=0.10 (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 .

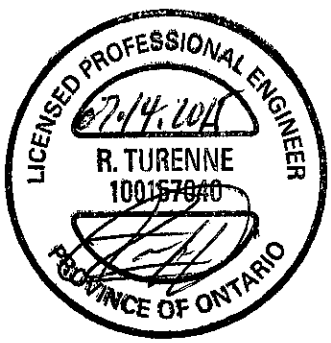
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.11 (G) (INPUT = 1.00)



A-10073518

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H07G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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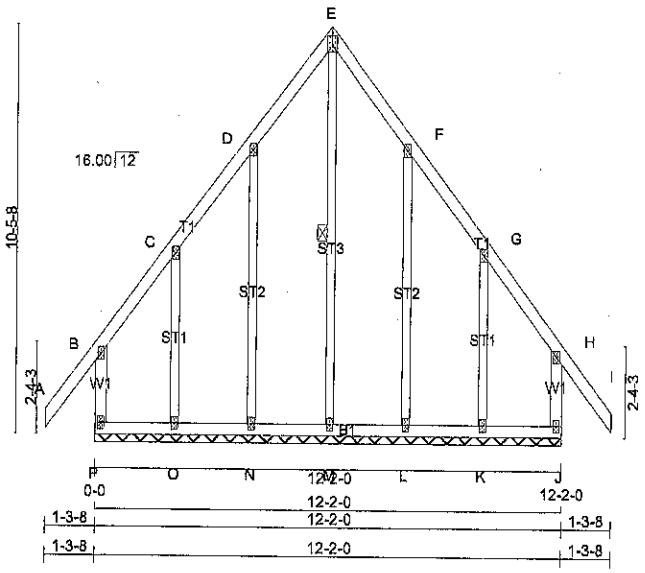

TOTAL WEIGHT = 74 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	5.0	2.00	Edge
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O						
K	BMW1+w	MT20	2.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
P- B	-179 / 0	0.0	0.0	0.03 (1)	7.81	M- E	-174 / 0	0.13 (1)
A- B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	N- D	-150 / 0	0.17 (1)
B- C	-4 / 0	-70.5	-70.5	0.07 (1)	10.00	O- C	-112 / 0	0.04 (1)
C- D	0 / 20	-70.5	-70.5	0.04 (1)	10.00	L- F	-150 / 0	0.17 (1)
D- E	0 / 17	-70.5	-70.5	0.04 (1)	10.00	K- G	-112 / 0	0.04 (1)
E- F	0 / 17	-70.5	-70.5	0.04 (1)	10.00			
F- G	0 / 20	-70.5	-70.5	0.04 (1)	10.00			
G- H	-4 / 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	-179 / 0	0.0	0.0	0.03 (1)	7.81			
P- O	-6 / 0	-17.5	-17.5	0.02 (4)	10.00			
O- N	-9 / 0	-17.5	-17.5	0.02 (4)	10.00			
N- M	-11 / 0	-17.5	-17.5	0.01 (4)	6.25			
M- L	-11 / 0	-17.5	-17.5	0.01 (4)	6.25			
L- K	-9 / 0	-17.5	-17.5	0.02 (4)	10.00			
K- J	-6 / 0	-17.5	-17.5	0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- 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=0.02 (K-L:4) , WB=0.17 (D-N: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (E) (INPUT = 0.90)
JSI METAL= 0.05 (H) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/14/2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

A-H073517

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H07	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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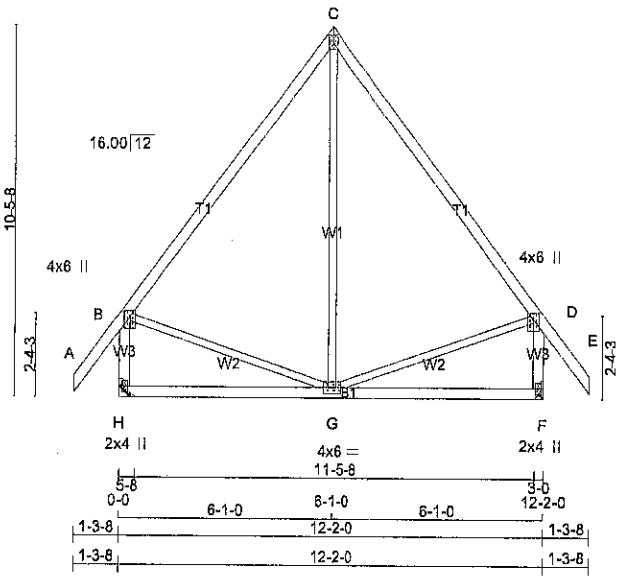
3x5 II

Scale = 1:65.1



TOTAL WEIGHT = 6 X 65 = 390 lb [M][F]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

NOTES- (1)

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	634	0	634	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
F	634	0	634	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	445	314 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
F	445	314 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 40	-70.5	-70.5	0.08 (1)	10.00		G- C	0 / 110	0.04 (4)
B- C	-282 / 0	-70.5	-70.5	0.28 (1)	6.25		B- G	0 / 178	0.04 (1)
C- D	-282 / 0	-70.5	-70.5	0.28 (1)	6.25		G- D	0 / 178	0.04 (1)
D- E	0 / 40	-70.5	-70.5	0.08 (1)	10.00				
H- B	-594 / 0	0.0	0.0	0.08 (1)	7.81				
F- D	-594 / 0	0.0	0.0	0.08 (1)	7.81				
H- G	0 / 0	-17.5	-17.5	0.19 (4)	10.00				
G- F	0 / 0	-17.5	-17.5	0.19 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- 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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.28 (C-D:1) , BC=0.19 (G-H:4) , WB=0.04 (D-G:1) , SSI=0.10 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (B) (INPUT = 0.90)
JSI METAL= 0.11 (F) (INPUT = 1.00)

A-150735516

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H06A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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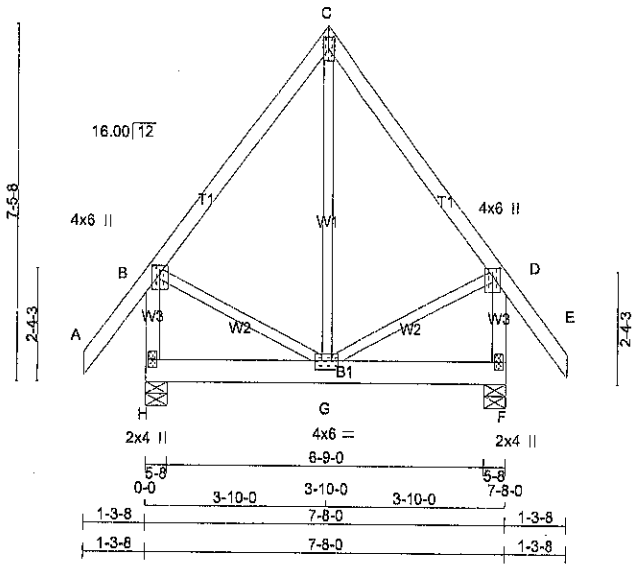
ID:hdKFA8XS_E1ZiH0GL9ahDNzQR2b-oZnRt5sSsN?NkRrxNiRS08Nxv7EHwH89JrGvoYyyEK3

3x6 II

Scale: 1/4"=1'



TOTAL WEIGHT = 60 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW+p	MT20	3.0	6.0		
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWWW-t	MT20	4.0	6.0	2.25	3.00
H	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	1258	0	1258	0	0	5-8	1-8
F	1258	0	1258	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	884	612 / 0	0 / 0	0 / 0	0 / 0	272 / 0	0 / 0
F	884	612 / 0	0 / 0	0 / 0	0 / 0	272 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 40	-70.5	-70.5	0.11 (1)	10.00		G- C	0 / 715	0.18 (1)
B- C	-615 / 0	-70.5	-70.5	0.21 (1)	6.25		B- G	0 / 411	0.10 (1)
C- D	-615 / 0	-70.5	-70.5	0.21 (1)	6.25		G- D	0 / 411	0.10 (1)
D- E	0 / 40	-70.5	-70.5	0.11 (1)	10.00				
H- B	-907 / 0	0.0	0.0	0.12 (1)	7.81				
F- D	-907 / 0	0.0	0.0	0.12 (1)	7.81				
H- G	0 / 0	-231.9	-231.9	0.26 (1)	10.00				
G- F	0 / 0	-231.9	-231.9	0.26 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-9-0
END DISTANCE = 7-8-0
END SPAN CARRIED = 11-9-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 65 % OF GSL.

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

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

(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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.21 (C-D:1) , BC=0.26 (G-H:1) , WB=0.18 (C-G:1) , SSI=0.36 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (G) (INPUT = 0.90)
JSI METAL= 0.18 (G) (INPUT = 1.00)

A-10073515

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H05	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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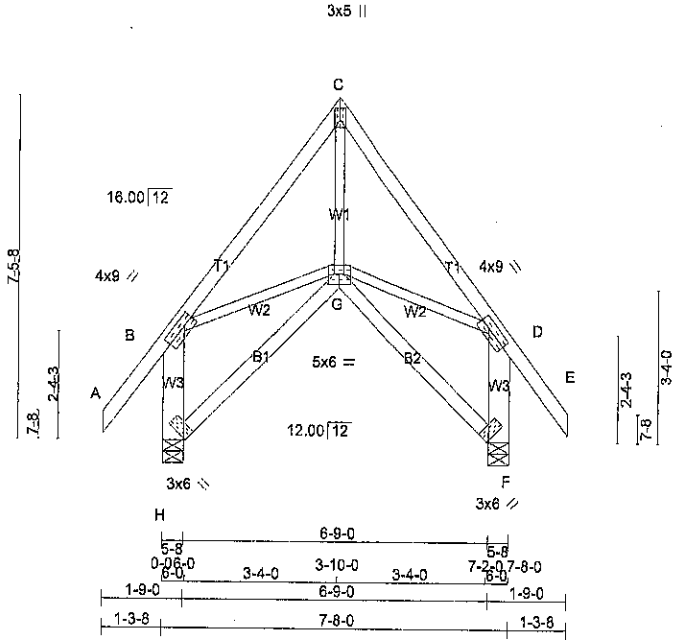

TOTAL WEIGHT = 5 X 49 = 246 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x6	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	2.00	3.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW-t	MT20	4.0	9.0	2.00	3.00
F	BVM1+l	MT20	3.0	6.0	Edge	0.25
G	BBWWW-p	MT20	5.0	6.0	2.75	3.00
H	BVM1+l	MT20	3.0	6.0	Edge	0.25

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.

LICENSED PROFESSIONAL ENGINEER
07.14.2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	436	0	436	0	0	5-8	1-8
F	436	0	436	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	305	220 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
F	305	220 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 40	-70.5	-70.5	0.10 (1)	10.00
B- C	-293 / 0	-70.5	-70.5	0.13 (1)	6.25
C- D	-293 / 0	-70.5	-70.5	0.13 (1)	6.25
D- E	0 / 40	-70.5	-70.5	0.10 (1)	10.00
H- B	-403 / 0	0.0	0.0	0.04 (1)	7.81
F- D	-403 / 0	0.0	0.0	0.04 (1)	7.81
H- G	0 / 0	-17.5	-17.5	0.08 (4)	10.00
G- F	0 / 0	-17.5	-17.5	0.08 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
G- C	0 / 199	0.04 (1)
B- G	0 / 188	0.04 (1)
G- D	0 / 188	0.04 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.13 (C-D:1) , BC=0.08 (F-G:4) , WB=0.04 (C-G:1) , SSI=0.06 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	616	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (C) (INPUT = 0.90)
JSI METAL= 0.08 (D) (INPUT = 1.00)

A-1073514

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252532	H03A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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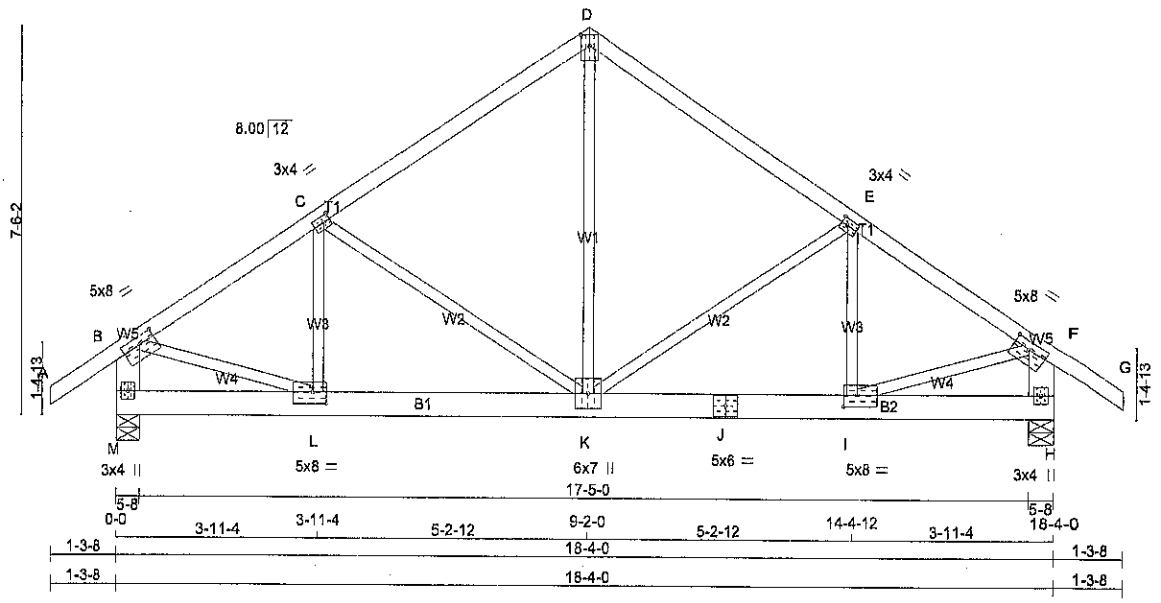

TOTAL WEIGHT = 91 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
M - B	2x6	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
M - J	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	3.75
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	4.0	6.0	2.50	2.00
E	TMWW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW-t	MT20	5.0	8.0	1.75	3.75
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	5.0	8.0	2.75	3.25
J	BS-t	MT20	5.0	6.0		
K	BMWWW+t	MT20	6.0	7.0		
L	BMWW-t	MT20	5.0	8.0	2.75	3.25
M	BMV1+p	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	2952	0	2952	0	0	5-8	4-2
H	2952	0	2952	0	0	5-8	4-2

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	2078	1420 / 0	0 / 0	0 / 0	0 / 0	658 / 0	0 / 0
H	2078	1420 / 0	0 / 0	0 / 0	0 / 0	658 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.67FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.10 (1)	10.00	
B- C	-3081 / 0	-70.5	-70.5	0.43 (1)	3.57	
C- D	-2331 / 0	-70.5	-70.5	0.42 (1)	4.11	
D- E	-2331 / 0	-70.5	-70.5	0.42 (1)	4.11	
E- F	-3081 / 0	-70.5	-70.5	0.43 (1)	3.57	
F- G	0 / 27	-70.5	-70.5	0.10 (1)	10.00	
M- B	-2570 / 0	0.0	0.0	0.18 (1)	6.43	
H- F	-2570 / 0	0.0	0.0	0.18 (1)	6.43	
M- L	0 / 0	-241.0	-241.0	0.27 (1)	10.00	
L- K	0 / 2583	-241.0	-241.0	0.77 (1)	10.00	
K- J	0 / 2583	-241.0	-241.0	0.77 (1)	10.00	
J- I	0 / 2583	-241.0	-241.0	0.77 (1)	10.00	
I- H	0 / 0	-241.0	-241.0	0.27 (1)	10.00	

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- D	0 / 2261	0.56 (1)
K- E	-800 / 0	0.58 (1)
I- E	0 / 498	0.12 (1)
C- K	-800 / 0	0.58 (1)
L- C	0 / 498	0.12 (1)
B- L	0 / 2664	0.66 (1)
I- F	0 / 2664	0.66 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 12-2-0
END DISTANCE = 18-4-0
END SPAN CARRIED = 12-2-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.43 (B-C:1) , BC=0.77 (I-K:1) , WB=0.66 (F-I:1) , SSI=0.45 (I-K:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.67 (J) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07-14-2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

A-H073513

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	J01C	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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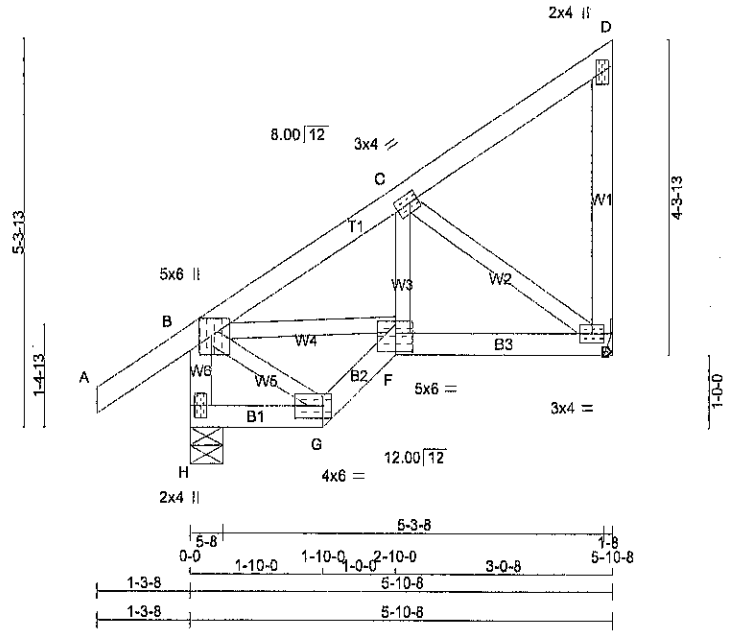

TOTAL WEIGHT = 30 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW+p	MT20	5.0	6.0	Edge	
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BBWW-I	MT20	5.0	6.0	3.00	3.00
G	BBW-I	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
H	355	0	355	0	0	IN-SX	IN-SX
E	258	0	258	0	0	5-8	1-8
						HANGER BY OTHERS	
						MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	248	181 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
E	182	123 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H-B	-339 / 0	0.0	0.0	0.03 (1)	7.81	B-G	0 / 20	0.01 (4)
A-B	0 / 27	-70.5	-70.5	0.09 (1)	10.00	B-F	0 / 209	0.05 (1)
B-C	-257 / 0	-70.5	-70.5	0.10 (1)	6.25	F-C	0 / 57	0.02 (4)
C-D	-13 / 0	-70.5	-70.5	0.10 (1)	6.25	C-E	-271 / 0	0.06 (1)
E-D	-79 / 0	0.0	0.0	0.02 (1)	7.81			
H-G	0 / 0	-17.5	-17.5	0.02 (4)	10.00			
G-F	0 / 25	-17.5	-17.5	0.01 (4)	10.00			
F-E	0 / 223	-17.5	-17.5	0.06 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10 (B-C:1) , BC=0.06 (E-F:1) , WB=0.06 (C-E:1) , SSI=0.06 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	622	2284	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.52 (B) (INPUT = 0.90)
JSI METAL= 0.06 (E) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07-13-2015
R. TURENNE
100157940
PROVINCE OF ONTARIO

A-150734480

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	J01B	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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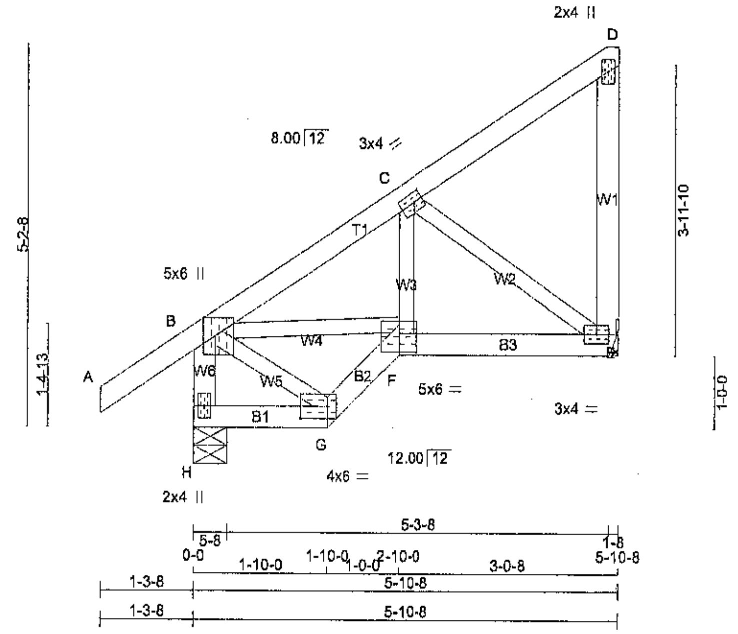

TOTAL WEIGHT = 30 lb

[M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW+p	MT20	5.0	6.0	Edge	
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BBWW-l	MT20	5.0	6.0	3.00	3.00
G	BBW-l	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

NOTES- (1)

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

LICENSED PROFESSIONAL ENGINEER

07-13-2015

R. TURENNE

100157040

PROVINCE OF ONTARIO

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	258	0	258	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
H	355	0	355	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	182	123 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0
H	248	181 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.09 (1)	10.00
B- C	-257 / 0	-70.5	-70.5	0.10 (1)	6.25
C- D	-13 / 0	-70.5	-70.5	0.10 (1)	6.25
E- D	-79 / 0	0.0	0.0	0.02 (1)	7.81
H- B	-339 / 0	0.0	0.0	0.03 (1)	7.81
H- G	0 / 0	-17.5	-17.5	0.02 (4)	10.00
G- F	0 / 25	-17.5	-17.5	0.01 (4)	10.00
F- E	0 / 223	-17.5	-17.5	0.06 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- F	0 / 209	0.05 (1)
F- C	0 / 57	0.02 (4)
C- E	-271 / 0	0.06 (1)
B- G	0 / 20	0.01 (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

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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10 (B-C:1) , BC=0.06 (E-F:1) , WB=0.06 (C-E:1) , SSI=0.08 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.52 (B) (INPUT = 0.90)
JSI METAL= 0.08 (E) (INPUT = 1.00)

A-1507379

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	J01A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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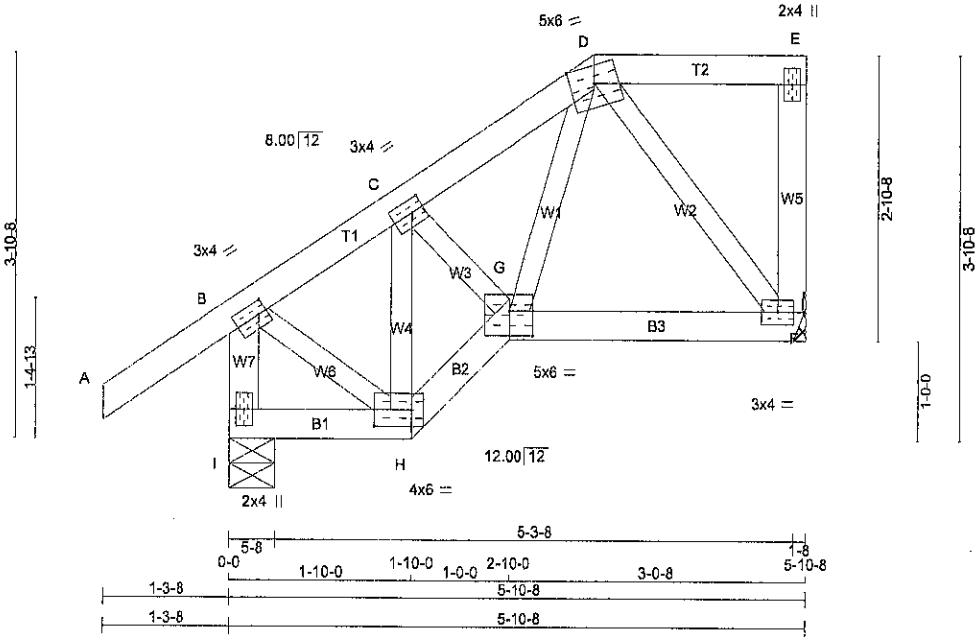

TOTAL WEIGHT = 29 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	3.0	4.0	1.50	1.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	5.0	6.0	Edge	
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BBWW-l	MT20	5.0	6.0	3.00	3.00
H	BBWW-l	MT20	4.0	6.0	2.00	4.50
I	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	247	0	247	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
I	366	0	366	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	174	117 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0
I	256	186 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.09 (1)	10.00
B- C	-173 / 0	-70.5	-70.5	0.09 (1)	6.25
C- D	-197 / 0	-70.5	-70.5	0.04 (1)	6.25
D- E	0 / 0	-70.5	-70.5	0.06 (1)	10.00
F- E	-76 / 0	0.0	0.0	0.01 (1)	7.81
I- B	-350 / 0	0.0	0.0	0.04 (1)	7.81
I- H	0 / 0	-17.5	-17.5	0.02 (4)	10.00
H- G	0 / 171	-17.5	-17.5	0.03 (1)	10.00
G- F	0 / 123	-17.5	-17.5	0.06 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-170 / 0	0.03 (1)
C- G	0 / 61	0.01 (1)
G- D	0 / 119	0.03 (1)
D- F	-190 / 0	0.04 (1)
B- H	0 / 148	0.03 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.09 (A-B:1) , BC=0.06 (F-G:4) , WB=0.04 (D-F: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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.48 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

A-1073478

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	H03T	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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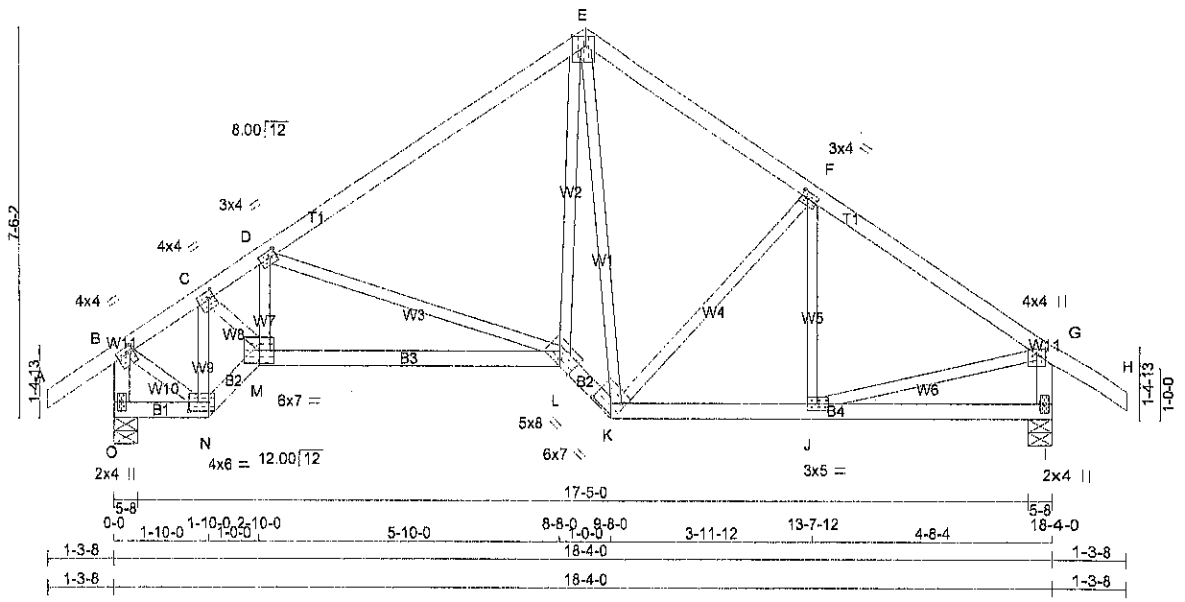

TOTAL WEIGHT = 4 X 86 = 343 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	1.50	1.00
C	TMWW-t	MT20	4.0	4.0	1.75	1.50
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW+p	MT20	5.0	6.0	Edge	3.00
F	TMWW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW+p	MT20	4.0	4.0	1.25	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	3.0	5.0		
K	BBWW-h	MT20	6.0	7.0	3.75	6.00
L	BBWW-h	MT20	5.0	8.0	Edge	
M	BBWW-l	MT20	6.0	7.0		
N	BBWW-l	MT20	4.0	6.0	2.00	4.50
O	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 VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
O	907	0	907	0	0	5-8	1-8
I	899	0	899	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	636	444 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
I	631	440 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.57FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX (PLF)	CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.09 (1)		10.00
B- C	-677 / 0	-70.5	-70.5	0.08 (1)		6.25
C- D	-1152 / 0	-70.5	-70.5	0.30 (1)		5.57
D- E	-761 / 0	-70.5	-70.5	0.33 (1)		6.25
E- F	-656 / 0	-70.5	-70.5	0.19 (1)		6.25
F- G	-838 / 0	-70.5	-70.5	0.20 (1)		6.25
G- H	0 / 27	-70.5	-70.5	0.09 (1)		10.00
O- B	-890 / 0	0.0	0.0	0.09 (1)		7.81
I- G	-865 / 0	0.0	0.0	0.09 (1)		7.81
O- N	0 / 0	-17.5	-17.5	0.02 (4)		10.00
N- M	0 / 693	-17.5	-17.5	0.11 (1)		10.00
M- L	0 / 1096	-17.5	-17.5	0.28 (1)		10.00
L- K	0 / 777	-17.5	-17.5	0.13 (1)		10.00
K- J	0 / 715	-17.5	-17.5	0.16 (1)		10.00
J- I	0 / 0	-17.5	-17.5	0.09 (4)		10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
N- C	-768 / 0	0.12 (1)
C- M	0 / 888	0.20 (1)
M- D	-104 / 57	0.02 (4)
D- L	-512 / 0	0.35 (1)
L- E	0 / 781	0.18 (1)
E- K	-313 / 0	0.32 (1)
K- F	-272 / 0	0.15 (1)
J- F	-79 / 51	0.02 (1)
B- N	0 / 607	0.14 (1)
J- G	0 / 734	0.17 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.33 (D-E:1) , BC=0.28 (L-M:1) , WB=0.35 (D-L:1) , SSI=0.21 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) 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 (C) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/13/2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

A-1073472

JOB.NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	H02T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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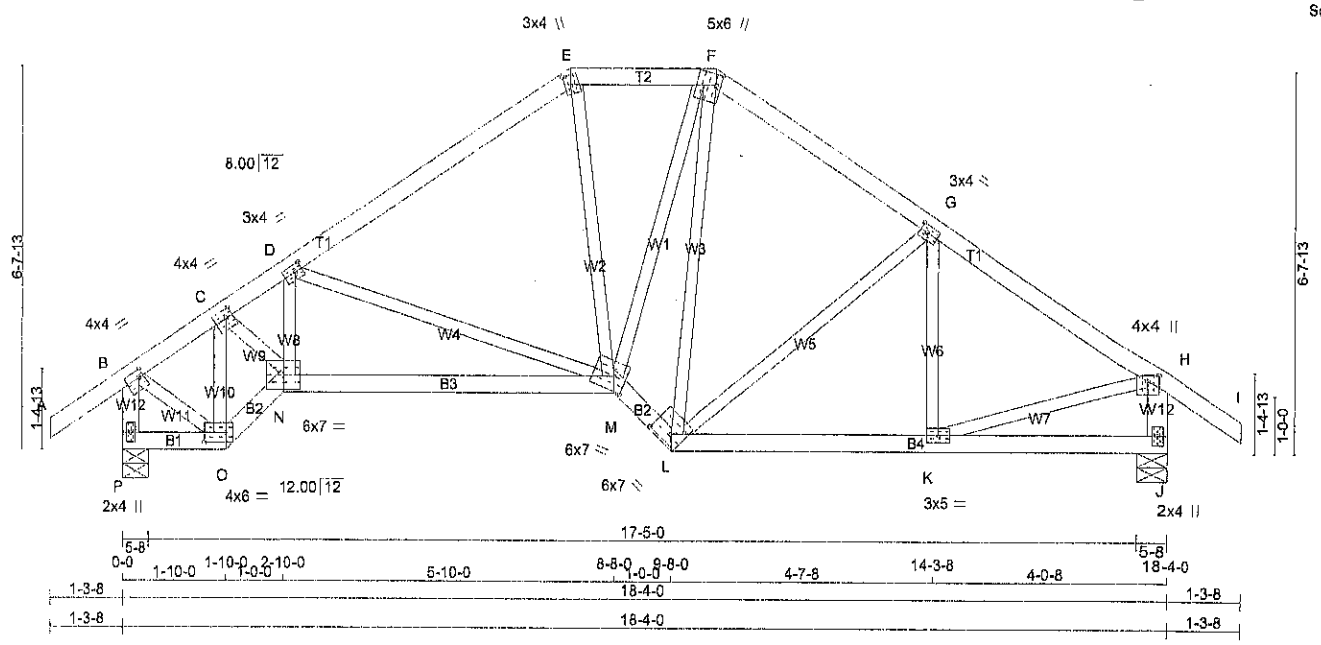

TOTAL WEIGHT = 87 lb

[M][F]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	1.50	1.00
C	TMWW-t	MT20	4.0	4.0	1.75	1.50
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TTW+m	MT20	3.0	4.0	2.00	1.25
F	TTWW+m	MT20	5.0	6.0	2.25	1.00
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW+p	MT20	4.0	4.0	1.25	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMWW-t	MT20	3.0	5.0		
L	BBWW-h	MT20	6.0	7.0	2.00	4.25
M	BBWWW-m	MT20	6.0	7.0	3.00	2.50
N	BBWW-I	MT20	6.0	7.0		
O	BBWW-t	MT20	4.0	6.0	2.00	4.50
P	BMV1+p	MT20	2.0	4.0		

NOTES- (1)

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
P	907	0	907	0	0	5-8	1-8
J	899	0	899	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	636	444 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
J	631	440 / 0	0 / 0	0 / 0	0 / 0	191 / 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 = 5.73FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
A- B	0 / 27	-70.5	-70.5	0.09 (1)	10.00	O- C	-762 / 0	0.13 (1)	
B- C	-682 / 0	-70.5	-70.5	0.07 (1)	8.25	C- N	0 / 797	0.18 (1)	
C- D	-1151 / 0	-70.5	-70.5	0.18 (1)	5.73	N- D	-28 / 67	0.02 (4)	
D- E	-797 / 0	-70.5	-70.5	0.20 (1)	6.25	D- M	-416 / 0	0.26 (1)	
E- F	-677 / 0	-70.5	-70.5	0.06 (1)	6.25	E- M	0 / 203	0.05 (1)	
F- G	-679 / 0	-70.5	-70.5	0.14 (1)	6.25	M- F	0 / 532	0.12 (1)	
G- H	-838 / 0	-70.5	-70.5	0.15 (1)	6.25	L- F	-331 / 0	0.25 (1)	
H- I	0 / 27	-70.5	-70.5	0.09 (1)	10.00	L- G	-210 / 0	0.13 (1)	
P- B	-890 / 0	0.0	0.0	0.09 (1)	7.81	K- G	-104 / 42	0.03 (1)	
J- H	-872 / 0	0.0	0.0	0.09 (1)	7.81	B- O	0 / 618	0.14 (1)	
						K- H	0 / 737	0.17 (1)	
P- O	0 / 0	-17.5	-17.5	0.02 (4)	10.00				
O- N	0 / 706	-17.5	-17.5	0.12 (1)	10.00				
N- M	0 / 1040	-17.5	-17.5	0.27 (1)	10.00				
M- L	0 / 718	-17.5	-17.5	0.12 (1)	10.00				
L- K	0 / 712	-17.5	-17.5	0.16 (1)	10.00				
K- J	0 / 0	-17.5	-17.5	0.09 (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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.20 (D-E:1) , BC=0.27 (M-N:1) , WB=0.26 (D-M:1) , SSI=0.14 (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)	
	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= 0.87 (E) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)

A-1007 3471

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	H01T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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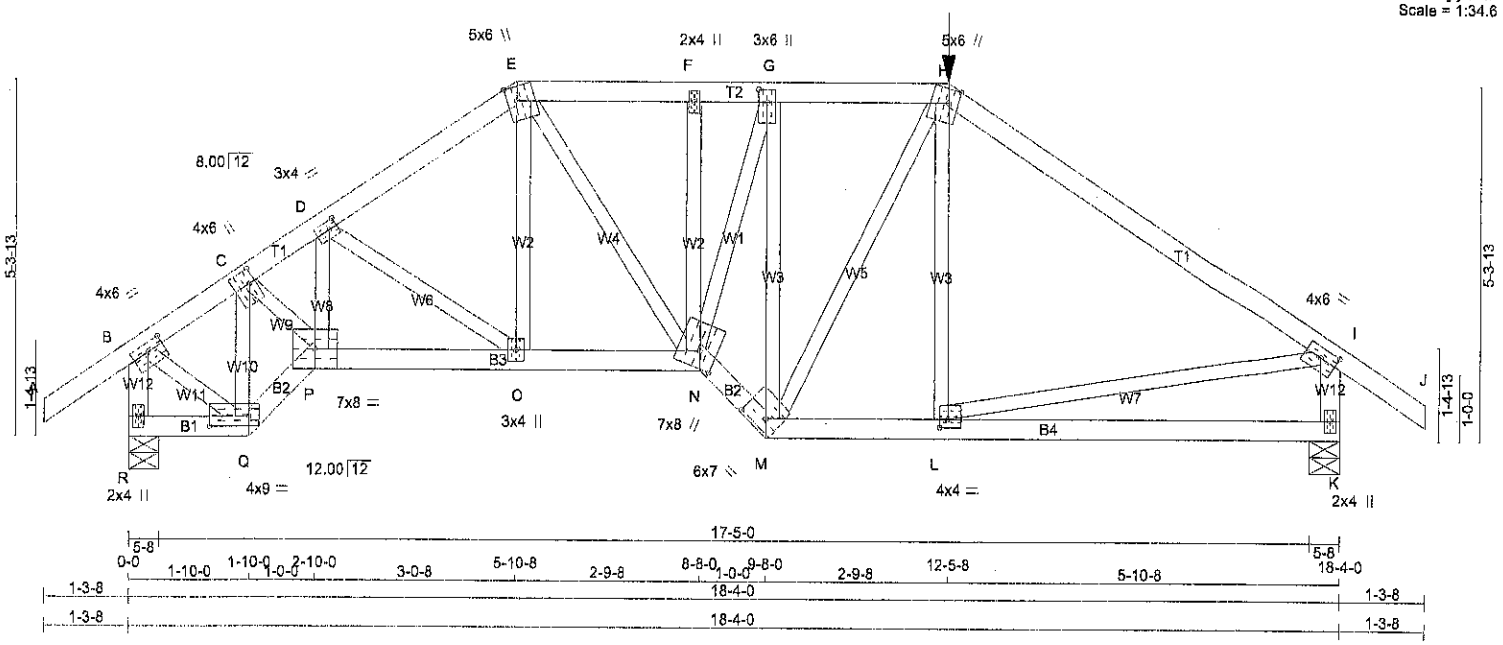

TOTAL WEIGHT = 90 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	1.50	3.00
C	TMWW+t	MT20	4.0	6.0	2.50	1.00
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW+m	MT20	5.0	6.0	Edge	1.75
F	TMW+w	MT20	2.0	4.0		
G	TMWW+t	MT20	3.0	6.0	2.25	1.50
H	TTWW+m	MT20	5.0	6.0	Edge	1.75
I	TMVW-t	MT20	4.0	6.0	1.75	3.00
K	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BBWW-h	MT20	6.0	7.0	2.00	4.25
N	BBWWW+m	MT20	7.0	8.0	3.00	3.00
O	BMWW+t	MT20	3.0	4.0		
P	BBWW-I	MT20	7.0	8.0		
Q	BBWW-I	MT20	4.0	9.0	1.75	7.25
R	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

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
R	1730	0	1730	0	0	5-8	2-2
K	1553	0	1553	0	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1215	842 / 0	0 / 0	0 / 0	0 / 0	373 / 0	0 / 0
K	1095	737 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 27	-70.5	-70.5	0.10 (1)	10.00	Q- C	-1680 / 0	0.29 (1)
B- C	-1413 / 0	-138.7	-138.7	0.13 (1)	5.33	C- P	0 / 1378	0.34 (1)
C- D	-2377 / 0	-138.7	-138.7	0.13 (1)	4.32	P- D	0 / 220	0.05 (1)
D- E	-1980 / 0	-70.5	-70.5	0.15 (1)	4.84	D- O	-422 / 0	0.11 (1)
E- F	-1885 / 0	-70.5	-70.5	0.16 (1)	4.72	O- E	0 / 566	0.14 (1)
F- G	-1883 / 0	-138.7	-138.7	0.16 (1)	4.72	E- N	0 / 402	0.10 (1)
G- H	-1536 / 0	-138.7	-138.7	0.17 (1)	5.11	N- F	-83 / 3	0.02 (1)
H- I	-1648 / 0	-70.5	-70.5	0.61 (1)	4.43	N- G	0 / 1441	0.36 (1)
I- J	0 / 27	-70.5	-70.5	0.10 (1)	10.00	M- G	-1758 / 0	0.76 (1)
R- B	-1698 / 0	0.0	0.0	0.19 (1)	6.33	M- H	0 / 342	0.08 (1)
K- I	-1468 / 0	0.0	0.0	0.17 (1)	6.71	L- H	-57 / 151	0.06 (4)
						B- Q	0 / 1324	0.33 (1)
R- Q	0 / 0	-34.5	-34.5	0.04 (4)	10.00	L- I	0 / 1392	0.34 (1)
Q- P	0 / 1512	-34.5	-34.5	0.27 (1)	10.00			
P- O	0 / 1990	-102.7	-102.7	0.50 (1)	10.00			
O- N	0 / 1654	-102.7	-102.7	0.44 (1)	10.00			
N- M	0 / 2120	-34.5	-34.5	0.38 (1)	10.00			
M- L	0 / 1368	-34.5	-34.5	0.41 (4)	10.00			
L- K	0 / 0	-34.5	-34.5	0.29 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
H	12-5-8	-302	-302	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL, LOADS APPLIED TO FIRST 2-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 2-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 8-8-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 5-10-8
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL, LOADS APPLIED TO FIRST 9-8-0 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.61 (H-I:1) , BC=0.50 (O-P:1) , WB=0.76 (G-M:1) , SSI=0.19 (G-M)

A-N013470

CONTINUED ON PAGE 2

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 301.8 lbs FACTORED DOWN AT 12-5-8 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

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= 0.89 (G) (INPUT = 0.90)
JSI METAL= 0.51 (L) (INPUT = 1.00)

A-1507347O(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252512	H03	14	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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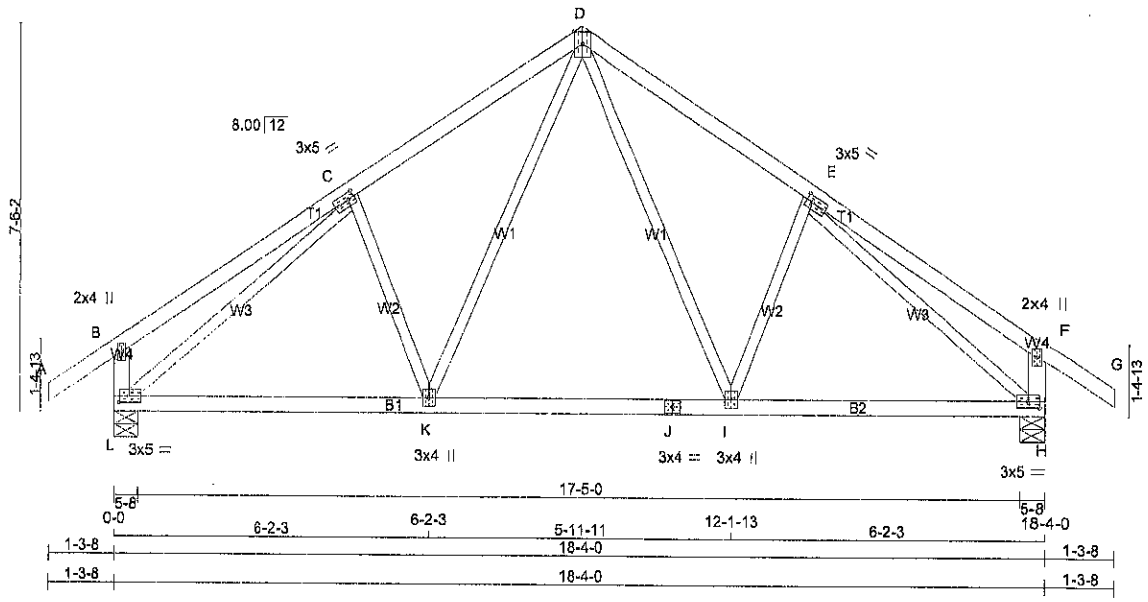

TOTAL WEIGHT = 14 X 81 = 1128 lb
[M][F]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	3.0	5.0	1.50	1.50
D	TTWW+p	MT20	4.0	6.0	Edge	
E	TMWW-t	MT20	3.0	5.0	1.50	1.50
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	3.0	5.0	1.50	2.25
I	BMWW+t	MT20	3.0	4.0		
J	BS-t	MT20	3.0	4.0		
K	BMWW+t	MT20	3.0	4.0		
L	BMVW1-t	MT20	3.0	5.0	1.50	2.25

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.

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
L	903	0	903	0	0	5-8	1-8
H	903	0	903	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	634	442 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
H	634	442 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.09 (1)	10.00
B- C	0 / 21	-70.5	-70.5	0.24 (1)	10.00
C- D	-784 / 0	-70.5	-70.5	0.19 (1)	6.25
D- E	-784 / 0	-70.5	-70.5	0.19 (1)	6.25
E- F	0 / 21	-70.5	-70.5	0.24 (1)	10.00
F- G	0 / 27	-70.5	-70.5	0.09 (1)	10.00
L- B	-219 / 0	0.0	0.0	0.02 (1)	7.81
H- F	-219 / 0	0.0	0.0	0.02 (1)	7.81
L- K	0 / 707	-17.5	-17.5	0.20 (4)	10.00
K- J	0 / 511	-17.5	-17.5	0.19 (4)	10.00
J- I	0 / 511	-17.5	-17.5	0.19 (4)	10.00
I- H	0 / 707	-17.5	-17.5	0.20 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- I	0 / 323	0.07 (1)
I- E	-196 / 3	0.07 (1)
K- D	0 / 323	0.07 (1)
C- K	-196 / 3	0.07 (1)
L- C	-953 / 0	0.62 (1)
E- H	-953 / 0	0.62 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.24 (E-F:1) , BC=0.20 (H-I:4) , WB=0.62 (E-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) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	822	2264	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (E) (INPUT = 0.90)
JSI METAL= 0.30 (C) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07.13.2015
R. TURENNE
100157040
PROVINCE OF ONTARIO

A-4073442

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252512	H02	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

ID:gUzNWMpyWh_3Mf_ncsznAqzVRmF-v1kdtHAThzLqpQurtwV2wNj2rVj1Jyv94_qBZ4yyY?c

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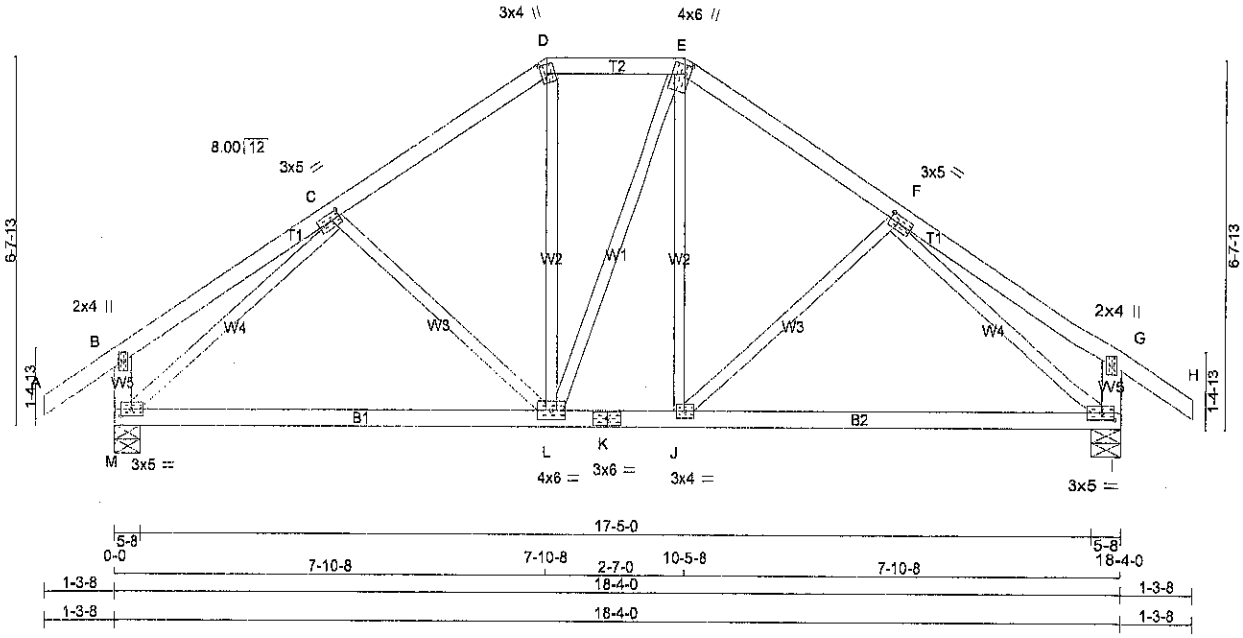

TOTAL WEIGHT = 83 lb

[M][F]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	3.0	5.0	1.50	2.00
D	TTW+m	MT20	3.0	4.0	2.00	1.25
E	TTWW+m	MT20	4.0	6.0	2.00	1.00
F	TMWW-t	MT20	3.0	5.0	1.50	2.00
G	TMV+p	MT20	2.0	4.0		
I	BMVW1-t	MT20	3.0	5.0	1.50	2.25
J	BMWW-t	MT20	3.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	6.0		
M	BMVW1-t	MT20	3.0	5.0	1.50	2.25

NOTES- (1)

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
M	903	0	903	0	0	5-8	1-8
I	903	0	903	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	634	442 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
I	634	442 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0

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

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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 27	-70.5	-70.5	0.09 (1)	10.00		C- L	-133 / 10	0.07 (1)
B- C	0 / 18	-70.5	-70.5	0.17 (1)	10.00		L- D	0 / 192	0.04 (1)
C- D	-719 / 0	-70.5	-70.5	0.14 (1)	6.25		L- E	0 / 1	0.00 (1)
D- E	-586 / 0	-70.5	-70.5	0.06 (1)	6.25		J- E	0 / 191	0.04 (1)
E- F	-719 / 0	-70.5	-70.5	0.14 (1)	6.25		J- F	-133 / 10	0.07 (1)
F- G	0 / 18	-70.5	-70.5	0.17 (1)	10.00		M- C	-936 / 0	0.44 (1)
G- H	0 / 27	-70.5	-70.5	0.09 (1)	10.00		F- I	-935 / 0	0.44 (1)
M- B	-203 / 0	0.0	0.0	0.02 (1)	7.81				
I- G	-203 / 0	0.0	0.0	0.02 (1)	7.81				
M- L	0 / 681	-17.5	-17.5	0.28 (4)	10.00				
L- K	0 / 586	-17.5	-17.5	0.28 (4)	10.00				
K- J	0 / 586	-17.5	-17.5	0.28 (4)	10.00				
J- I	0 / 681	-17.5	-17.5	0.27 (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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.17 (F-G:1) , BC=0.28 (J-L:4) , WB=0.44 (C-M:1) , SSI=0.11 (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) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (E) (INPUT = 0.90)
JSI METAL= 0.42 (K) (INPUT = 1.00)

A-1073441

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252512	H01	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

ID:gUzNWMpyWh_3Mf_ncsznAqzVRmF-RrAEfx9rwfDzBGJfJD_pNAAmA5LjaW20rL5e1eyyY?p

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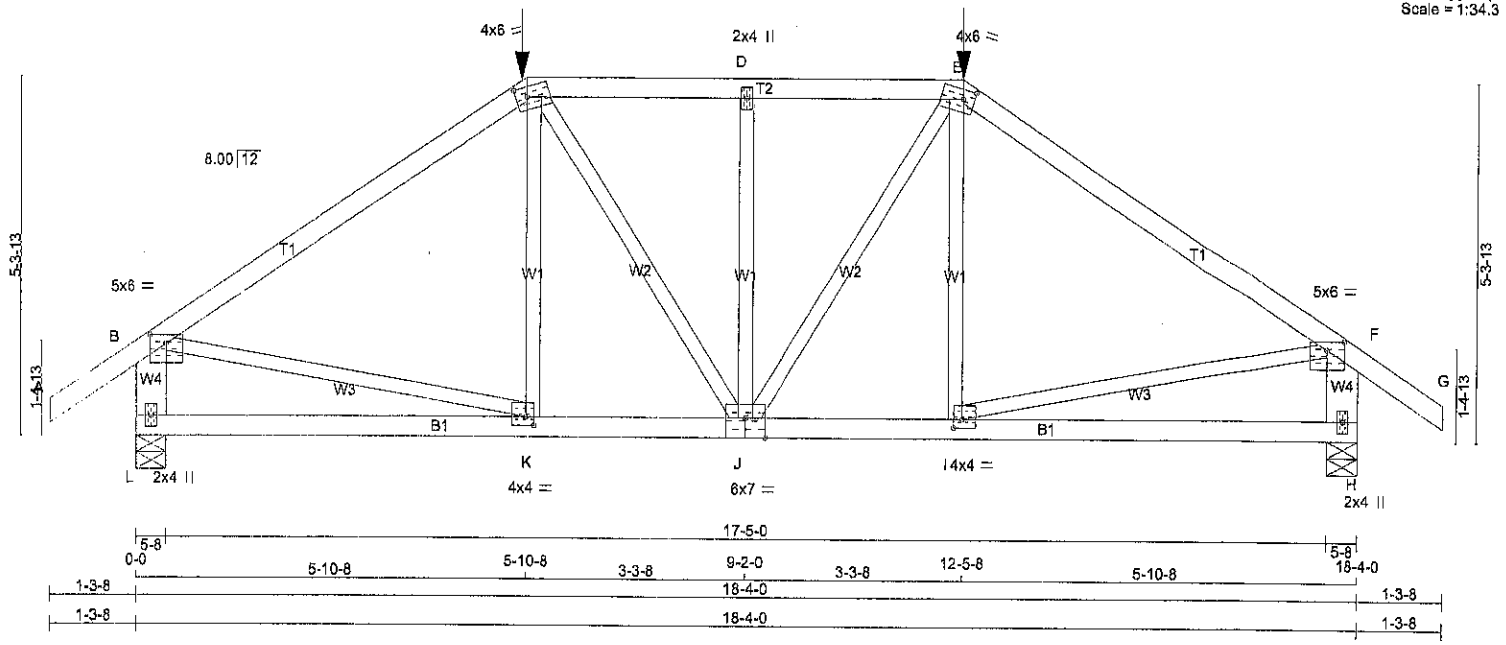


TOTAL WEIGHT = 82 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	4.0	6.0	1.75	2.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.00
F	TMVW-p	MT20	5.0	6.0	1.50	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BSWWW-I	MT20	6.0	7.0	Edge	3.50
K	BMWW-t	MT20	4.0	4.0	1.50	1.50
L	BMV1+p	MT20	2.0	4.0		

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) 301.8 lbs FACTORED DOWN AT 12-5-8, AND 301.8 lbs FACTORED DOWN AT 5-10-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

1)

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1585	0	1585	0	0	5-8	1-11
H	1585	0	1585	0	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1117	756 / 0	0 / 0	0 / 0	0 / 0	361 / 0	0 / 0
H	1117	756 / 0	0 / 0	0 / 0	0 / 0	361 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.38FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 27	-70.5	-70.5	0.10 (1)		10.00
B- C	-1694 / 0	-70.5	-70.5	0.62 (1)		4.38
C- D	-1594 / 0	-138.7	-138.7	0.29 (1)		4.86
D- E	-1594 / 0	-138.7	-138.7	0.29 (1)		4.86
E- F	-1694 / 0	-70.5	-70.5	0.62 (1)		4.38
F- G	0 / 27	-70.5	-70.5	0.10 (1)		10.00
L- B	-1500 / 0	0.0	0.0	0.11 (1)		7.81
H- F	-1500 / 0	0.0	0.0	0.11 (1)		7.81
L- K	0 / 0	-34.5	-34.5	0.29 (4)		10.00
K- J	0 / 1407	-34.5	-34.5	0.41 (4)		10.00
J- I	0 / 1407	-34.5	-34.5	0.41 (4)		10.00
I- H	0 / 0	-34.5	-34.5	0.29 (4)		10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-37 / 163	0.06 (4)
C- J	0 / 341	0.08 (1)
J- D	-544 / 0	0.24 (1)
J- E	0 / 341	0.08 (1)
I- E	-37 / 163	0.06 (4)
B- K	0 / 1430	0.35 (1)
I- F	0 / 1430	0.35 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	5-10-8	-302	-302	---	FRONT	VERT	TOTAL
E	12-5-8	-302	-302	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 5-10-8
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.62 (B-C:1) , BC=0.41 (J-K:4) , WB=0.35 (F-I:1) , SSI=0.24 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.53 (K) (INPUT = 1.00)

A-150734440

LUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

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

MATERIAL: 18 gauge

FINISH: G90 galvanized

DESIGN:

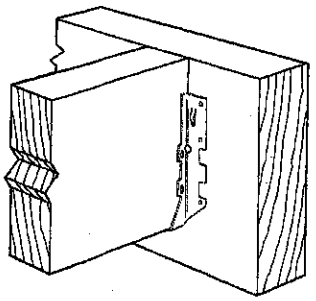
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

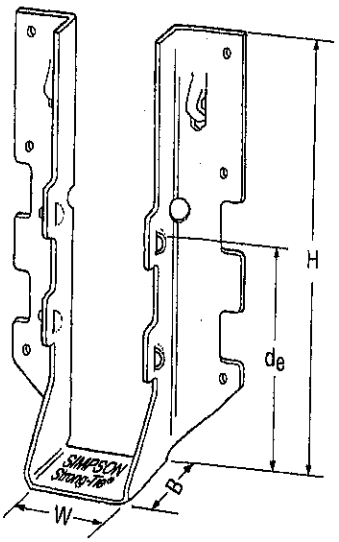
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- These hangers cannot be modified.



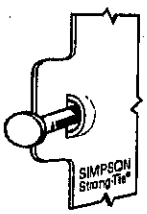
Typical LUS Installation



LUS28

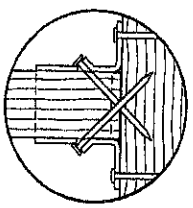
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
LUS24	18	1 9/16	3 1/8	1 3/4	1 15/16	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	4-16d	2-16d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

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

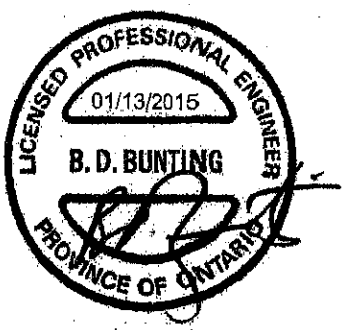


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

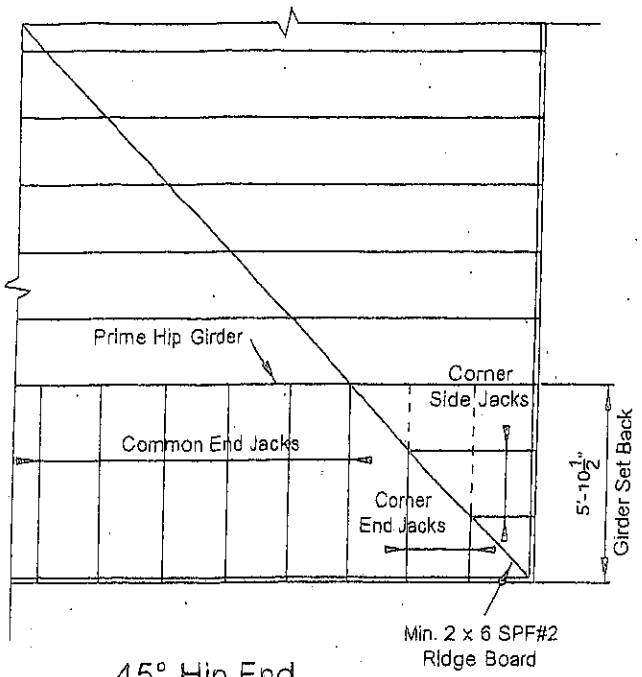
U.S. Patent 5,603,580



Double Shear Nailing Top View.



STRACON ENGINEERING INC.



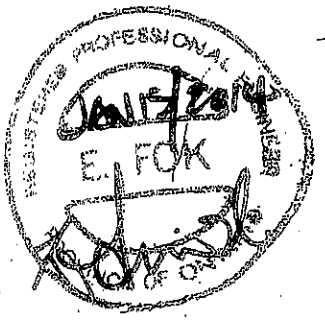
45° Hip End

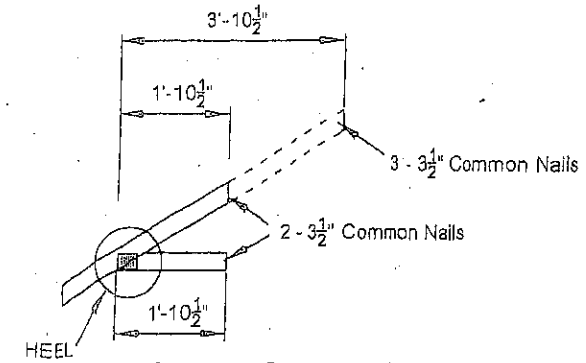
LUMBER SPECIFICATION

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

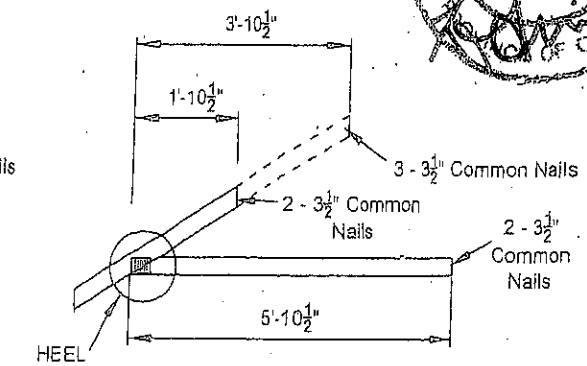
DESIGN LOAD

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

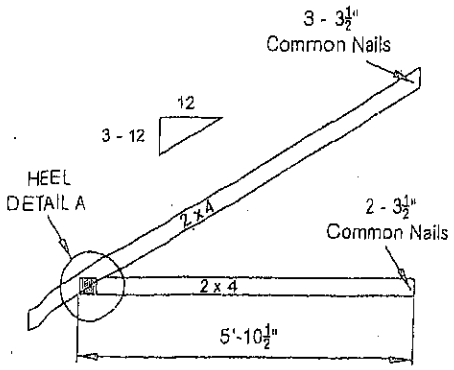




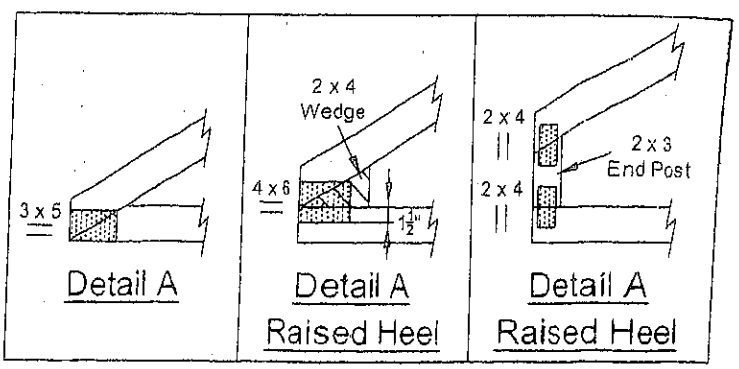
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

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