JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
B8153	DG1A	1	1	Dunchurch Addition-Roof TRUSS DESC.	

, On. L0M 1T0,

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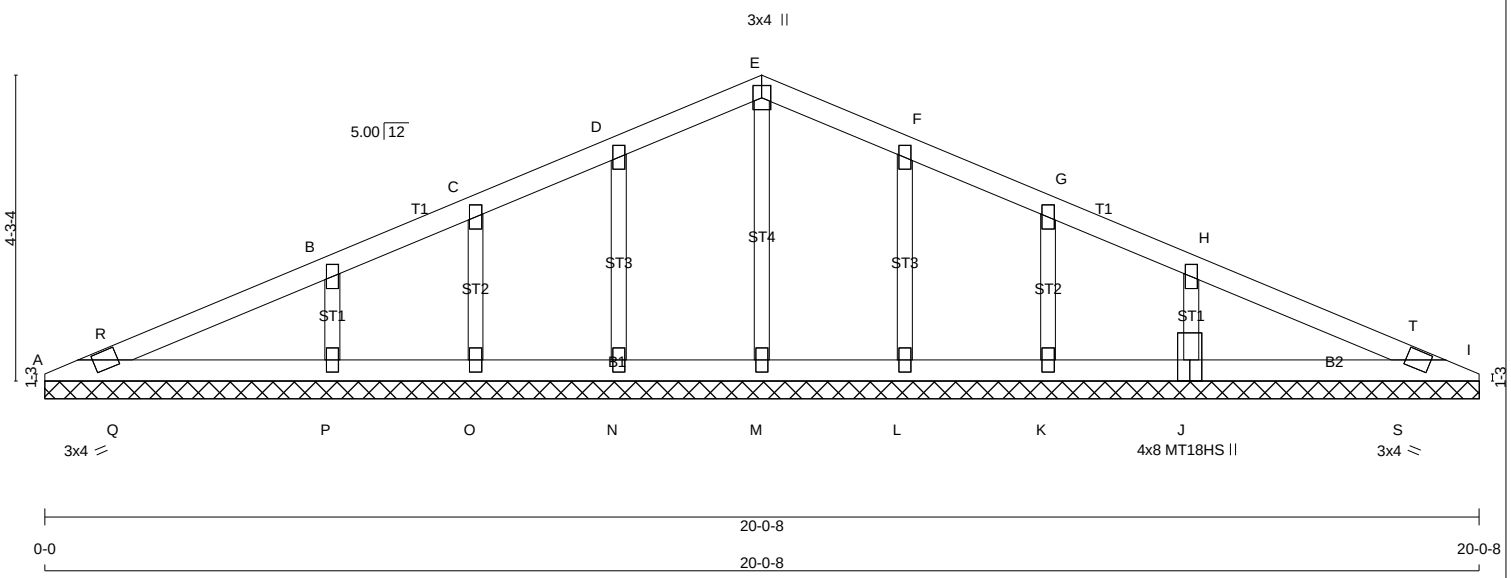

TOTAL WEIGHT = 59 lb

[M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBM1-h	MT20	3.0	4.0		
B, C, D, F, G, H						
B	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	4.0		
I	TBM1-h	MT20	3.0	4.0		
J	BSW1+I	MT18HS	4.0	8.0	Edge	
K, L, M, N, O, P						
K	BMW1+w	MT20	2.0	4.0		

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- R	0 / 100	-136.6	-136.6	0.08 (1)	10.00
R- B	0 / 140	-136.6	-136.6	0.22 (1)	10.00
B- C	0 / 111	-136.6	-136.6	0.21 (1)	10.00
C- D	0 / 148	-136.6	-136.6	0.11 (1)	10.00
D- E	0 / 134	-136.6	-136.6	0.11 (1)	10.00
E- F	0 / 134	-136.6	-136.6	0.11 (1)	10.00
F- G	0 / 149	-136.6	-136.6	0.11 (1)	10.00
G- H	0 / 108	-136.6	-136.6	0.23 (1)	10.00
H- T	0 / 137	-136.6	-136.6	0.23 (1)	10.00
T- I	0 / 84	-136.6	-136.6	0.10 (1)	10.00
A- Q	-124 / 0	-18.2	-18.2	0.17 (1)	6.25
Q- P	-107 / 0	-18.2	-18.2	0.17 (1)	6.25
P- O	-124 / 0	-18.2	-18.2	0.11 (1)	6.25
O- N	-129 / 0	-18.2	-18.2	0.02 (1)	6.25
N- M	-135 / 0	-18.2	-18.2	0.02 (4)	6.25
M- L	-135 / 0	-18.2	-18.2	0.01 (4)	6.25
L- K	-129 / 0	-18.2	-18.2	0.02 (4)	6.25
K- J	-124 / 0	-18.2	-18.2	0.02 (4)	6.25
J- S	-99 / 0	-18.2	-18.2	0.16 (1)	6.25
S- I	-116 / 0	-18.2	-18.2	0.16 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- E	-330 / 0	0.09 (1)
N- D	-328 / 0	0.07 (1)
O- C	-187 / 0	0.03 (1)
P- B	-454 / 0	0.07 (1)
L- F	-330 / 0	0.07 (1)
K- G	-178 / 0	0.03 (1)
J- H	-471 / 0	0.07 (1)
Q- R	-162 / 2	0.00 (1)
S- T	-125 / 16	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	40.5	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD		=	53.8	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 58.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 40.5 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.23/1.00 (H-T:1) , BC=0.17/1.00 (P-Q:1) , WB=0.09/1.00 (E-M:1) , SSI=0.20/1.00 (H-T: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	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (E) (INPUT = 0.90)
JSI METAL= 0.20 (P) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
B8153	T1A	10	1	Dunchurch Addition-Roof TRUSS DESC.	

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ID:X8PT2VS4H3zv5goFJn8Bpcz7gLX-CXEirrQFRe3Yhzwd?aay3UR60pSBSNLhVXH?Zlz7gKH

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1-5-8 5-0-5 4-11-15 4-11-15 5-0-5 1-5-8

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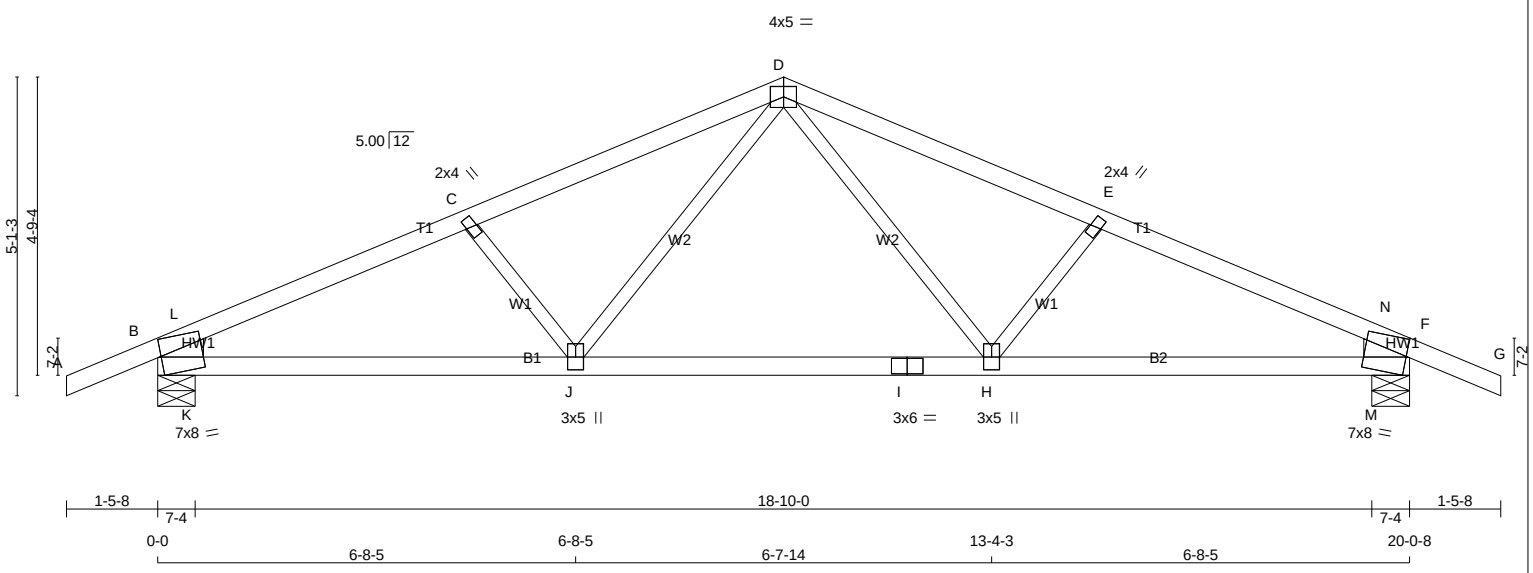

TOTAL WEIGHT = 10 X 66 = 662 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
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	TMBH1-m	MT20	7.0	8.0	Edge	0.25
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	4.0	5.0		
E	TMW+w	MT20	2.0	4.0		
F	TMBH1-m	MT20	7.0	8.0	Edge	0.25
H	BMWW+t	MT20	3.0	5.0		
I	BS-t	MT20	3.0	6.0		
J	BMWW+t	MT20	3.0	5.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	1758	0	1758	0	0	7-4	1-14	2x4 L
F	1758	0	1758	0	0	7-4	1-14	2x4 R

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	1219	935 / 0	0 / 0	0 / 0	0 / 0	285 / 0	0 / 0
F	1219	935 / 0	0 / 0	0 / 0	0 / 0	285 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.53 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)

C H O R D S

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 23	-136.6	-136.6	0.22 (1)	10.00
B- L	-3104 / 0	-136.6	-136.6	0.44 (1)	3.53
L- C	-2776 / 0	-136.6	-136.6	0.45 (1)	3.74
C- D	-2378 / 0	-136.6	-136.6	0.51 (1)	3.91
D- E	-2378 / 0	-136.6	-136.6	0.51 (1)	3.91
E- N	-2776 / 0	-136.6	-136.6	0.45 (1)	3.74
N- F	-3104 / 0	-136.6	-136.6	0.44 (1)	3.53
F- G	0 / 23	-136.6	-136.6	0.22 (1)	10.00
B- K	0 / 2556	-18.2	-18.2	0.64 (1)	10.00
K- J	0 / 2556	-18.2	-18.2	0.64 (1)	10.00
J- I	0 / 1721	-18.2	-18.2	0.40 (1)	10.00
I- H	0 / 1721	-18.2	-18.2	0.40 (1)	10.00
H- M	0 / 2556	-18.2	-18.2	0.64 (1)	10.00
M- F	0 / 2556	-18.2	-18.2	0.64 (1)	10.00

W E B S

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	0 / 763	0.17 (1)
H- E	-644 / 0	0.12 (1)
J- D	0 / 763	0.17 (1)
C- J	-644 / 0	0.12 (1)
K- L	0 / 392	0.00 (1)
M- N	0 / 392	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	40.5	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTAL	LOAD		=	53.8	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 58.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 40.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/180 (1.34")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")
ALLOWABLE DEFL.(TL)= L/180 (1.34")
CALCULATED VERT. DEFL.(TL) = L/ 856 (0.28")

CSI: TC=0.51/1.00 (C-D:1) , BC=0.64/1.00 (B-K:1) , WB=0.17/1.00 (D-H:1) , SSI=0.36/1.00 (B-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (B) (INPUT = 0.90)
JSI METAL= 0.62 (I) (INPUT = 1.00)