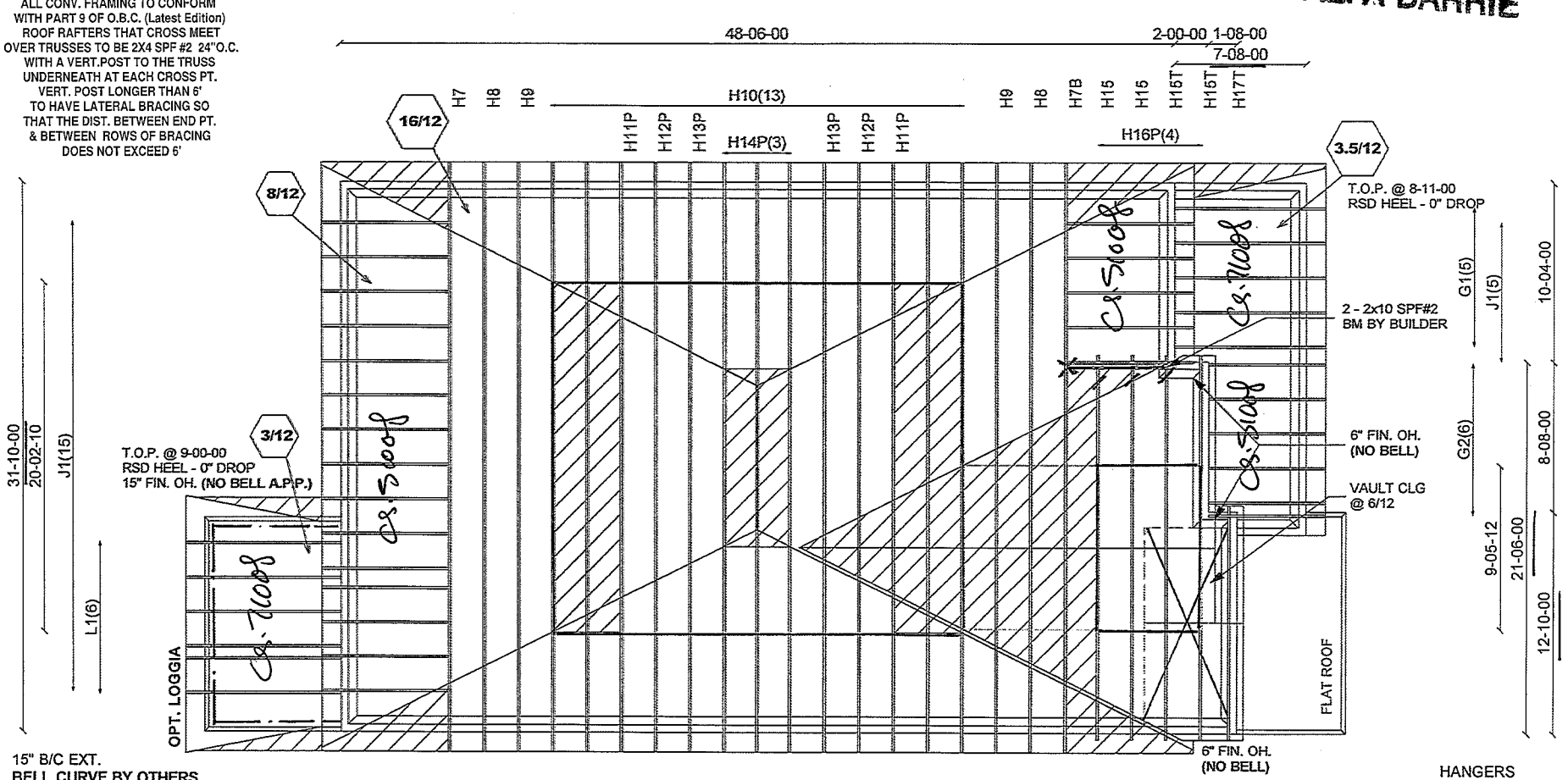
ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition)
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'



15" B/C EXT.
BELL CURVE BY OTHERS
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK
*PIGGYBACK TRS
PURLINS BY OTHERS

HANGERS
// LJS26DS
X HHUS26-2

A-18023088 - A-18023093
A-18023112 - A-18023118

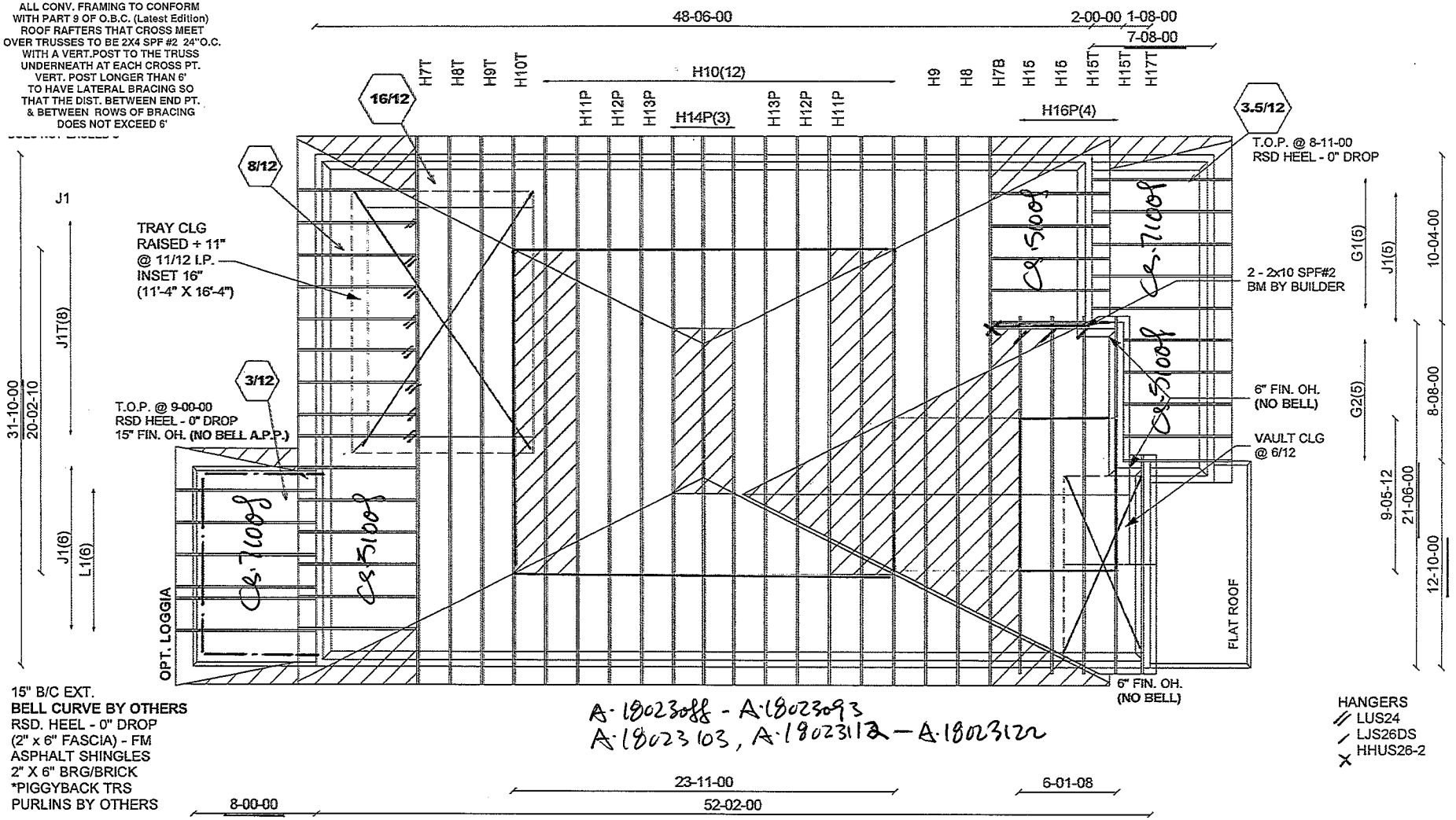
CONVENTIONAL FRAMING BY OTHERS

VALLEYVIEW

Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN	Model / Elevation: 4002 / A	STD OR OPT LOGGIA
Layout ID: 291798	Project: PINE VALLEY		
Plan Log: 95233	Date: 1/16/2018 Designer: AMANDA		

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) 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'



15" B/C EXT.
BELL CURVE BY OTHERS
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK
*PIGGYBACK TRS
PURLINS BY OTHERS

A-18023088 - A-18023093
A-18023103, A-18023112 - A-18023122

HANGERS
// LUS24
/ LJS26DS
X HHUS26-2

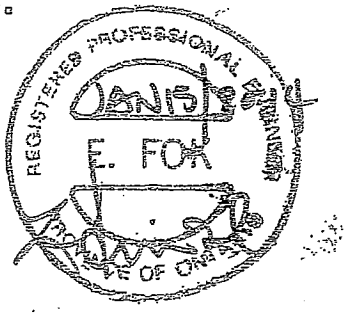
CONVENTIONAL FRAMING BY OTHERS

VALLEYVIEW

Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN	Model / Elevation: 4002 REV1	/ A OPT TRAY OR OPT LOGGIA
Layout ID: 292574	Project: PINE VALLEY		
Plan Log: 95914	Date: 1/16/2018 Designer: AMANDA		

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.
292570	H8	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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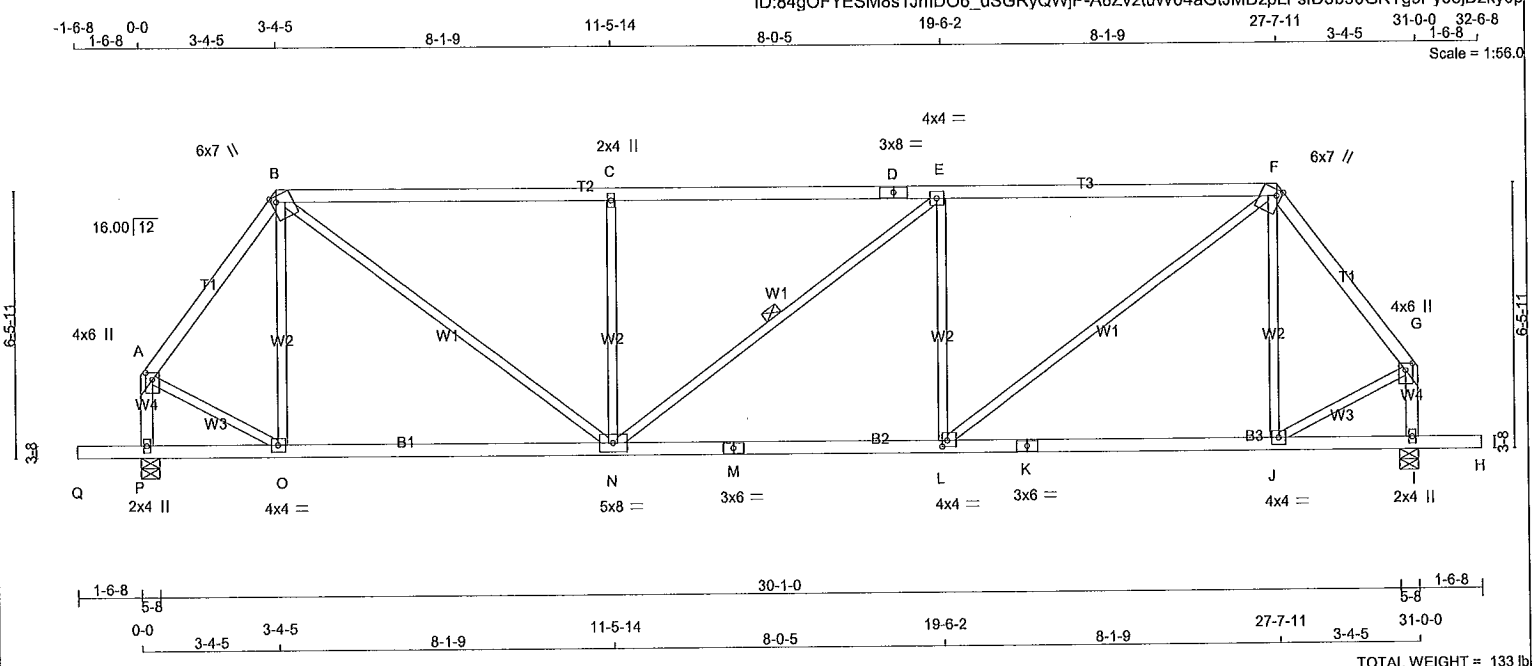


TOTAL WEIGHT = 133 lb

[M]

LUMBER

N. L. G. A. RULES

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

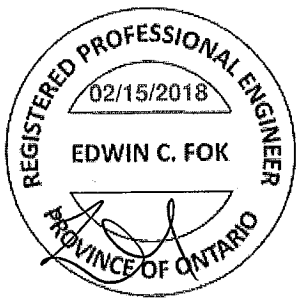
DRY: SEASONED LUMBER.

PLATES (table is in Inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	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	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0	1.75	1.50
M	BS-t	MT20	3.0	6.0		
N	BMWWW-t	MT20	5.0	8.0		
O	BMWW-t	MT20	4.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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

NOTE: 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
P	1644	0	1644	0	0	5-8	2-7
I	1644	0	1644	0	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
I	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-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 MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54
B- C	-1844 / 0	-78.0	-78.0	0.99 (1)	3.69
C- D	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67
D- E	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67
E- F	-1845 / 0	-78.0	-78.0	1.00 (1)	3.67
F- G	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54
P- A	-1487 / 0	0.0	0.0	0.17 (1)	6.72
I- G	-1486 / 0	0.0	0.0	0.17 (1)	6.72
Q- P	0 / 0	-96.5	-96.5	0.16 (1)	10.00
P- O	0 / 0	-18.5	-18.5	0.18 (4)	10.00
O- N	0 / 745	-18.5	-18.5	0.31 (4)	10.00
N- M	0 / 1845	-18.5	-18.5	0.43 (1)	10.00
M- L	0 / 1845	-18.5	-18.5	0.43 (1)	10.00
L- K	0 / 744	-18.5	-18.5	0.31 (4)	10.00
K- J	0 / 744	-18.5	-18.5	0.31 (4)	10.00
J- I	0 / 0	-18.5	-18.5	0.18 (4)	10.00
I- H	0 / 0	-96.5	-96.5	0.16 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- B	-219 / 2	0.15 (1)
B- N	0 / 1378	0.31 (1)
N- C	-680 / 0	0.46 (1)
N- E	-1 / 0	0.00 (1)
L- E	-680 / 0	0.46 (1)
L- F	0 / 1379	0.31 (1)
J- F	-219 / 2	0.15 (1)
A- O	0 / 825	0.19 (1)
J- G	0 / 825	0.19 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=1.00/1.00 (E-F:1) , BC=0.43/1.00 (L-N:1) , WB=0.46/1.00 (E-L:1) , SSI=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

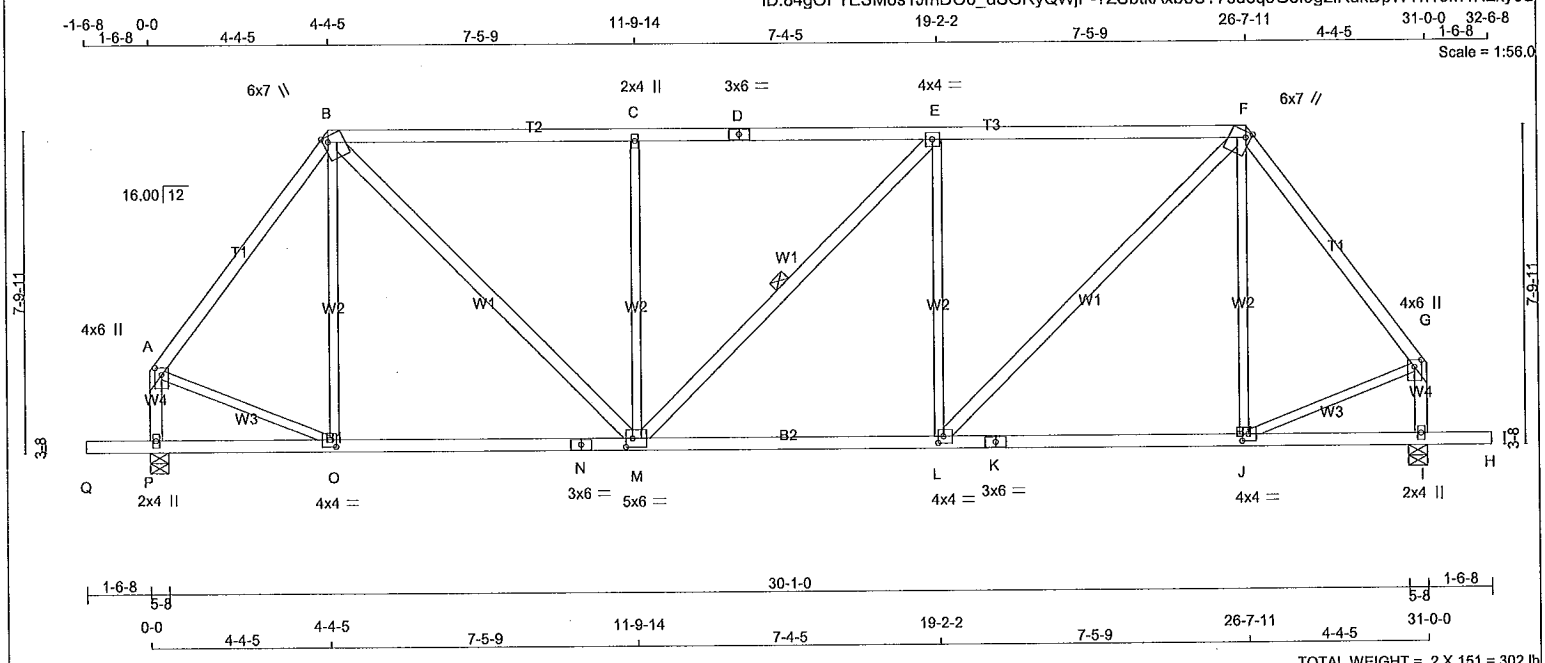
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.64 (M) (INPUT = 1.00)

A-18023088

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H9	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple



TOTAL WEIGHT = 2 X 151 = 302 lb

[M]

LUMBER
N. L. G. A. RULES

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

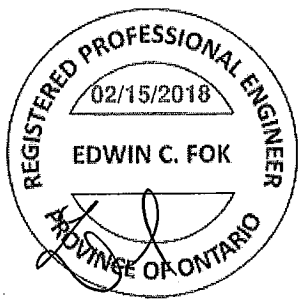
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0		
F	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	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0	2.00	1.50
M	BMWWW-t	MT20	5.0	6.0	2.50	2.00
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	4.0	4.0	2.00	1.75
P	BMV1+p	MT20	2.0	4.0		

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

NOTE: 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
P	1644	0	1644	0	0	5-8	2-7
I	1644	0	1644	0	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
I	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-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	LC	MAX CSI	MAX. UNBRAC LENGTH
A- B	-1277 / 0	-78.0	-78.0	0.33 (1)		5.35
B- C	-1521 / 0	-78.0	-78.0	0.74 (1)		4.36
C- D	-1521 / 0	-78.0	-78.0	0.74 (1)		4.35
D- E	-1521 / 0	-78.0	-78.0	0.74 (1)		4.35
E- F	-1522 / 0	-78.0	-78.0	0.75 (1)		4.35
F- G	-1277 / 0	-78.0	-78.0	0.33 (1)		5.35
P- A	-1469 / 0	0.0	0.0	0.17 (1)		6.75
I- G	-1469 / 0	0.0	0.0	0.17 (1)		6.75
Q- P	0 / 0	-96.5	-96.5	0.16 (1)		10.00
P- O	0 / 0	-18.5	-18.5	0.16 (4)		10.00
O- N	0 / 760	-18.5	-18.5	0.27 (4)		10.00
N- M	0 / 760	-18.5	-18.5	0.27 (4)		10.00
M- L	0 / 1522	-18.5	-18.5	0.36 (1)		10.00
L- K	0 / 760	-18.5	-18.5	0.27 (4)		10.00
K- J	0 / 760	-18.5	-18.5	0.27 (4)		10.00
J- I	0 / 0	-18.5	-18.5	0.16 (4)		10.00
I- H	0 / 0	-96.5	-96.5	0.16 (1)		10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- B	-151 / 28	0.17 (1)
B- M	0 / 1077	0.17 (1)
M- C	-624 / 0	0.71 (1)
M- E	-1 / 0	0.00 (1)
L- E	-624 / 0	0.71 (1)
L- F	0 / 1078	0.17 (1)
J- F	-152 / 28	0.17 (1)
A- O	0 / 810	0.18 (1)
J- G	0 / 810	0.18 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.75/1.00 (E-F:1) , BC=0.36/1.00 (L-M:1) , WB=0.71/1.00 (E-L:1) , SSI=0.27/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.44 (A) (INPUT = 1.00)

A-18023089

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H10	11	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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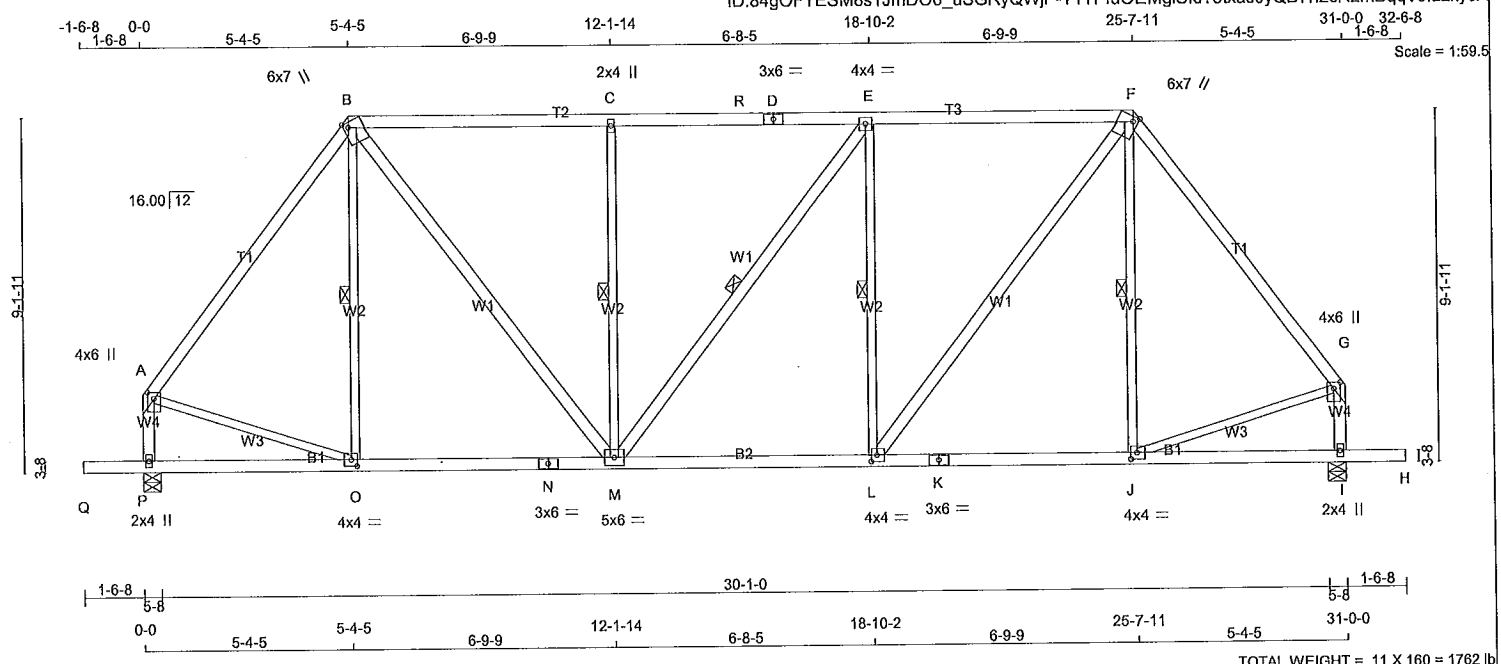


TOTAL WEIGHT = 11 X 160 = 1762 lb

[M][F]

LUMBER
N. L. G. A. RULES

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

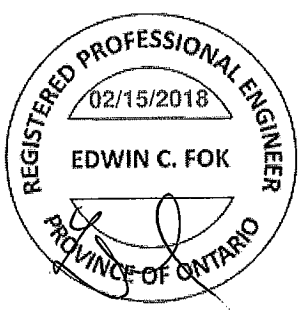
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0		
F	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, L, O						
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
M	BMWWW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
P	BMV1+p	MT20	2.0	4.0		

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

NOTE: 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
P	1720	0	1720	0	0	5-8	2-9
I	1720	0	1720	0	0	5-8	2-9

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0
I	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0

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

BRACING
FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-O, C-M, E-M, E-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 MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO			
A- B	-1355 / 0	-78.0	-78.0	0.37 (1)	5.22	O- B	-112 / 36	0.06 (1)
B- C	-1383 / 0	-85.5	-85.5	0.49 (1)	2.00	B- M	0 / 941	0.15 (1)
C- R	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M- C	-622 / 0	0.34 (1)
R- D	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M- E	-2 / 0	0.00 (1)
D- E	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	L- E	-622 / 0	0.34 (1)
E- F	-1384 / 0	-85.5	-85.5	0.49 (1)	2.00	L- F	0 / 944	0.15 (1)
F- G	-1354 / 0	-78.0	-78.0	0.37 (1)	5.22	J- F	-113 / 36	0.06 (1)
P- A	-1533 / 0	0.0	0.0	0.18 (1)	6.64	A- O	0 / 844	0.19 (1)
I- G	-1533 / 0	0.0	0.0	0.18 (1)	6.64	J- G	0 / 843	0.19 (1)
Q- P	0 / 0	-96.5	-96.5	0.16 (1)	10.00			
P- O	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
O- N	0 / 808	-18.5	-18.5	0.25 (4)	10.00			
N- M	0 / 808	-18.5	-18.5	0.25 (4)	10.00			
M- L	0 / 1385	-18.5	-18.5	0.31 (1)	10.00			
L- K	0 / 808	-18.5	-18.5	0.25 (4)	10.00			
K- J	0 / 808	-18.5	-18.5	0.25 (4)	10.00			
J- I	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
I- H	0 / 0	-96.5	-96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON 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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.49/1.00 (E-F:1) , BC=0.31/1.00 (L-M:1) , WB=0.34/1.00 (E-L:1) , SSI=0.27/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)

A-18023090

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H11P	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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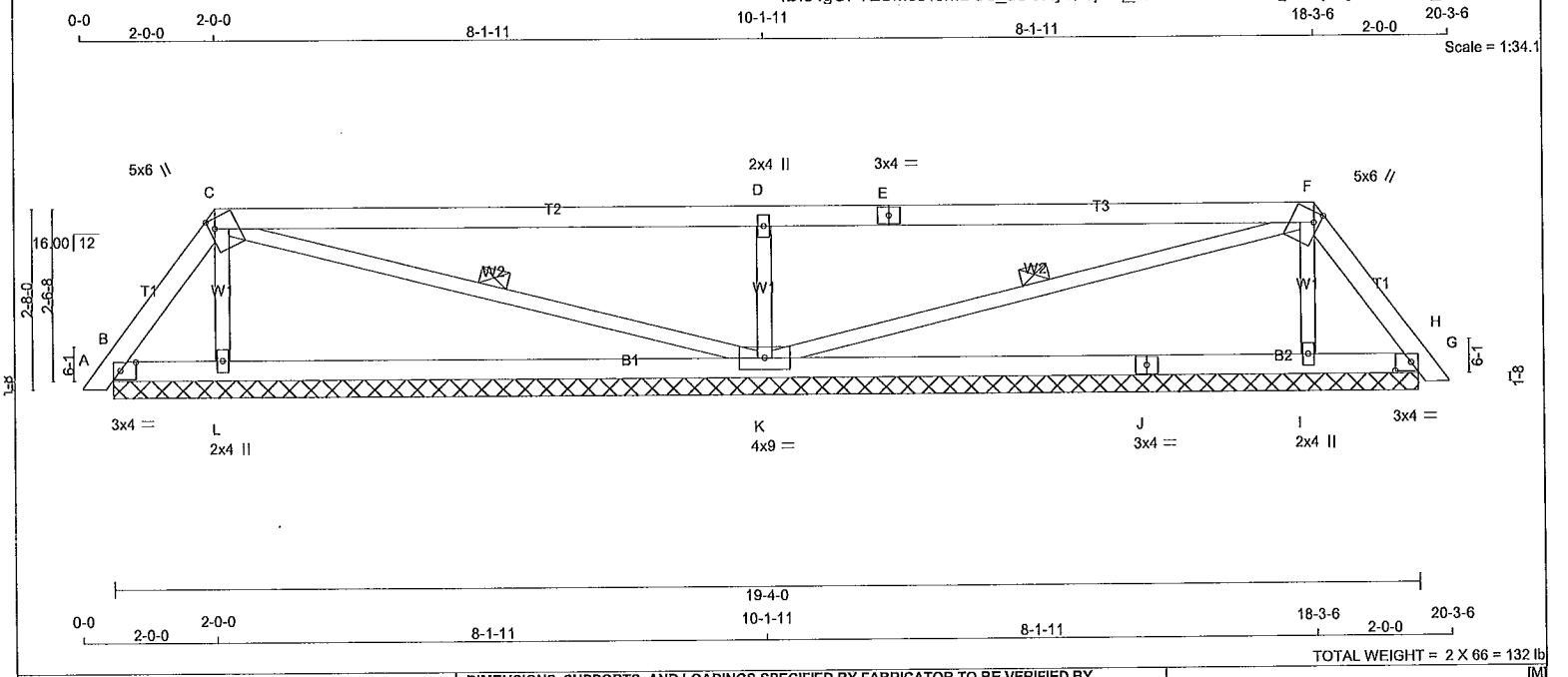

TOTAL WEIGHT = 2 X 66 = 132 lb

[M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table Is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
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	TS-t	MT20	3.0	4.0		
F	TTWW+m	MT20	5.0	6.0	1.75	1.00
G	TMB1-I	MT20	3.0	4.0	1.50	2.75
I	BMW1+w	MT20	2.0	4.0		
J	BS-t	MT20	3.0	4.0		
K	BMWWW1-t	MT20	4.0	9.0		
L	BMW1+w	MT20	2.0	4.0		

NOTE: 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
B	139	0	139	0	0	19-4-0 (4-0-0)-11-14	
L	344	0	344	0	0	19-4-0 (4-0-0)-11-14	
K	953	0	953	0	0	19-4-0 (4-0-0)-11-14	
I	344	0	344	0	0	19-4-0 (4-0-0)-11-14	
G	139	0	139	0	0	19-4-0 (4-0-0)-11-14	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	93	93 / 0	0 / 0	0 / 0	0 / 0	0 / -0	0 / 0
L	253	113 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
K	677	429 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
I	253	113 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
G	93	93 / 0	0 / 0	0 / 0	0 / 0	0 / -0	0 / 0

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	L- C	-210 / 0	0.03 (1)
B- C	-104 / 0	-78.0	-78.0	0.03 (1)	6.25	C- K	-8 / 0	0.00 (1)
C- D	-41 / 0	-78.0	-78.0	0.88 (1)	6.25	K- D	-793 / 0	0.13 (1)
D- E	-43 / 0	-78.0	-78.0	0.88 (1)	6.25	K- F	-8 / 0	0.00 (1)
E- F	-43 / 0	-78.0	-78.0	0.88 (1)	6.25	I- F	-210 / 0	0.03 (1)
F- G	-104 / 0	-78.0	-78.0	0.03 (1)	6.25			
G- H	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- L	0 / 60	-18.5	-18.5	0.19 (4)	10.00			
L- K	0 / 50	-18.5	-18.5	0.26 (4)	10.00			
K- J	0 / 50	-18.5	-18.5	0.26 (4)	10.00			
J- I	0 / 50	-18.5	-18.5	0.26 (4)	10.00			
I- G	0 / 60	-18.5	-18.5	0.19 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

CSI: TC=0.88/1.00 (D-F:1) , BC=0.26/1.00 (K-L:4) , WB=0.13/1.00 (D-K:1) , SSI=0.31/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.26 (E) (INPUT = 1.00)

A-18023091

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H12P	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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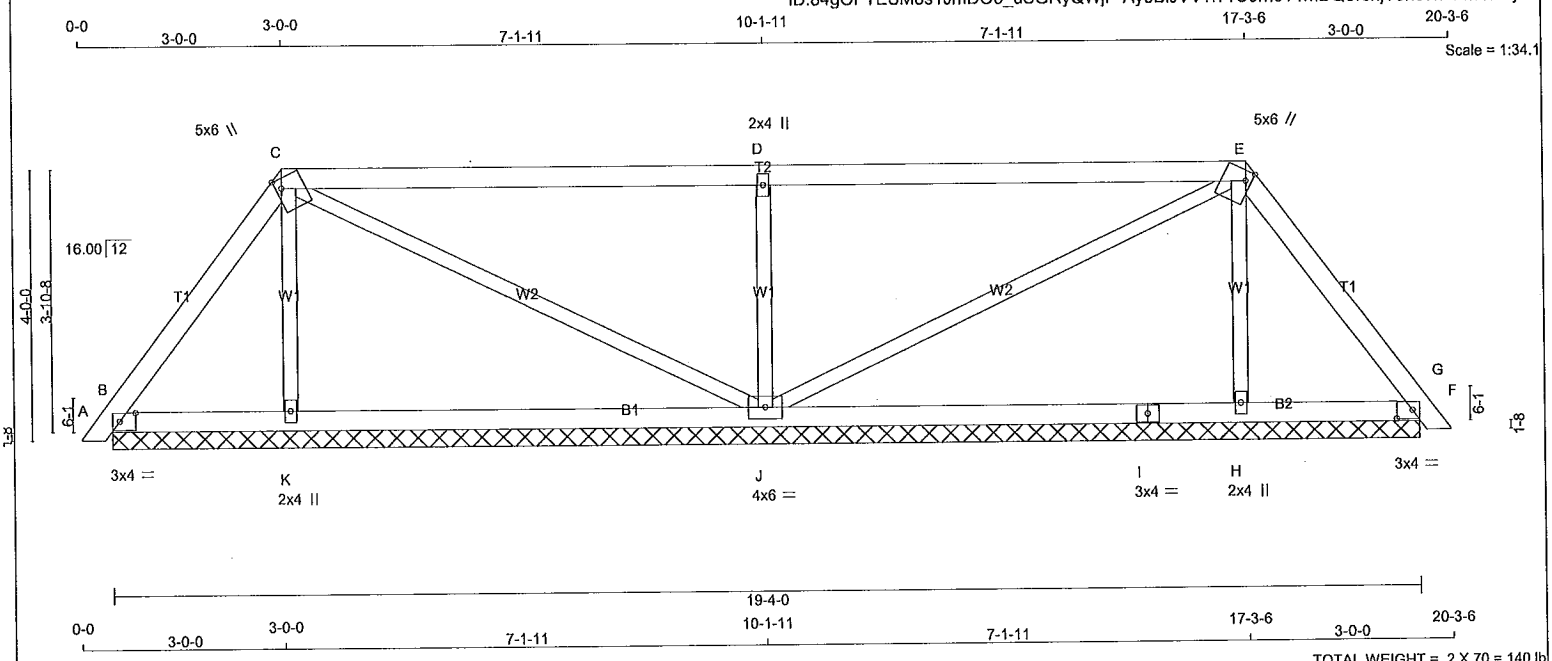


TOTAL WEIGHT = 2 X 70 = 140 lb

(M)

LUMBER

N. L. G. A. RULES

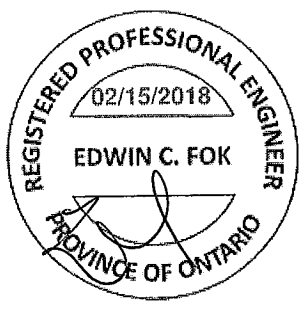
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in Inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
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	BS-t	MT20	3.0	4.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

NOTE: 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
B	213	0	213	0	0	19-4-0 (4-0-0)	3-9-7
K	310	0	310	0	0	19-4-0 (4-0-0)	3-9-7
J	875	0	875	0	0	19-4-0 (4-0-0)	3-9-7
H	310	0	310	0	0	19-4-0 (4-0-0)	3-9-7
F	213	0	213	0	0	19-4-0 (4-0-0)	3-9-7

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	148	113 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
K	226	109 / 0	0 / 0	0 / 0	0 / 0	116 / 0	0 / 0
J	620	396 / 0	0 / 0	0 / 0	0 / 0	224 / 0	0 / 0
H	226	109 / 0	0 / 0	0 / 0	0 / 0	116 / 0	0 / 0
F	148	113 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- C	-104 / 0	-78.0	-78.0	0.09 (1)	6.25
C- D	-13 / 0	-78.0	-78.0	0.68 (1)	6.25
D- E	-13 / 0	-78.0	-78.0	0.68 (1)	6.25
E- F	-104 / 0	-78.0	-78.0	0.09 (1)	6.25
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- K	0 / 60	-18.5	-18.5	0.14 (4)	10.00
K- J	0 / 54	-18.5	-18.5	0.21 (4)	10.00
J- I	0 / 54	-18.5	-18.5	0.21 (4)	10.00
I- H	0 / 54	-18.5	-18.5	0.21 (4)	10.00
H- F	0 / 60	-18.5	-18.5	0.14 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-203 / 0	0.05 (1)
C- J	-46 / 0	0.06 (1)
J- D	-695 / 0	0.16 (1)
J- E	-46 / 0	0.06 (1)
H- E	-203 / 0	0.05 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

CSI: TC=0.68/1.00 (C-D:1) , BC=0.21/1.00 (H-J:4) , WB=0.16/1.00 (D-J:1) , SSI=0.27/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.15 (D) (INPUT = 1.00)

A-18023092

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H13P	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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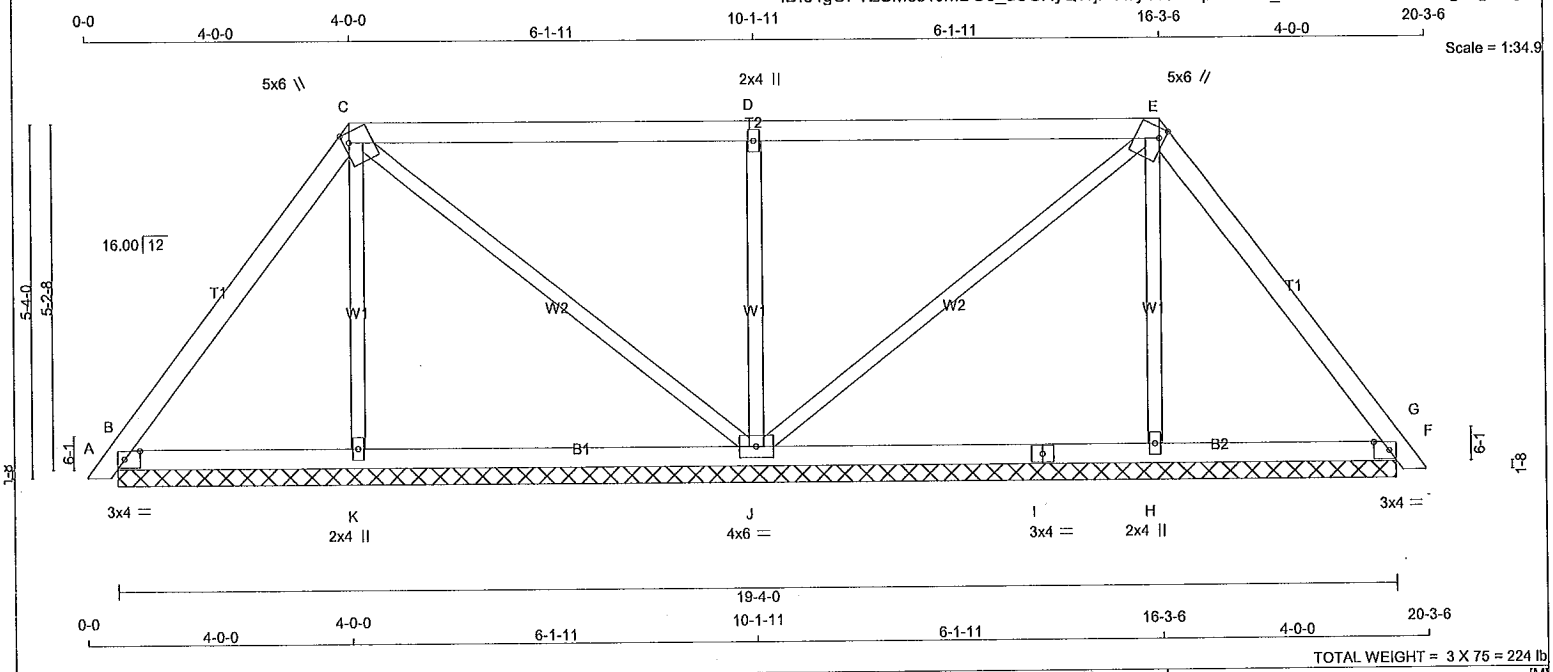


TOTAL WEIGHT = 3 X 75 = 224 lb

[M]

LUMBER

N. L. G. A. RULES

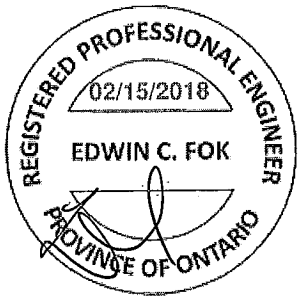
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is In Inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
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	BS-t	MT20	3.0	4.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

NOTE: 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
B	275	0	275	0	0	19-4-0 (5-4-0)-7-8	
K	283	0	283	0	0	19-4-0 (5-4-0)-7-8	
J	803	0	803	0	0	19-4-0 (5-4-0)-7-8	
H	283	0	283	0	0	19-4-0 (5-4-0)-7-8	
F	275	0	275	0	0	19-4-0 (5-4-0)-7-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	193	137 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0
K	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
J	569	369 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0
H	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
F	193	137 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- C	-110 / 0	-78.0	-78.0	0.17 (1)	6.25
C- D	-4 / 0	-78.0	-78.0	0.50 (1)	10.00
D- E	-4 / 0	-78.0	-78.0	0.50 (1)	10.00
E- F	-110 / 0	-78.0	-78.0	0.17 (1)	6.25
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- K	0 / 64	-18.5	-18.5	0.11 (4)	10.00
K- J	0 / 60	-18.5	-18.5	0.15 (4)	10.00
J- I	0 / 60	-18.5	-18.5	0.15 (4)	10.00
I- H	0 / 60	-18.5	-18.5	0.15 (4)	10.00
H- F	0 / 64	-18.5	-18.5	0.11 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-184 / 0	0.07 (1)
C- J	-71 / 0	0.09 (1)
J- D	-598 / 0	0.24 (1)
J- E	-71 / 0	0.09 (1)
H- E	-184 / 0	0.07 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

CSI: TC=0.50/1.00 (C-D:1) , BC=0.15/1.00 (J-K:4) , WB=0.24/1.00 (D-J:1) , SSI=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

A-18023093

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	J1T	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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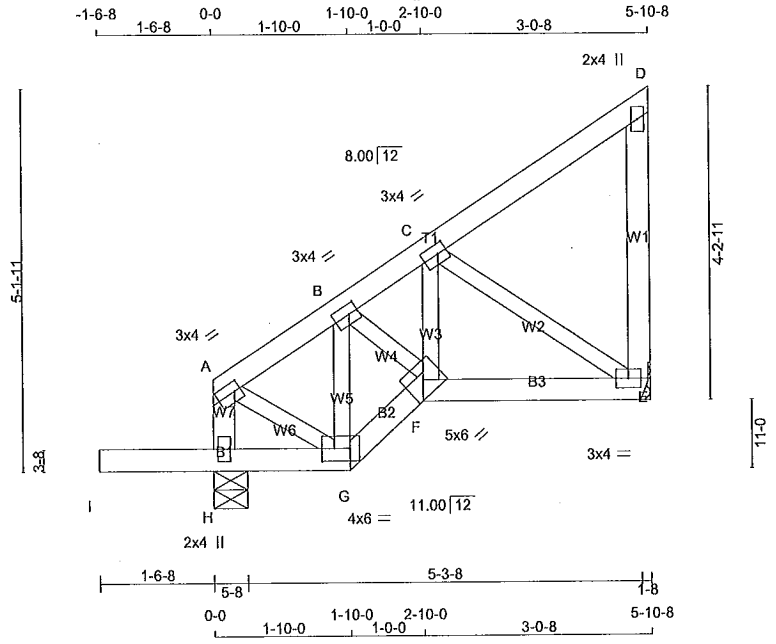


TOTAL WEIGHT = 5 X 30 = 150 lb

(M)

LUMBER

N. L. G. A. RULES

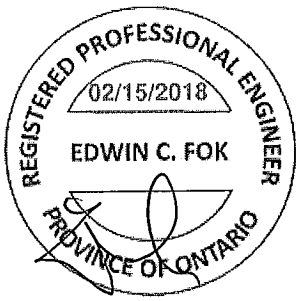
CHORDS	SIZE		LUMBER	DESCR.
H - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in Inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TMWW-t	MT20	3.0	4.0	1.50	1.50
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-h	MT20	5.0	6.0		
G	BBWW-l	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

NOTE: 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	452	0	452	0	0	5-8	1-8
E	264	0	264	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	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- A	-223 / 0	0.0	0.0	0.02 (1)	7.81		A- G	0 / 154	0.03 (1)
A- B	-165 / 0	-78.0	-78.0	0.04 (1)	6.25		G- B	-220 / 0	0.03 (1)
B- C	-239 / 0	-78.0	-78.0	0.08 (1)	6.25		B- F	0 / 130	0.03 (1)
C- D	-11 / 0	-78.0	-78.0	0.08 (1)	6.25		F- C	0 / 63	0.02 (4)
E- D	-95 / 0	0.0	0.0	0.03 (1)	7.81		C- E	-259 / 0	0.06 (1)
I- H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
H- G	0 / 0	-18.5	-18.5	0.16 (1)	10.00				
G- F	0 / 173	-18.5	-18.5	0.03 (1)	10.00				
F- E	0 / 216	-18.5	-18.5	0.07 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 588 (0.03")

CSI: TC=0.08/1.00 (B-C:1) , BC=0.16/1.00 (G-H:1) , WB=0.06/1.00 (C-E:1) , SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (E) (INPUT = 1.00)

A-18023103

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H7B-Cond1	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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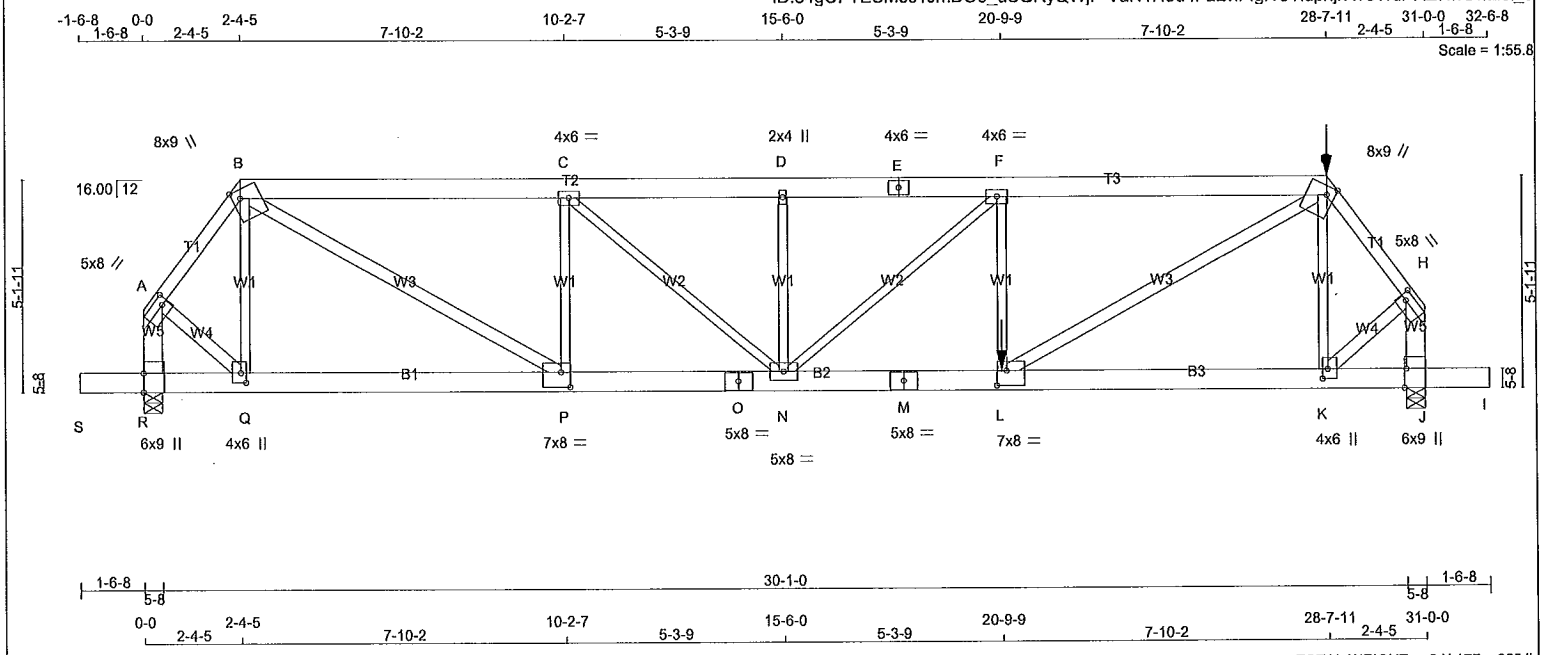

TOTAL WEIGHT = 2 X 177 = 355 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - E	2x6	DRY	1650F 1.5E	SPF
E - G	2x6	DRY	1650F 1.5E	SPF
G - H	2x4	DRY	No.2	SPF
R - A	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
S - O	2x6	DRY	No.2	SPF
O - M	2x6	DRY	No.2	SPF
M - I	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
B - P	2x4	DRY	No.2	SPF
L - G	2x4	DRY	No.2	SPF
A - Q	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.25	2.00
B	TTWW+m	MT20	8.0	9.0	2.50	2.25
C	TMWW-t	MT20	4.0	6.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	4.0	6.0		
F	TMWW-t	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	2.50	2.25
H	TMVW-t	MT20	5.0	8.0	2.25	2.00
J	BMV1+t	MT20	6.0	9.0	Edge	0.50
K	BMWW+t	MT20	4.0	6.0	2.75	1.50
L	BMWW-t	MT20	7.0	8.0	4.25	2.75
M	BS-t	MT20	5.0	8.0		
N	BMWWW-t	MT20	5.0	8.0		
O	BS-t	MT20	5.0	8.0		
P	BMWW-t	MT20	7.0	8.0	4.25	2.75
Q	BMWW+t	MT20	4.0	6.0	2.75	1.50
R	BMV1+t	MT20	6.0	9.0	Edge	

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

NOTE: 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

REGISTERED PROFESSIONAL ENGINEER
02/15/2018
EDWIN C. FOK
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
R	2343	0	2343	0	0	5-8	2-8
J	3490	0	3490	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL.
R	1660	1069 / 0	0 / 0	0 / 0	0 / 0	591 / 0	0 / 0
J	2469	1614 / 0	0 / 0	0 / 0	0 / 0	855 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1820 / 0	-78.0	-78.0	0.13 (1)	4.83
B- C	-3799 / 0	-78.0	-78.0	0.28 (1)	4.71
C- D	-4771 / 0	-78.0	-78.0	0.28 (1)	4.28
D- E	-4771 / 0	-78.0	-78.0	0.43 (1)	4.09
E- F	-4771 / 0	-78.0	-78.0	0.43 (1)	4.09
F- G	-5429 / 0	-153.5	-153.5	0.61 (1)	3.70
G- H	-2824 / 0	-78.0	-78.0	0.20 (1)	3.96
R- A	-2223 / 0	0.0	0.0	0.18 (1)	6.82
J- H	-3398 / 0	0.0	0.0	0.27 (1)	5.72
S- R	0 / 0	-96.5	-96.5	0.08 (1)	10.00
R- Q	0 / 0	-18.5	-18.5	0.11 (4)	10.00
Q- P	0 / 1079	-18.5	-18.5	0.23 (1)	10.00
P- O	0 / 3799	-18.5	-18.5	0.54 (1)	10.00
O- N	0 / 3799	-18.5	-18.5	0.54 (1)	10.00
N- M	0 / 5429	-18.5	-18.5	0.77 (1)	10.00
M- L	0 / 5429	-18.5	-18.5	0.77 (1)	10.00
L- K	0 / 1676	-36.4	-36.4	0.40 (1)	10.00
K- J	0 / 0	-36.4	-36.4	0.23 (4)	10.00
J- I	0 / 0	-96.5	-96.5	0.08 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
Q- B	-514 / 0	0.18 (1)
B- P	0 / 3166	0.56 (1)
P- C	-1509 / 0	0.53 (1)
C- N	0 / 1298	0.32 (1)
N- D	-183 / 0	0.06 (1)
N- F	-878 / 0	0.81 (1)
L- F	-449 / 0	0.16 (1)
L- G	0 / 4370	0.77 (1)
K- G	-723 / 0	0.26 (1)
A- Q	0 / 1282	0.23 (1)
K- H	0 / 1989	0.35 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
G	28-7-11	-134	-134	---	FRONT	VERT	TOTAL
L	20-9-8	-1635	-1635	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
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 10-4-0 OF SPAN MEASURED FROM THE RIGHT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.61/1.00 (F-G:1) , BC=0.77/1.00 (L-N:1) , WB=0.81/1.00 (F-N:1) , SSI=0.46/1.00 (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 = 1.00

AUTOSOLVE HEELS OFF

A-18023112

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H14P	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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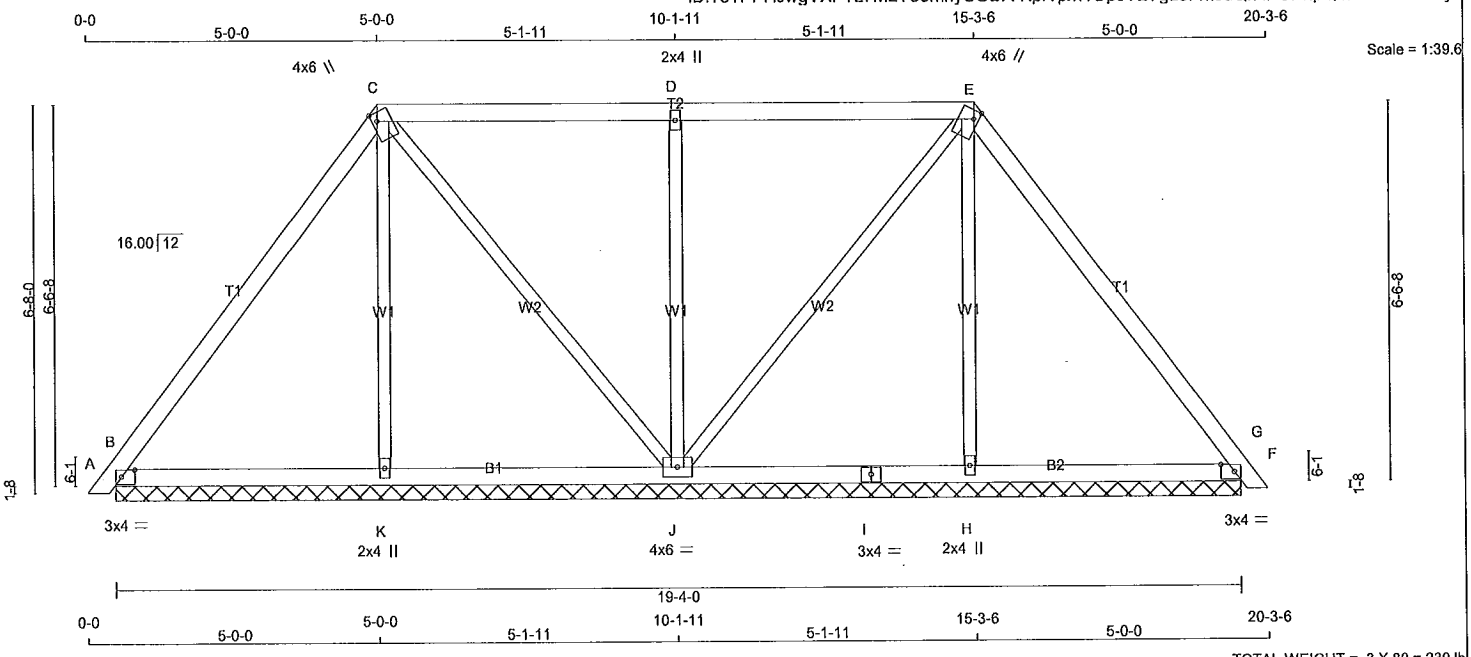


TOTAL WEIGHT = 3 X 80 = 239 lb

[M]

LUMBER

N. L. G. A. RULES

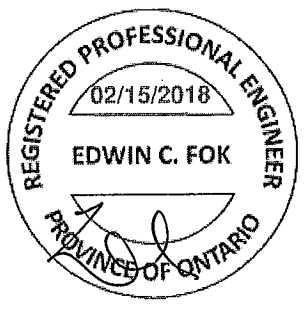
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	4.0	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	BS-t	MT20	3.0	4.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

NOTE: 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
B	324	0	324	0	0	19-4-0 (6-4-0)	7-0
K	267	0	267	0	0	19-4-0 (6-4-0)	7-0
J	738	0	738	0	0	19-4-0 (6-4-0)	7-0
H	267	0	267	0	0	19-4-0 (6-4-0)	7-0
F	324	0	324	0	0	19-4-0 (6-4-0)	7-0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	228	157 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0
K	196	89 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
J	521	349 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
H	196	89 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
F	228	157 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- C	-108 / 0	-78.0	-78.0	0.28 (1)	6.25
C- D	0 / 1	-78.0	-78.0	0.35 (1)	10.00
D- E	0 / 1	-78.0	-78.0	0.35 (1)	10.00
E- F	-108 / 0	-78.0	-78.0	0.28 (1)	6.25
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00
B- K	0 / 64	-18.5	-18.5	0.11 (4)	10.00
K- J	0 / 61	-18.5	-18.5	0.11 (4)	10.00
J- I	0 / 61	-18.5	-18.5	0.11 (4)	10.00
I- H	0 / 61	-18.5	-18.5	0.11 (4)	10.00
H- F	0 / 64	-18.5	-18.5	0.11 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-166 / 0	0.12 (1)
C- J	-96 / 0	0.13 (1)
J- D	-500 / 0	0.35 (1)
J- E	-96 / 0	0.13 (1)
H- E	-166 / 0	0.12 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

CSI: TC=0.35/1.00 (C-D:1) , BC=0.11/1.00 (B-K:4) , WB=0.35/1.00 (D-J:1) , SSI=0.20/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.14 (F) (INPUT = 1.00)

A-18023113

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H15	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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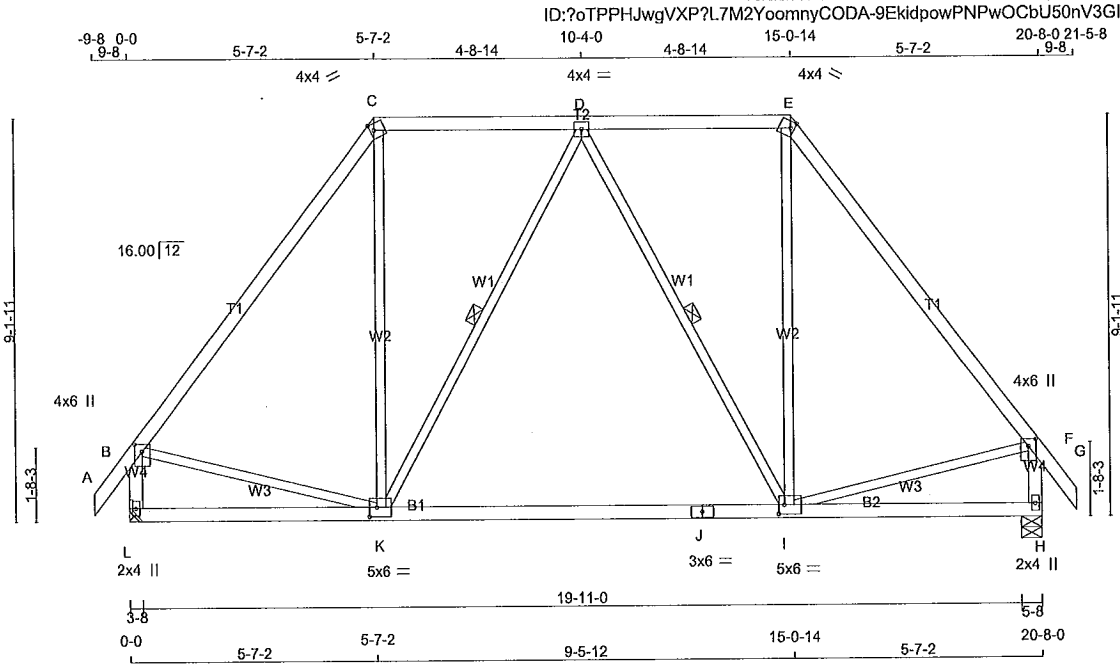


TOTAL WEIGHT = 2 X 101 = 202 lb

[M][F]

LUMBER

N. L. G. A. RULES

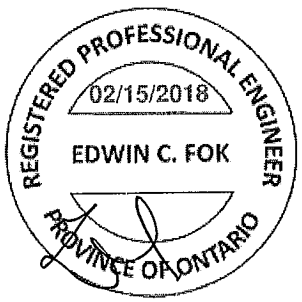
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW-m	MT20	4.0	4.0	1.75	1.00
D	TMWW-t	MT20	4.0	4.0		
E	TTW-m	MT20	4.0	4.0	1.75	1.00
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWWW-t	MT20	5.0	6.0	2.50	1.50
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	5.0	6.0	2.50	2.00
L	BMV1+p	MT20	2.0	4.0		

NOTE: 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
L	1103	0	1103	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
H	1103	0	1103	0	0	5-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	788	472 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
H	788	472 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 28	-78.0	-78.0	0.05 (1)	10.00	K- C	0 / 291	0.07 (4)
B- C	-833 / 0	-78.0	-78.0	0.35 (1)	6.25	K- D	-278 / 0	0.20 (1)
C- D	-501 / 0	-85.5	-85.5	0.25 (1)	2.00	D- I	-278 / 0	0.20 (1)
D- E	-501 / 0	-85.5	-85.5	0.25 (1)	2.00	I- E	0 / 291	0.07 (4)
E- F	-833 / 0	-78.0	-78.0	0.35 (1)	6.25	B- K	0 / 511	0.11 (1)
F- G	0 / 28	-78.0	-78.0	0.05 (1)	10.00	I- F	0 / 511	0.11 (1)
L- B	-1070 / 0	0.0	0.0	0.12 (1)	7.62			
H- F	-1070 / 0	0.0	0.0	0.12 (1)	7.62			
L- K	0 / 0	-18.5	-18.5	0.27 (4)	10.00			
K- J	0 / 630	-18.5	-18.5	0.33 (4)	10.00			
J- I	0 / 630	-18.5	-18.5	0.33 (4)	10.00			
I- H	0 / 0	-18.5	-18.5	0.27 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE 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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.69")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.69")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.35/1.00 (B-C:1) , BC=0.33/1.00 (I-K:4) , WB=0.20/1.00 (D-I:1) , SSI=0.20/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.33 (F) (INPUT = 1.00)

A-18023114

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H15T	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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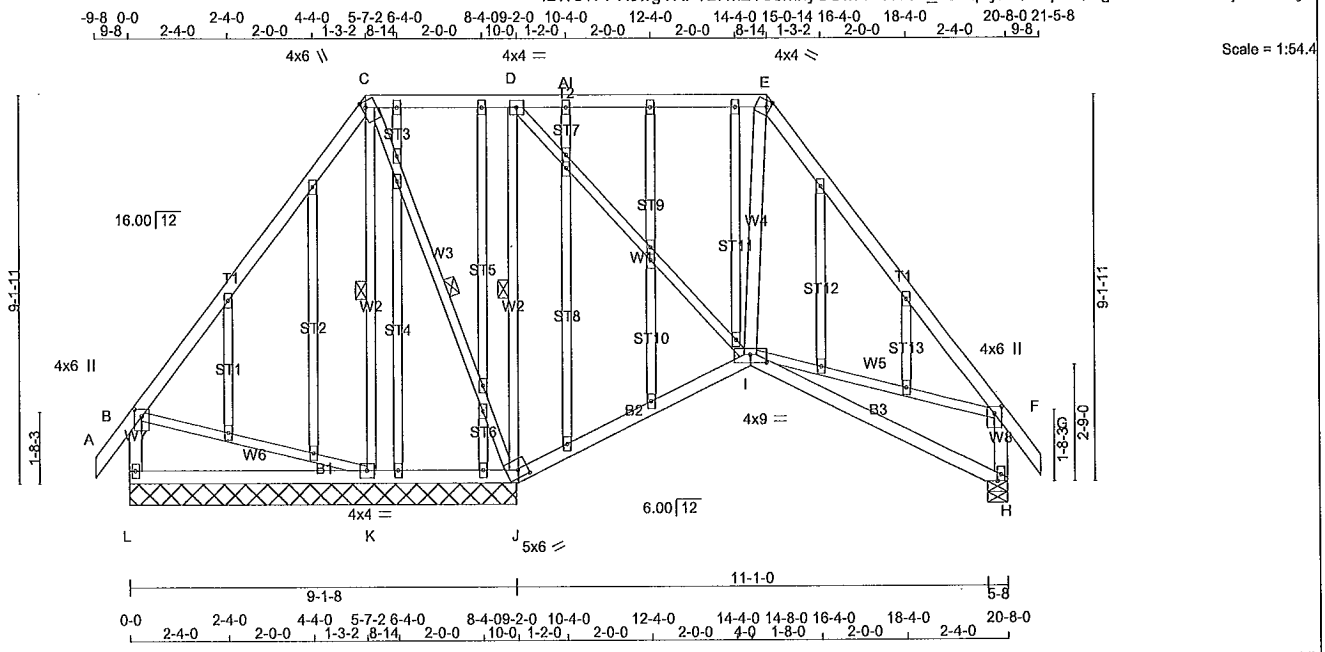


TOTAL WEIGHT = 2 X 152 = 304 lb

[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
E - 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 - I	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - E	2x4	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

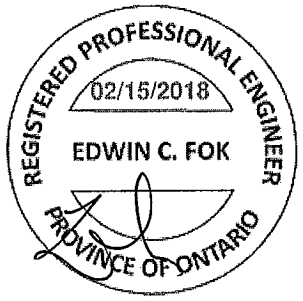
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TMWW-t	MT20	4.0	4.0		
E	TTW-m	MT20	4.0	4.0	1.75	1.00
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
H	BMV1+p	MT20	2.0	4.0	Edge	
I	BBWWW-p	MT20	4.0	9.0	2.25	4.50
J	BBWW1-h	MT20	5.0	6.0	2.00	2.75
K	BMWW1-t	MT20	4.0	4.0		
L	BMV1+p	MT20	2.0	4.0		
M	NP+w	MT20	2.0	4.0	1.75	1.00

M, N, O, P, P, Q, R, S, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH

M	NP+w	MT20	2.0	4.0		
AB	NP+w	MT20	2.0	4.0	1.75	1.00

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

NOTE: 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
L	351	0	351	0	0	9-1-8	2-3-15
J	1038	0	1038	0	0	9-1-8	2-3-15
H	576	0	576	0	0	5-8	1-8
K	241	0	241	0	0	9-1-8	2-3-15

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	246	175 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0
J	741	446 / 0	0 / 0	0 / 0	0 / 0	295 / 0	0 / 0
H	410	256 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0
K	180	66 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-78.0	-78.0	0.05 (1)	10.00
B- C	-21 / 12	-78.0	-78.0	0.31 (1)	6.25
C- D	0 / 45	-85.5	-85.5	0.40 (1)	2.00
D-AI	-202 / 0	-85.5	-85.5	0.35 (1)	2.00
AI- E	-202 / 0	-85.5	-85.5	0.35 (1)	2.00
E- F	-354 / 0	-78.0	-78.0	0.32 (1)	6.25
F- G	0 / 28	-78.0	-78.0	0.05 (1)	10.00
L- B	-308 / 0	0.0	0.0	0.03 (1)	7.81
H- F	-521 / 0	0.0	0.0	0.06 (1)	7.81
L- K	0 / 0	-18.5	-18.5	0.13 (4)	10.00
K- J	-8 / 11	-18.5	-18.5	0.10 (4)	10.00
J- I	-59 / 0	-18.5	-18.5	0.12 (4)	6.25
I- H	0 / 0	-18.5	-18.5	0.20 (4)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-133 / 0	0.07 (1)
K- J	-144 / 0	0.09 (1)
J- D	-811 / 0	0.44 (1)
D- I	0 / 376	0.08 (1)
I- E	-145 / 3	0.07 (1)
B- K	-8 / 13	0.00 (4)
I- F	0 / 218	0.05 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON 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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL.)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL.) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL.) = L/ 999 (0.07")

CSI: TC=0.40/1.00 (C-D:1) , BC=0.20/1.00 (H-I:4) , WB=0.44/1.00 (D-J:1) , SSI=0.24/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (J) (INPUT = 0.90)
JSI METAL= 0.29 (J) (INPUT = 1.00)

A-18023115

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H16P	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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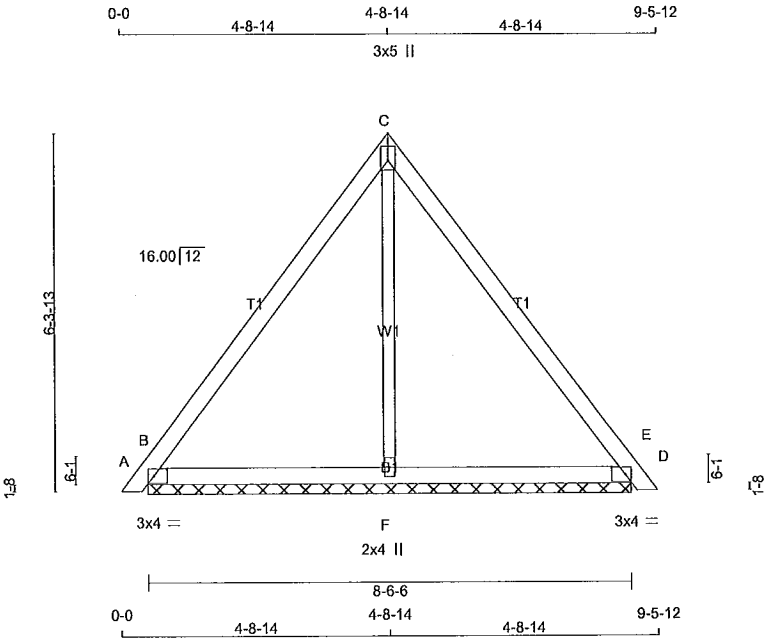

Scale = 1:40.7

TOTAL WEIGHT = 4 X 32 = 129 lb

[M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMB1-I	MT20	3.0	4.0	1.50	2.75
F	BMW1+w	MT20	2.0	4.0		

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

NOTE: 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

REGISTERED PROFESSIONAL ENGINEER
02/15/2018
EDWIN C. FOK
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
B	314	0	314	0	0	8-6-6	9-10
D	314	0	314	0	0	8-6-6	9-10
F	249	0	249	0	0	8-6-6	9-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	221	153 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
D	221	153 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
F	183	81 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	F- C	-150 / 0	0.08 (1)
B- C	-113 / 0	-78.0	-78.0	0.24 (1)	6.25			
C- D	-113 / 0	-78.0	-78.0	0.24 (1)	6.25			
D- E	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- F	0 / 67	-18.5	-18.5	0.10 (4)	10.00			
F- D	0 / 67	-18.5	-18.5	0.10 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

CSI: TC=0.24/1.00 (B-C:1) , BC=0.10/1.00 (B-F:4) , WB=0.08/1.00 (C-F:1) , SSI=0.08/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (D) (INPUT = 0.90)
JSI METAL= 0.14 (D) (INPUT = 1.00)

A-18023116

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H17T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

ID:?oTPPHJwgVXP?L7M2YoomnyCODA-WkbRp8GNDMJOZB4zti_e8VP3GGXqKXxQjj4Z12zkwxu

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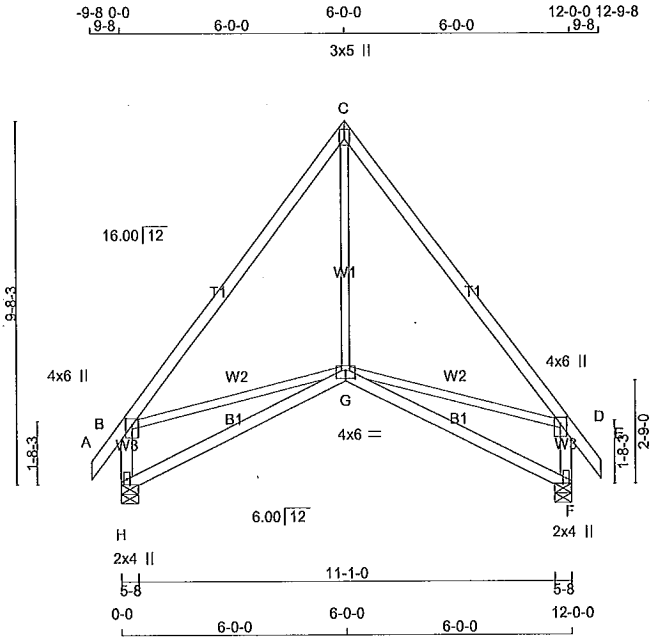


TOTAL WEIGHT = 60 lb

[M][F]

LUMBER

N. L. G. A. RULES

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

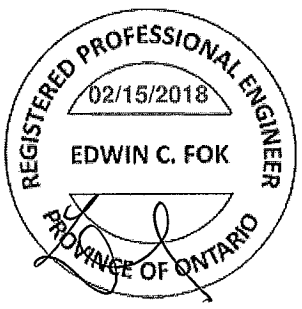
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	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	Edge	
G	BBWWW-p	MT20	4.0	6.0	2.50	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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

NOTE: 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	650	0	650	0	0	5-8	1-8
F	650	0	650	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	462	290 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
F	462	290 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 28	-78.0	-78.0	0.03 (1)	10.00	G- C	0 / 242	0.06 (4)
B- C	-443 / 0	-78.0	-78.0	0.24 (1)	6.25	B- G	0 / 274	0.06 (1)
C- D	-443 / 0	-78.0	-78.0	0.24 (1)	6.25	G- D	0 / 274	0.06 (1)
D- E	0 / 28	-78.0	-78.0	0.03 (1)	10.00			
H- B	-594 / 0	0.0	0.0	0.07 (1)	7.81			
F- D	-594 / 0	0.0	0.0	0.07 (1)	7.81			
H- G	0 / 0	-18.5	-18.5	0.20 (4)	10.00			
G- F	0 / 0	-18.5	-18.5	0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.20/1.00 (G-H:4) , WB=0.06/1.00 (D-G:1) , SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (G) (INPUT = 0.90)
JSI METAL= 0.25 (H) (INPUT = 1.00)

A-18023117

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H7B-Cond2	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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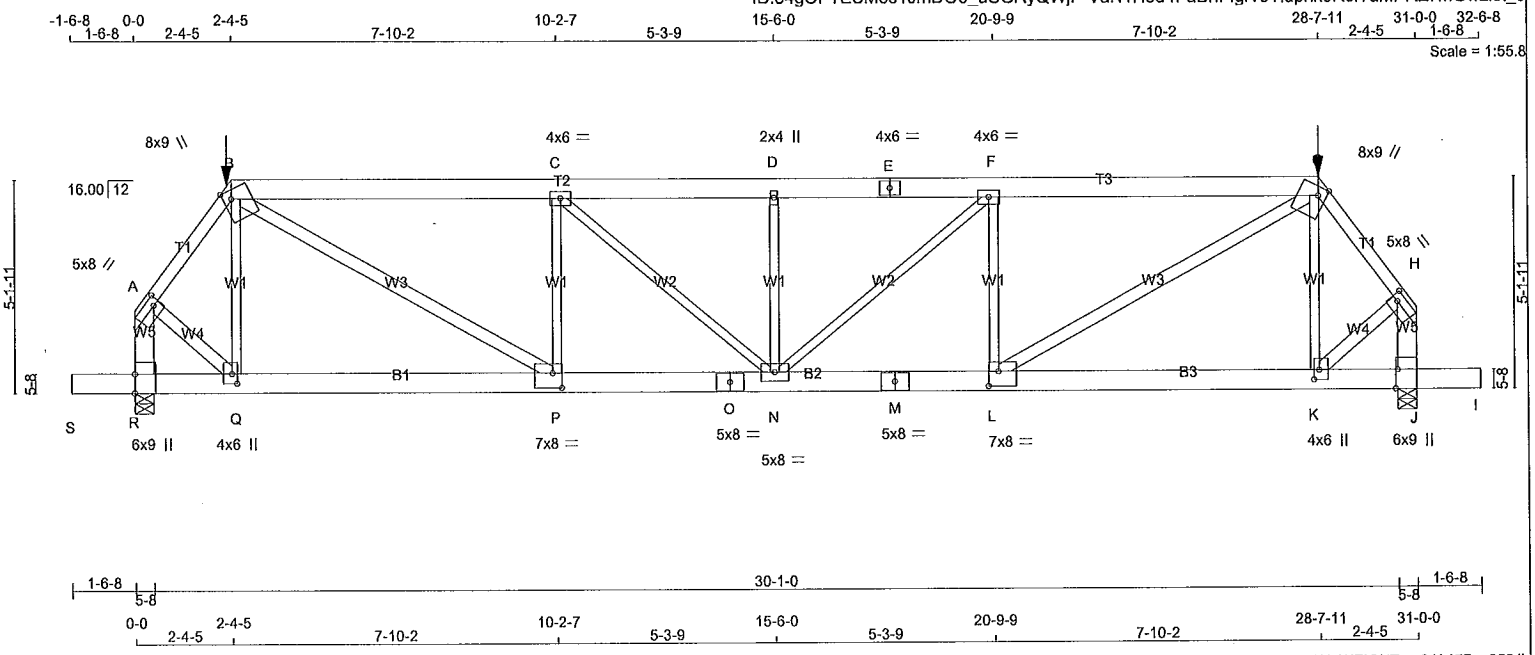


TOTAL WEIGHT = 2 X 177 = 355 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - E	2x6	DRY	1650F 1.5E	SPF
E - G	2x6	DRY	1650F 1.5E	SPF
G - H	2x4	DRY	No.2	SPF
R - A	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
S - O	2x6	DRY	No.2	SPF
O - M	2x6	DRY	No.2	SPF
M - I	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
B - P	2x4	DRY	No.2	SPF
L - G	2x4	DRY	No.2	SPF
A - Q	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF

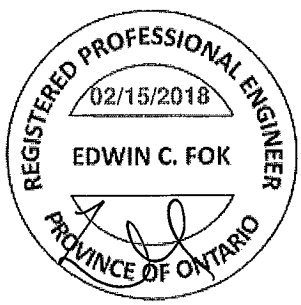
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.25	2.00
B	TTWW+m	MT20	8.0	9.0	2.50	2.25
C	TMWW-t	MT20	4.0	6.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	4.0	6.0		
F	TMWW-t	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	2.50	2.25
H	TMVW-t	MT20	5.0	8.0	2.25	2.00
J	BMV1+t	MT20	6.0	9.0	Edge	0.50
K	BMWW+t	MT20	4.0	6.0	2.75	1.50
L	BMWW-t	MT20	7.0	8.0	4.25	2.75
M	BS-t	MT20	5.0	8.0		
N	BMWWW-t	MT20	5.0	8.0		
O	BS-t	MT20	5.0	8.0		
P	BMWW-t	MT20	7.0	8.0	4.25	2.75
Q	BMWW+t	MT20	4.0	6.0	2.75	1.50
R	BMV1+t	MT20	6.0	9.0	Edge	

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

NOTE: 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
R	3048	0	3048	0	0	5-8	4-3
J	3048	0	3048	0	0	5-8	4-3

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	2174	1322 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0
J	2174	1322 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-2431 / 0	-78.0	-78.0	0.17 (1)	4.25	Q- B	-613 / 0	0.22 (1)
B- C	-4515 / 0	-153.5	-153.5	0.53 (1)	4.09	B- P	0 / 3576	0.63 (1)
C- D	-4902 / 0	-153.5	-153.5	0.50 (1)	3.94	P- C	-1595 / 0	0.56 (1)
D- E	-4902 / 0	-153.5	-153.5	0.50 (1)	3.94	C- N	0 / 516	0.13 (1)
E- F	-4902 / 0	-153.5	-153.5	0.50 (1)	3.94	N- D	-523 / 0	0.18 (1)
F- G	-4515 / 0	-153.5	-153.5	0.53 (1)	4.09	N- F	0 / 516	0.13 (1)
G- H	-2431 / 0	-78.0	-78.0	0.17 (1)	4.25	L- F	-1595 / 0	0.56 (1)
R- A	-2939 / 0	0.0	0.0	0.24 (1)	6.09	L- G	0 / 3576	0.63 (1)
J- H	-2939 / 0	0.0	0.0	0.24 (1)	6.09	K- G	-613 / 0	0.22 (1)
						A- Q	0 / 1713	0.30 (1)
S- R	0 / 0	-96.5	-96.5	0.08 (1)	10.00	K- H	0 / 1713	0.30 (1)
R- Q	0 / 0	-36.4	-36.4	0.21 (4)	10.00			
Q- P	0 / 1443	-36.4	-36.4	0.34 (1)	10.00			
P- O	0 / 4515	-36.4	-36.4	0.66 (1)	10.00			
O- N	0 / 4515	-36.4	-36.4	0.66 (1)	10.00			
N- M	0 / 4515	-36.4	-36.4	0.66 (1)	10.00			
M- L	0 / 4515	-36.4	-36.4	0.66 (1)	10.00			
L- K	0 / 1443	-36.4	-36.4	0.34 (1)	10.00			
K- J	0 / 0	-36.4	-36.4	0.21 (4)	10.00			
J- I	0 / 0	-96.5	-96.5	0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	—	FRONT	VERT	TOTAL
G	28-7-11	-134	-134	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.53/1.00 (B-C:1) , BC=0.66/1.00 (N-P:1) , WB=0.63/1.00 (B-P:1) , SSI=0.47/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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	788	1987	1656

A-18023148

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H7T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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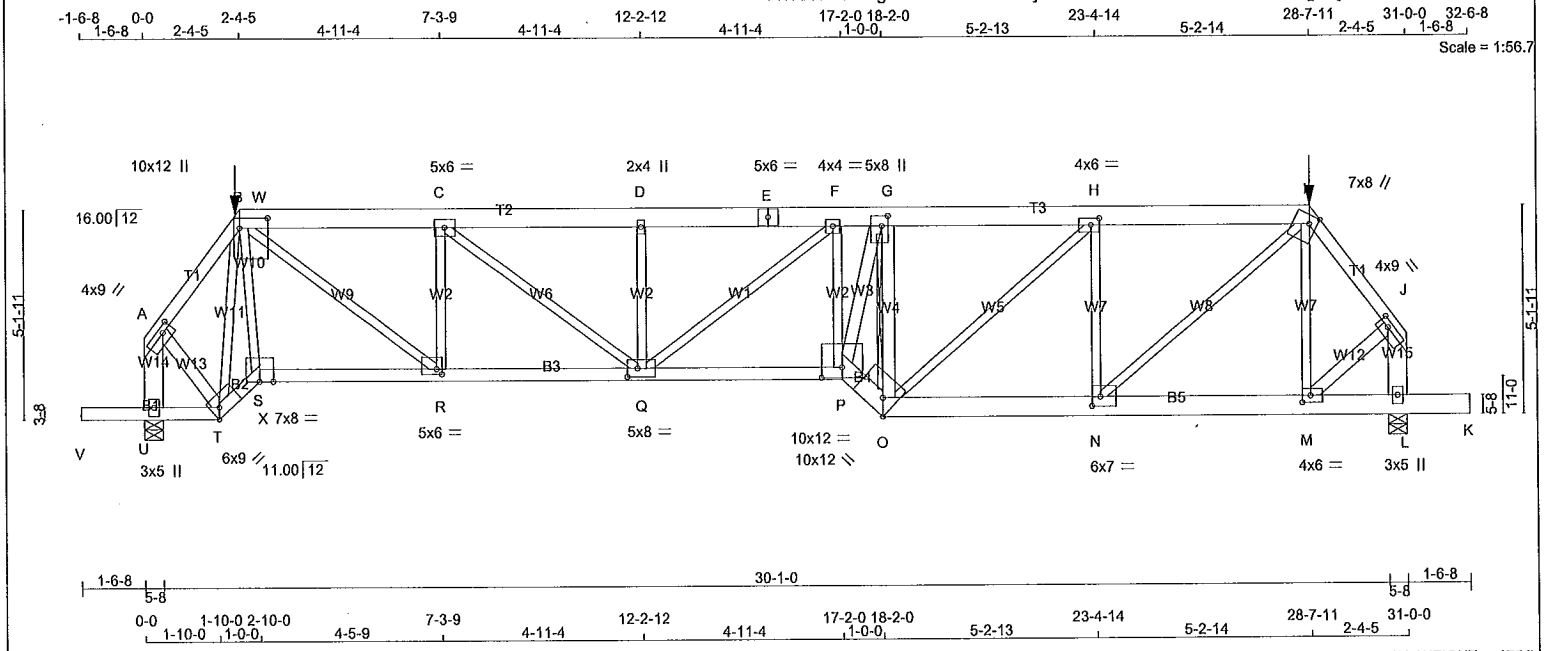


TOTAL WEIGHT = 175 lb

[M]

LUMBER

N. L. G. A. RULES

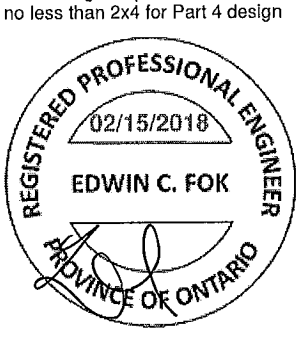
CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - E	2x6	DRY	No.2	SPF
E - I	2x6	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
U - A	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
V - T	2x4	DRY	No.2	SPF
T - S	2x4	DRY	No.2	SPF
S - P	2x4	DRY	2100F 1.8E	SPF
P - O	2x6	DRY	No.2	SPF
O - K	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
P - G	2x4	DRY	No.2	SPF
O - G	2x4	DRY	No.2	SPF
A - T	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	9.0	1.50	3.00
B	TTWWW+p	MT20	10.0	12.0	3.00	8.25
C	TMWW-t	MT20	5.0	6.0		
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	5.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMWW+t	MT20	5.0	8.0	3.00	1.75
H	TMWW-t	MT20	4.0	6.0	2.00	2.50
I	TTWW+m	MT20	7.0	8.0	2.50	2.25
J	TMVW-t	MT20	4.0	9.0	1.50	3.00
L	BMV1+p	MT20	3.0	5.0		
M	BMWW-t	MT20	4.0	6.0	2.00	2.50
N	BMWW-t	MT20	6.0	7.0	2.75	2.50
O	BBWW-h	MT20	10.0	12.0	4.00	Edge
P	BBWW-I	MT20	10.0	12.0	3.00	6.00
Q	BMWWW-t	MT20	5.0	8.0	2.50	3.00
R	BMWW-t	MT20	5.0	6.0	1.50	1.50
S	BBW-I	MT20	7.0	8.0		

NOTE: 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
U	3056	0	3056	0	0	5-8	4-3
L	3049	0	3049	0	0	5-8	4-3

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL.
U	2179	1326 / 0	0 / 0	0 / 0	0 / 0	854 / 0	0 / 0
L	2175	1323 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT G-O

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-2065 / 0	-78.0	-78.0	0.15 (1)		4.57
B- W	-4360 / 0	-153.5	-153.5	0.28 (1)		3.92
W- C	-4360 / 0	-78.0	-78.0	0.28 (1)		3.92
C- D	-5780 / 0	-78.0	-78.0	0.33 (1)		3.43
D- E	-5780 / 0	-78.0	-78.0	0.45 (1)		3.30
E- F	-5780 / 0	-78.0	-78.0	0.45 (1)		3.30
F- G	-5978 / 0	-153.5	-153.5	0.36 (1)		3.33
G- H	-4839 / 0	-153.5	-153.5	0.49 (1)		3.51
H- I	-3723 / 0	-153.5	-153.5	0.42 (1)		4.02
I- J	-2405 / 0	-78.0	-78.0	0.17 (1)		4.27
U- A	-2811 / 0	0.0	0.0	0.24 (1)		6.20
L- J	-2908 / 0	0.0	0.0	0.23 (1)		6.11
V- U	0 / 0	-96.5	-96.5	0.17 (1)		10.00
U- T	0 / 0	-36.4	-36.4	0.17 (1)		10.00
T- X	0 / 2049	-36.4	-36.4	0.37 (1)		10.00
X- S	0 / 2049	-36.4	-36.4	0.37 (1)		10.00
S- R	0 / 1711	-112.0	-112.0	0.36 (1)		10.00
R- Q	0 / 4360	-112.0	-112.0	0.60 (1)		10.00
Q- P	0 / 5973	-112.0	-112.0	0.73 (1)		10.00
P- O	0 / 6224	-36.4	-36.4	0.81 (1)		10.00
O- N	0 / 3723	-36.4	-36.4	0.57 (1)		10.00
N- M	0 / 1426	-36.4	-36.4	0.28 (1)		10.00
M- L	0 / 0	-36.4	-36.4	0.10 (4)		10.00
L- K	0 / 0	-96.5	-96.5	0.08 (1)		10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- B	-2477 / 0	0.90 (1)
B- S	0 / 1626	0.40 (1)
R- C	-1501 / 0	0.40 (1)
C- Q	0 / 1801	0.45 (1)
Q- D	-447 / 0	0.12 (1)
Q- F	-247 / 0	0.16 (1)
P- F	0 / 188	0.05 (1)
P- G	0 / 4448	0.79 (1)
O- G	-4952 / 0	0.78 (1)
O- H	0 / 1492	0.37 (1)
N- H	-1907 / 0	0.67 (1)
N- I	0 / 3079	0.76 (1)
M- I	-679 / 0	0.24 (1)
A- T	0 / 1633	0.29 (1)
M- J	0 / 1694	0.30 (1)
B- R	0 / 3357	0.83 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
I	28-7-11	-134	-134	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
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 = 17-2-0
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 = 2-4-5
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 13-10-0 OF SPAN MEASURED FROM THE RIGHT.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.30")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 629 (0.59")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")

A-18023119

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H8T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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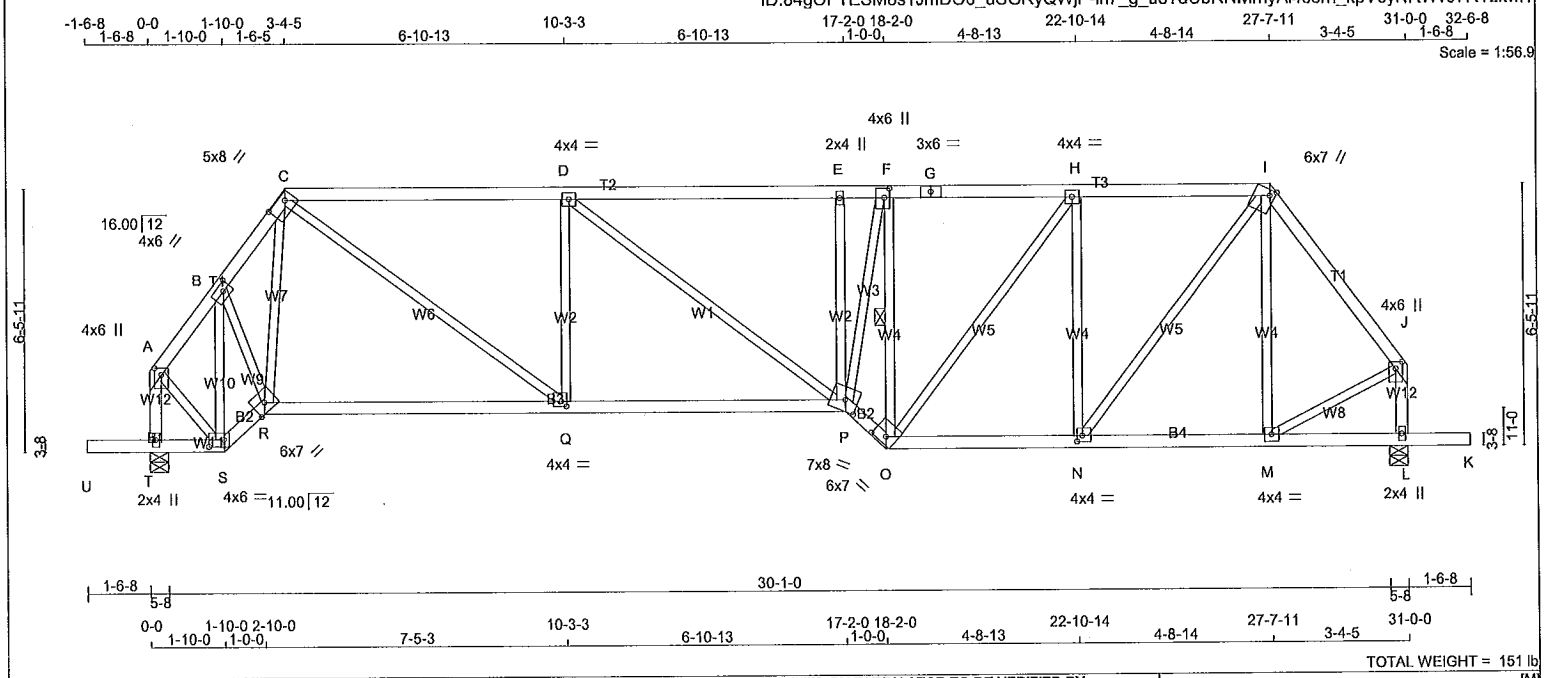


TOTAL WEIGHT = 151 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
T - A	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - P	2x4	DRY	No.2	SPF
P - O	2x4	DRY	No.2	SPF
O - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

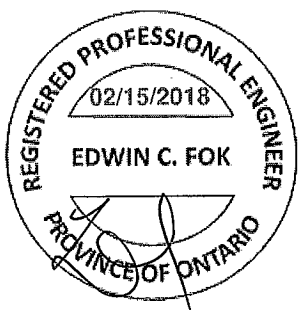
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMWW-t	MT20	4.0	6.0	2.00	2.50
C	TTWW-h	MT20	5.0	8.0	1.75	5.50
D	TMWW-t	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW+t	MT20	4.0	6.0	2.75	1.50
G	TS-t	MT20	3.0	6.0		
H	TMWW-t	MT20	4.0	4.0		
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMVW+p	MT20	4.0	6.0	2.00	2.00
L	BMV1+p	MT20	2.0	4.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMWW-t	MT20	4.0	4.0	1.75	1.50
O	BBWW-h	MT20	6.0	7.0	2.00	4.00
P	BBWWW-m	MT20	7.0	8.0	3.25	3.75
Q	BMWW-t	MT20	4.0	4.0	1.50	1.50
R	BBWW-h	MT20	6.0	7.0	Edge	
S	BBWW-l	MT20	4.0	6.0	2.00	4.50
T	BMV1+p	MT20	2.0	4.0		

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

NOTE: 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
T	1648	0	1648	0	0	5-8	2-7
L	1640	0	1640	0	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0
L	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-O.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO						FR-TO		
A- B	-1026 / 0	-78.0	-78.0	0.04 (1)	6.15	S- B	-1110 / 0	0.30 (1)
B- C	-1413 / 0	-78.0	-78.0	0.05 (1)	5.45	B- R	0 / 700	0.16 (1)
C- D	-2032 / 0	-78.0	-78.0	0.77 (1)	3.86	R- C	-50 / 21	0.02 (1)
D- E	-2211 / 0	-78.0	-78.0	0.79 (1)	3.70	C- Q	0 / 1497	0.34 (1)
E- F	-2204 / 0	-78.0	-78.0	0.27 (1)	4.32	Q- D	-751 / 0	0.35 (1)
F- G	-1835 / 0	-78.0	-78.0	0.33 (1)	4.61	D- P	0 / 224	0.05 (1)
G- H	-1835 / 0	-78.0	-78.0	0.33 (1)	4.61	P- E	-336 / 0	0.16 (1)
H- I	-1478 / 0	-78.0	-78.0	0.31 (1)	5.04	P- F	0 / 1958	0.44 (1)
I- J	-1239 / 0	-78.0	-78.0	0.19 (1)	5.57	O- F	-2061 / 0	0.56 (1)
T- A	-1419 / 0	0.0	0.0	0.16 (1)	6.84	O- H	0 / 585	0.13 (1)
L- J	-1469 / 0	0.0	0.0	0.17 (1)	6.76	N- H	-877 / 0	0.60 (1)
						N- I	0 / 1218	0.27 (1)
U- T	0 / 0	-96.5	-96.5	0.16 (1)	10.00	M- I	-259 / 0	0.18 (1)
T- S	0 / 0	-18.5	-18.5	0.16 (1)	10.00	A- S	0 / 817	0.18 (1)
S- R	0 / 799	-18.5	-18.5	0.13 (1)	10.00	M- J	0 / 814	0.18 (1)
R- Q	0 / 838	-18.5	-18.5	0.35 (4)	10.00			
Q- P	0 / 2032	-18.5	-18.5	0.47 (1)	10.00			
P- O	0 / 2443	-18.5	-18.5	0.40 (1)	10.00			
O- N	0 / 1478	-18.5	-18.5	0.29 (1)	10.00			
N- M	0 / 734	-18.5	-18.5	0.17 (4)	10.00			
M- L	0 / 0	-18.5	-18.5	0.07 (4)	10.00			
L- K	0 / 0	-96.5	-96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.28")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.79/1.00 (D-E:1) , BC=0.47/1.00 (P-Q:1) , WB=0.60/1.00 (H-N:1) , SSI=0.26/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.45 (Q) (INPUT = 1.00)

A-18023120

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H9T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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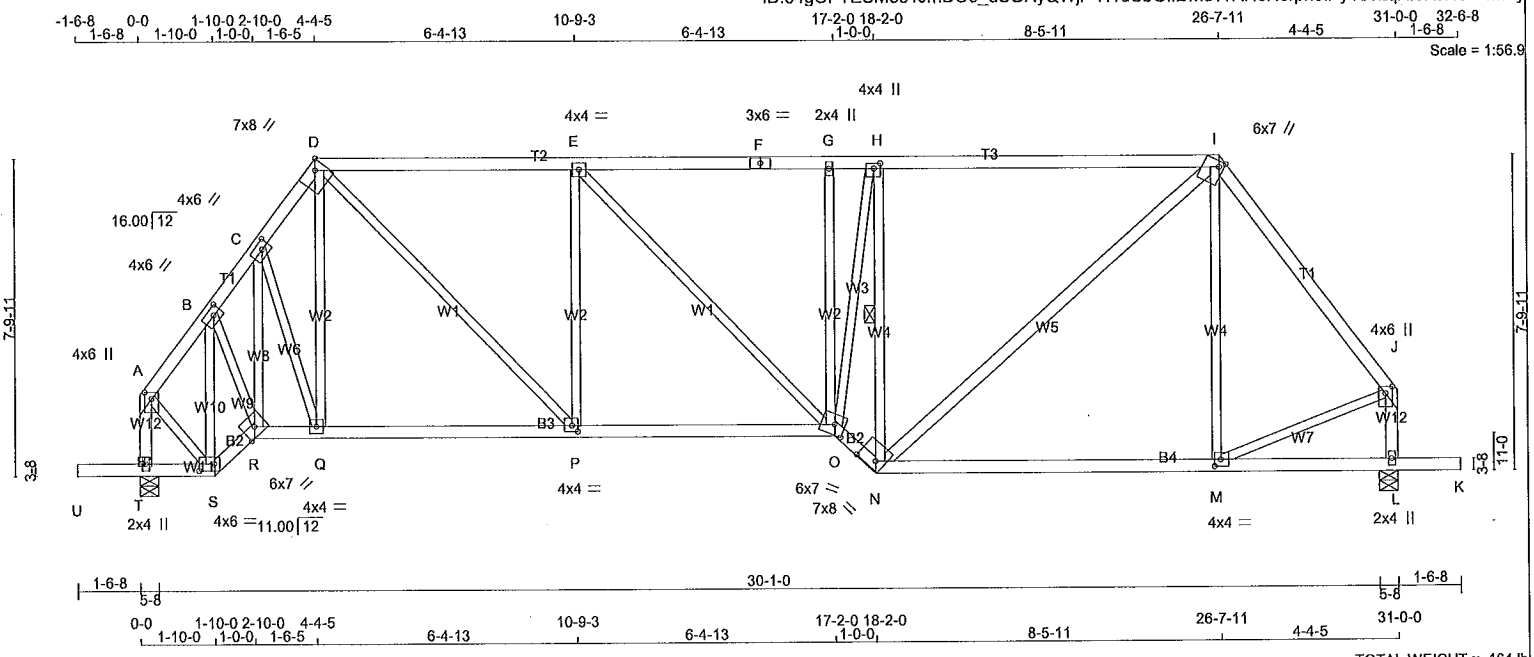


TOTAL WEIGHT = 164 lb

[M]

LUMBER

N. L. G. A. RULES

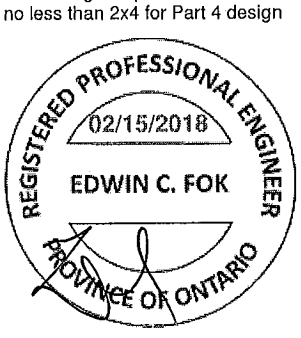
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	1650F 1.5E	SPF
F - I	2x4	DRY	1650F 1.5E	SPF
I - J	2x4	DRY	No.2	SPF
T - A	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
N - I	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMWW-t	MT20	4.0	6.0	2.00	2.50
C	TMWW-t	MT20	4.0	6.0	2.00	2.50
D	TTWW-h	MT20	7.0	8.0	Edge	2.75
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMW+w	MT20	2.0	4.0		
H	TMWW+t	MT20	4.0	4.0	1.50	1.75
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMVW+p	MT20	4.0	6.0	2.00	2.00
L	BMV1+p	MT20	2.0	4.0		
M	BMWW-t	MT20	4.0	4.0	2.00	1.75
N	BBWW-h	MT20	7.0	8.0	2.25	5.50
O	BBWWW-m	MT20	6.0	7.0	3.00	3.00
P	BMWW-t	MT20	4.0	4.0	1.75	1.75
Q	BMWW-t	MT20	4.0	4.0		
R	BBWW-h	MT20	6.0	7.0	Edge	
S	BBWW-l	MT20	4.0	6.0	2.00	4.50
T	BMV1+p	MT20	2.0	4.0		

NOTE: 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
T	1648	0	1648	0	0	5-8	2-7
L	1640	0	1640	0	0	5-8	2-7

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0
L	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1026 / 0	-78.0	-78.0	0.04 (1)	6.15
B- C	-1413 / 0	-78.0	-78.0	0.04 (1)	5.47
C- D	-1432 / 0	-78.0	-78.0	0.05 (1)	5.42
D- E	-1646 / 0	-78.0	-78.0	0.48 (1)	5.16
E- F	-1753 / 0	-78.0	-78.0	0.48 (1)	5.03
F- G	-1753 / 0	-78.0	-78.0	0.48 (1)	5.03
G- H	-1755 / 0	-78.0	-78.0	0.69 (1)	4.38
H- I	-1578 / 0	-78.0	-78.0	0.84 (1)	4.59
I- J	-1285 / 0	-78.0	-78.0	0.33 (1)	5.34
T- A	-1419 / 0	0.0	0.0	0.16 (1)	6.84
L- J	-1477 / 0	0.0	0.0	0.17 (1)	6.74
U- T	0 / 0	-96.5	-96.5	0.16 (1)	10.00
T- S	0 / 0	-18.5	-18.5	0.16 (1)	10.00
S- R	0 / 799	-18.5	-18.5	0.13 (1)	10.00
R- Q	0 / 844	-18.5	-18.5	0.20 (1)	10.00
Q- P	0 / 848	-18.5	-18.5	0.27 (4)	10.00
P- O	0 / 1646	-18.5	-18.5	0.36 (1)	10.00
O- N	0 / 2103	-18.5	-18.5	0.34 (1)	10.00
N- M	0 / 765	-18.5	-18.5	0.36 (4)	10.00
M- L	0 / 0	-18.5	-18.5	0.28 (4)	10.00
L- K	0 / 0	-96.5	-96.5	0.16 (1)	10.00

WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
S- B	-1110 / 0	0.30 (1)
B- R	0 / 725	0.16 (1)
R- C	-130 / 0	0.05 (1)
C- Q	0 / 19	0.01 (4)
Q- D	0 / 82	0.03 (4)
D- P	0 / 1141	0.26 (1)
P- E	-689 / 0	0.55 (1)
E- O	0 / 153	0.03 (1)
O- G	0 / 153	0.03 (1)
O- H	0 / 1239	0.28 (1)
N- H	-2061 / 0	0.79 (1)
N- I	0 / 1083	0.17 (1)
M- I	-119 / 67	0.14 (1)
A- S	0 / 817	0.18 (1)
M- J	0 / 815	0.18 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

ALLOWABLE DEFL.(LL.)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.84/1.00 (H-I:1) , BC=0.36/1.00 (O-P:1) , WB=0.79/1.00 (H-N:1) , SSI=0.35/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (B) (INPUT = 0.90)
JSI METAL= 0.44 (J) (INPUT = 1.00)

A-18023121

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H10T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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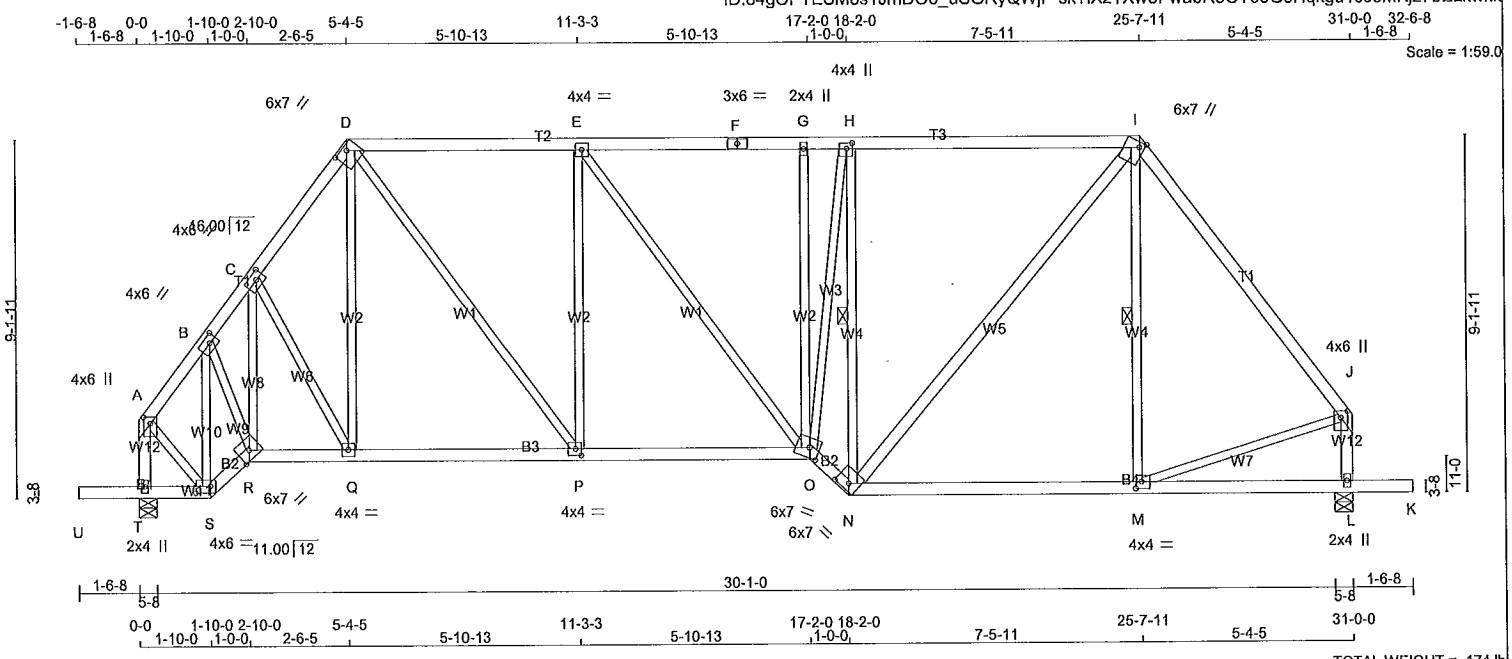


TOTAL WEIGHT = 174 lb

[M]

LUMBER

N. L. G. A. RULES

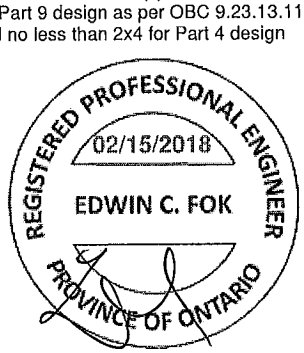
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
T - A	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
N - I	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMWW-t	MT20	4.0	6.0	2.00	2.50
C	TMWW-t	MT20	4.0	6.0	2.00	2.50
D	TTWW-h	MT20	6.0	7.0	1.50	3.75
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMW+w	MT20	2.0	4.0		
H	TMWW+t	MT20	4.0	4.0	1.75	1.75
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMVW+p	MT20	4.0	6.0	2.00	2.00
L	BMV1+p	MT20	2.0	4.0		
M	BMWW-t	MT20	4.0	4.0	2.00	1.75
N	BBWW-h	MT20	6.0	7.0	2.00	4.00
O	BBWWW-m	MT20	6.0	7.0	3.00	3.00
P	BMWW-t	MT20	4.0	4.0	2.00	1.75
Q	BMWW-t	MT20	4.0	4.0		
R	BBWW-h	MT20	6.0	7.0	Edge	
S	BBWW-l	MT20	4.0	6.0	2.00	4.50
T	BMV1+p	MT20	2.0	4.0		

NOTE: 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
T	1648	0	1648	0	0	5-8	2-7
L	1640	0	1640	0	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0
L	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-N, I-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 CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1026 / 0	-78.0	-78.0	0.05 (1)	6.15
B- C	-1398 / 0	-78.0	-78.0	0.06 (1)	5.48
C- D	-1410 / 0	-78.0	-78.0	0.09 (1)	5.41
D- E	-1389 / 0	-78.0	-78.0	0.49 (1)	4.90
E- F	-1454 / 0	-78.0	-78.0	0.49 (1)	4.80
F- G	-1454 / 0	-78.0	-78.0	0.49 (1)	4.80
G- H	-1455 / 0	-78.0	-78.0	0.64 (1)	4.33
H- I	-1324 / 0	-78.0	-78.0	0.76 (1)	4.52
I- J	-1279 / 0	-78.0	-78.0	0.54 (1)	5.13
T- A	-1419 / 0	0.0	0.0	0.16 (1)	6.84
L- J	-1459 / 0	0.0	0.0	0.17 (1)	6.77
U- T	0 / 0	-96.5	-96.5	0.16 (1)	10.00
T- S	0 / 0	-18.5	-18.5	0.16 (1)	10.00
S- R	0 / 797	-18.5	-18.5	0.13 (1)	10.00
R- Q	0 / 851	-18.5	-18.5	0.19 (1)	10.00
Q- P	0 / 834	-18.5	-18.5	0.24 (4)	10.00
P- O	0 / 1389	-18.5	-18.5	0.31 (1)	10.00
O- N	0 / 1768	-18.5	-18.5	0.29 (1)	10.00
N- M	0 / 763	-18.5	-18.5	0.31 (4)	10.00
M- L	0 / 0	-18.5	-18.5	0.23 (4)	10.00
L- K	0 / 0	-96.5	-96.5	0.16 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
S- B	-1107 / 0	0.30 (1)
B- R	0 / 747	0.17 (1)
R- C	-134 / 0	0.05 (1)
C- Q	-38 / 0	0.02 (1)
Q- D	0 / 112	0.03 (4)
D- P	0 / 926	0.21 (1)
P- E	-623 / 0	0.82 (1)
E- O	0 / 109	0.02 (1)
O- G	0 / 77	0.02 (1)
O- H	0 / 1100	0.25 (1)
N- H	-1787 / 0	0.97 (1)
N- I	0 / 866	0.14 (1)
M- I	-77 / 78	0.04 (1)
A- S	0 / 815	0.18 (1)
M- J	0 / 796	0.18 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.76/1.00 (H-I:1) , BC=0.31/1.00 (O-P:1) , WB=0.97/1.00 (H-N:1) , SSI=0.28/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

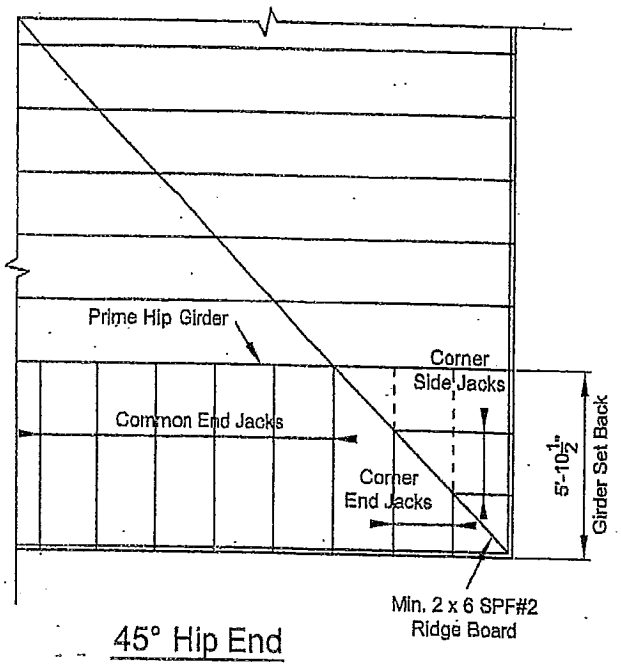
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (N) (INPUT = 0.90)
JSI METAL= 0.45 (J) (INPUT = 1.00)

A-18023122

CONTINUED ON PAGE 2

STRACON ENGINEERING INC.



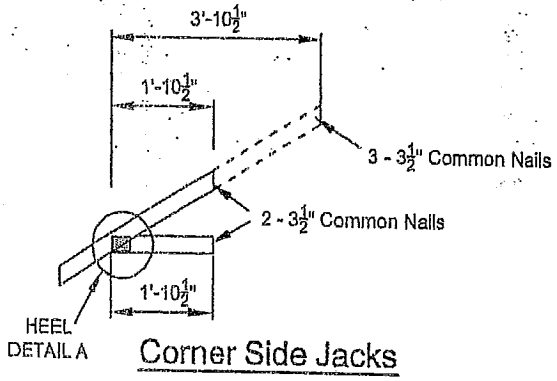
45° Hip End

LUMBER SPECIFICATION

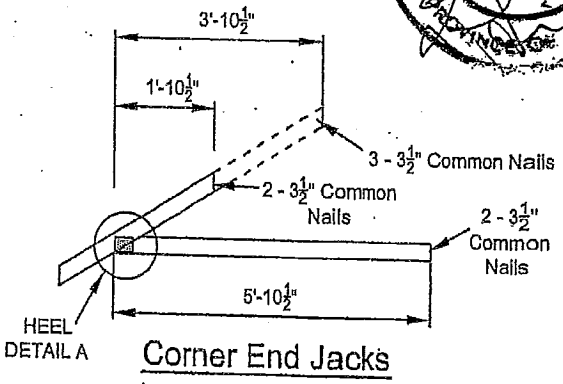
TOP CHORD : 2 x 4 SPF#2
BOTTOM CHORD : 2 x 4 SPF#2
WEBS : 2 x 3 SPF#2
UNLESS OTHERWISE SHOWN

DESIGN LOAD

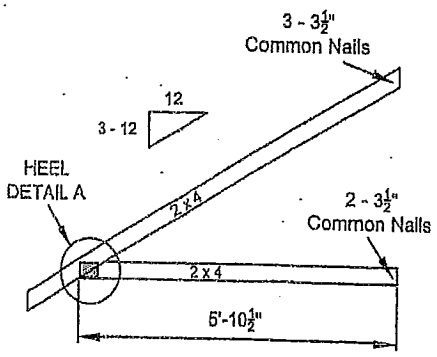
TOP CHORD SNOW LOAD	:	40.5 P.S.F.
TOP CHORD DEAD LOAD	:	3.0 P.S.F.
BOTTOM CHORD LIVE LOAD	:	0.0 P.S.F.
BOTTOM CHORD DEAD LOAD	:	7.0 P.S.F.
TOTAL LOAD	:	50.5 P.S.F



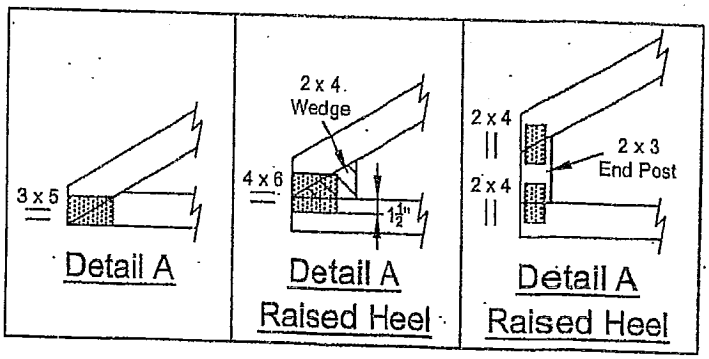
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008

TECHNICAL BULLETIN

LUS – Double Shear Joist Hangers

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

Material: 18 gauge

Finish: G90 galvanized

Design:

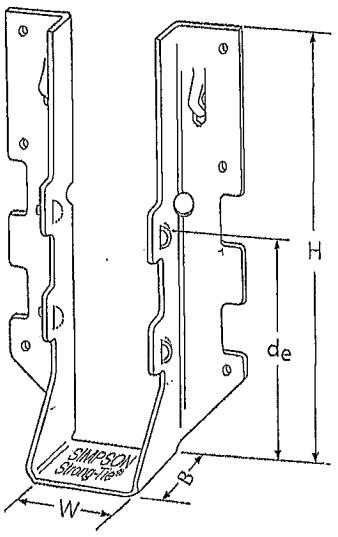
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

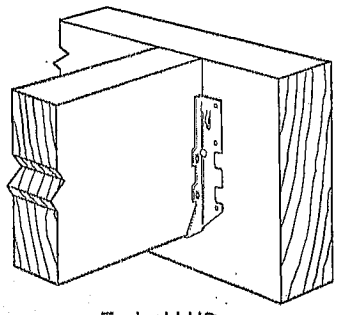
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

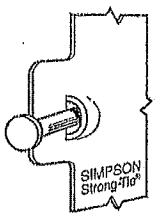


LUS28


Typical LUS Installation

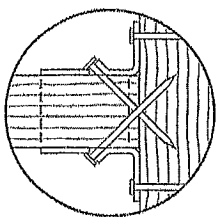
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
LUS24	18	1⁹⁄₁₆	3⅛	1¾	1 ¹⁵⁄₁₆	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3⅛	3⅛	2	1 ¹⁵⁄₁₆	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1⁹⁄₁₆	4¾	1¾	3⅝	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3⅛	4⅞	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4⅝	4⁹⁄₁₆	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1⁹⁄₁₆	6⅝	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3⅛	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4⅝	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1⁹⁄₁₆	7 ¹³⁄₁₆	1¾	3⅞	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3⅛	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4⅝	8⁹⁄₁₆	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

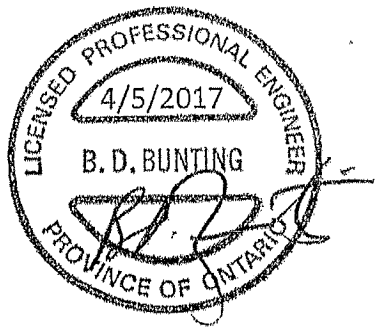
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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

U.S. Patent 5,603,580


Double Shear Nailing Top View.



LIMIT STATES DESIGN

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T-SPECLUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HHUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

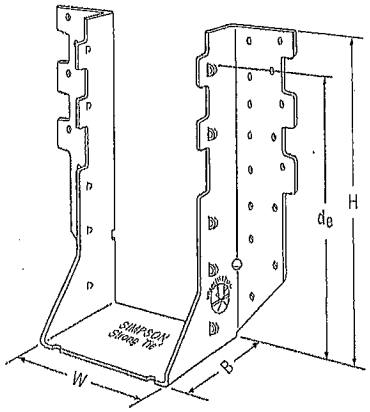
All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

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



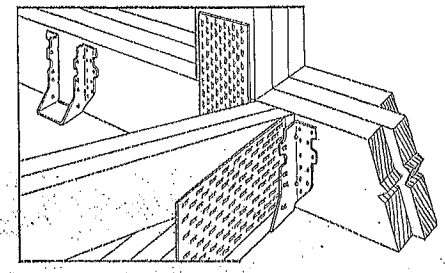
HHUS410

Installation:

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

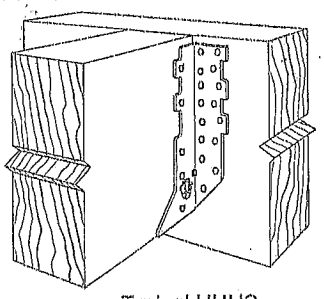
Options:

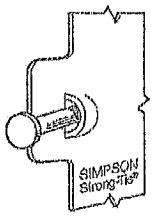
- See current catalogue for options


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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HHUS26-2	14	3 5/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 7/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 3/32	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 1/16	9	3	7 15/16	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 5/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 5/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8945	2267	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 5/16	7 29/32	(30) 16d	(10) 16d	4745	10770	4310	7650

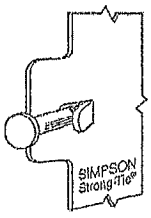
1. d_e is the distance from the seat of the hanger to the highest joist nail.


Typical HHUS Installation

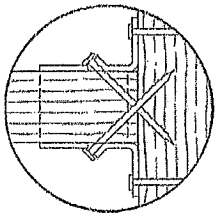


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,680



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


Double Shear Nailing Top View.

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(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers

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

Material: See table

Finish: G90 galvanized

Design:

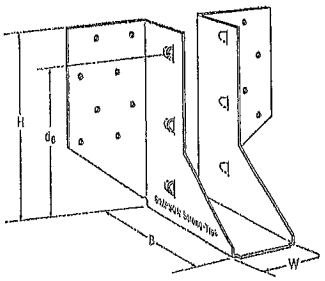
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

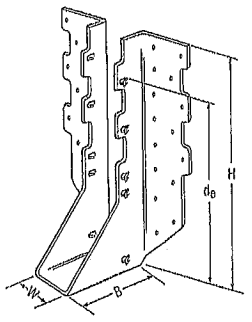
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

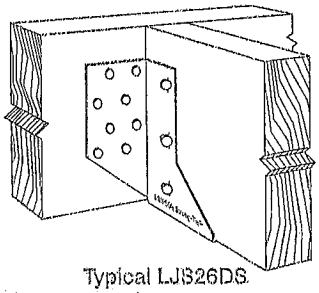
- See current catalogue for options



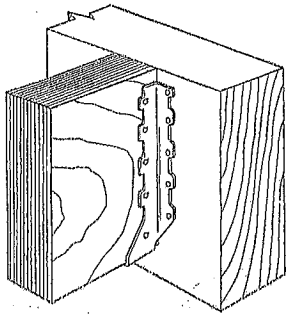
LJS26DS



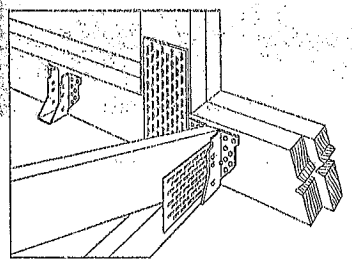
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



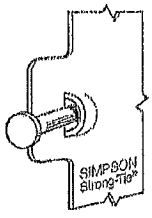
Typical HUS Installation



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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
								lb.	lb.	lb.	lb.
LJS26DS	18	1 9/16	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅜	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7 3/32	3	6 3/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9 3/32	3	7 31/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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



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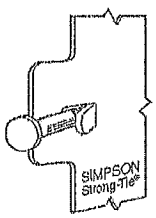
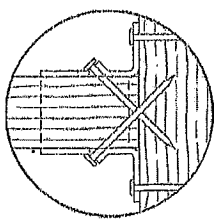
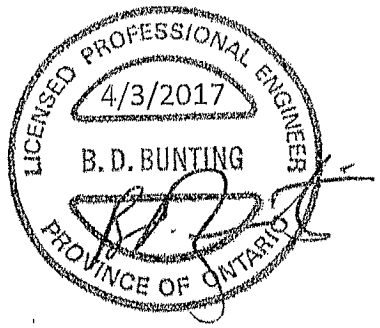


Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



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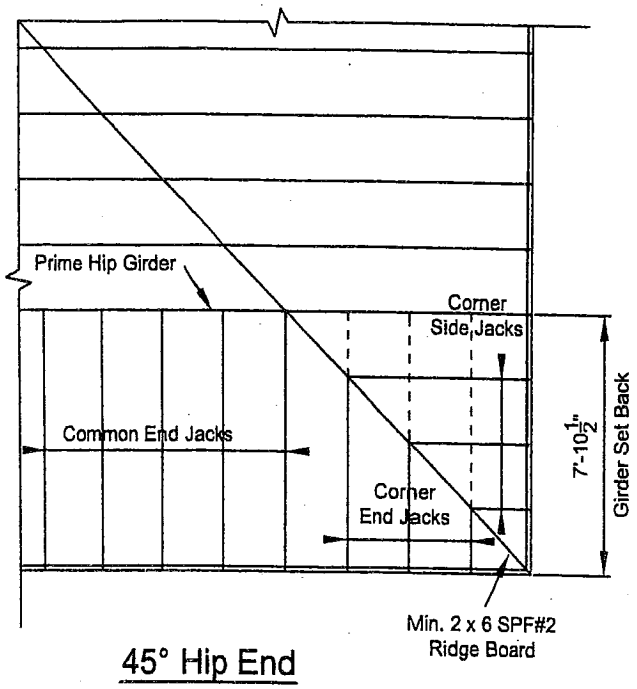
STRACON ENGINEERING INC.



45° Hip End

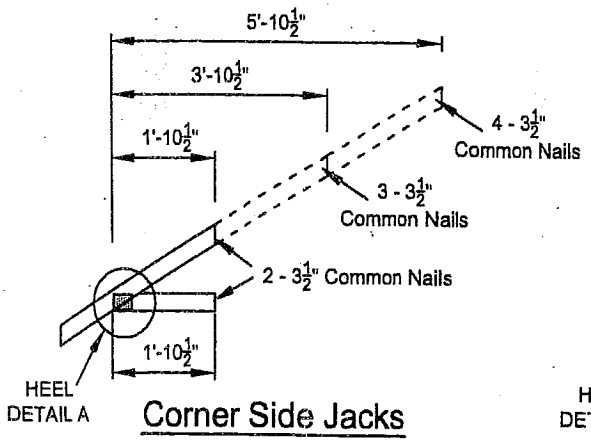
LUMBER SPECIFICATION

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

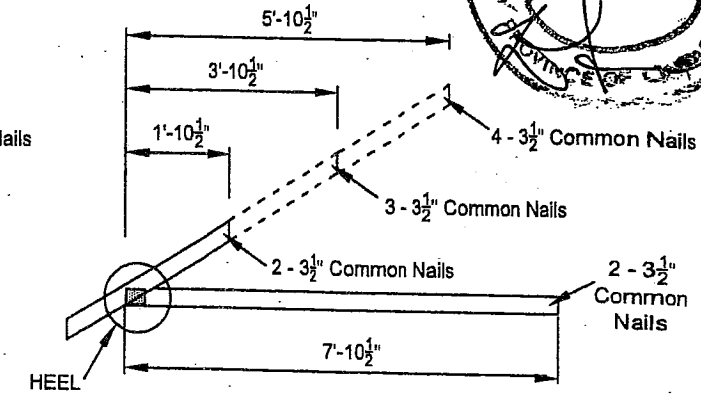
DESIGN LOAD

TOP CHORD SNOW LOAD	:	34.8 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	:	44.8 P.S.F

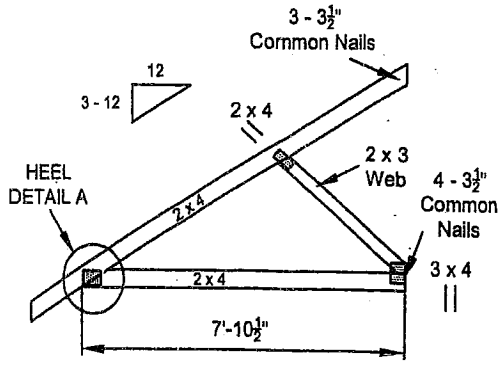
REGISTERED PROFESSIONAL ENGINEER
Sept 29
E. FOK
PROVINCE OF ONTARIO



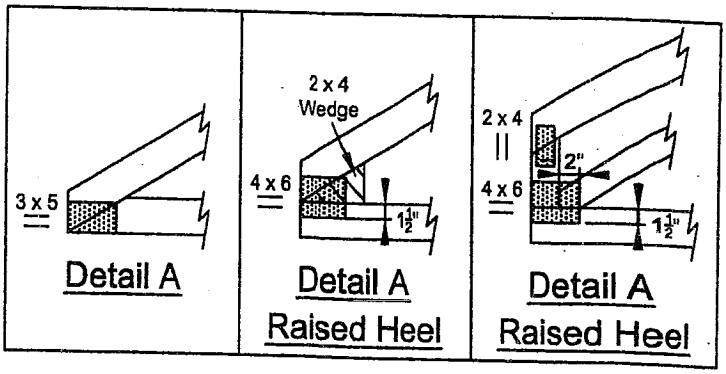
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-71008N