

DESIGN INFORMATION Code **NBCC 2015** Bldg Residential - HSB (NBCC Part 9) TC LL 25.6 lb/ft² TC DL 3.0 lb/ft² BC LL 0.0 lb/ft² 7.3 lb/ft² BC DL Deflection LL=L/360 TL=L/360 24" O/C unless otherwise Spacing noted OBC 2012 (2019 Amendment) Complies With CSA 086-14 and TPIC 2014

IMPORTANT INFORMATION

Refer to truss drawings in the Truss Engineering Package for ply-to-ply attachment notes

For site-framed valleys: top chords of all roof trusses must be laterally supported using 2x4 continuous bracing @24 O/C - all bracing must be anchored at ends as per TPIC Installation Guidelines

Read all notes on this page in addition to those shown on the KOTT Truss Engineering package

Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

Unless noted otherwise, hurricane ties are to be installed at the bearings of all trusses > 40 ft clear span, and any girder or beam supporting trusses with a clear span >40 ft. See hanger legend for type.

Unless noted otherwise, for Part 9 bldgs, all trusses are to be anchored to the top of supporting walls as follows: trusses with a clear span <40 ft use 3-1/4" nails @ each bearing, trusses with a dear span 140 ft use 3-1/4" nails @ each bearing in Gaddition to the appropriate hurricane tie.

KOTT Inc.

14 Anderson Blvd. Uxbridge, ON 905.642.4400





ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE OBC. ROOF RAFTERS THAT CROSS OVER TRUSSES
TO BE MIN. 2x4 SPF @ 24" C/C WITH A 2x4 VERTICAL POST
TO THE TRUSS BELOW. VERTICAL POSTS TO BE LATERALLY 6'. DESIGN OF CONVENTIONAL FRAMING IS THE RESPONSIBILITY OF THE PROJECT ENGINEER.

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION

RESPONSIBILITIES

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY KOTT DESIGN. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON THIS DRAWING. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.

TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING

IT IS THE RESPONSIBILITY OF KOTT TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

USE AND OCCUPANCY

The building is of the type indicated on the drawing

LOADING

- The truss loading intensity and distribution as well as load transfer mechanism is that indicated on the drawing
- No buildings, trees, parapets or other projections higher than the roof for which the trusses are used are
 located within a distance less than ten (10) times the difference in height, or five metres (16 ft)
 whichever is greater, unless the drawing indicates that the snow drifting has been taken into account

HANDLING, INSTALLATION AND BRACING

- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- Temporary and permanent bracing must be installed as indicated on the truss drawing and according to the BCSI-B1 and BCSI-B3 Summary Sheets. Bracing for the lateral stability of the truss is to be provided by the building designer
- It is recommended that a Professional Engineer's advice be obtained for the bracing of trusses spanning more than 12.37m (40'-7")

SUPPORTS

- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability of the overall building structure
- Elevation of bearings must be carefully checked and shimmed to alignment for solid bearings
- · Adequate wood truss bearing is the responsibility of the building designer.

DIMENSIONS

 Geometry of the truss and dimensions indicated on the drawing are identical to those of the installed truss.

CITY OF RICHMOND HILL BUILDING DIVISION

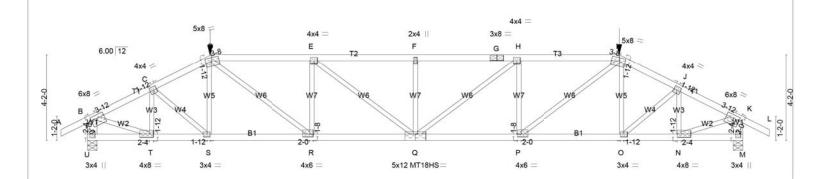
09/22/2022

2020/04/22 RECEIVED r: joshua.nabua

KOTT

Scale = 1:56.2

KTT - GREENPARK - ROUNDEL HOMES - GLENROWAN - GR41-03-3 IM1021-021-R1 Page 2 of 27 JOB DESC JOB NAME TRUSS NAME QUANTITY PLY DRWG NO TRUSS DESC. G01 2 IM1021-021 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:48 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-O2vrCWFq5bMfmW99T42ZIhz64SFr2JZlv74i QyWVhb 1-3-8 6-0-0 19-11-0 6-0-0 1-3-8



LUMBER N. L. G. A. RULES CHORDS SIZE BUILDING DESIGNER BEARINGS SIZE LUMBER DESCR 2×4 DRY No.2 SPF 2x4 DRY 2x4 2100F 1.8E SPF 2x4 2x6 DRY No.2 SPF SPF No.2

SPF

SPF

SPE

U - B M - K U - Q Q - M 2x6 DRY No.2 2100F 1.8E 2100F 1.8E 2x4 DRY ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

A -D -G -D

G

JT	TYPE	PLATES	W	LEN	Y	X
В	TMVW-t	MT20	6.0	8.0	2.00	3.75
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTWW-m	MT20	5.0	8.0	1.75	3.50
E	TMWW-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	8.0		
H	TMWW-t	MT20	4.0	4.0		
1	TTWW-m	MT20	5.0	8.0	1.75	3.50
J	TMWW-t	MT20	4.0	4.0	2.00	1.75
K	TMVW-t	MT20	6.0	8.0	2.00	3.75
M	BMV1+p	MT20	3.0	4.0	2.25	1.50
N	BMWW-t	MT20	4.0	8.0	1.75	2.25
0	BMWW-t	MT20	3.0	4.0	1.50	1.75
P	BMWW-t	MT20	4.0	6.0	1.50	2.00
Q	BSWWW-I	MT18HS	5.0	12.0	Edge	6.00
R	BMWW-t	MT20	4.0	6.0	1.50	2.00
S	BMWW-t	MT20	3.0	4.0	1.50	1.75
T	BMWW-t	MT20	4.0	8.0	1.75	2.25
	DEAL CALL	MATOO	20	40	2 25	4 50

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

3.0

BMV1+p



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

31-11-0

	FACTO GROSS R			M FACT		INPUT BRG	REQRE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT		IN-SX
U	3130	0	3130	0	0	5-8	3-6
M	3130	0	3130	0	0	5-8	3-6

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2191	1567 / 0	0/0	0/0	0/0	623 / 0	0/0
M	2191	1567 / 0	0/0	0/0	0/0	623 / 0	0/0

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

FORCE (LBS) 0/26 (2/0 (5/0 (6/0) (8/0 (8/0 (8/0 (8/0) (8/0) (8/0) (8/0) (8/0)	FACTO VERT. LC (PI FROM -84.3 -84.3 -158.9 -158.9 -158.9 -158.9 -158.9 -84.3	DAD LC1 LF) TO -84.3 -84.3 -84.3 -158.9 -158.9 -158.9	1 MAX CSI (LC) 0.12 (1) 0.36 (1) 0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	MAX. UNBRAC LENGTH 10.00 3.19 2.94 2.99 2.81 2.81	FR-TO T- C C- S S- D D- R R- E	MAX. FACT FORCE (LBS) -958 / 0 0 / 642 -246 / 61 0 / 2453 -1333 / 0	MAX CSI (LC) 0.17 (1) 0.16 (1) 0.07 (1) 0.61 (1)
FORCE (LBS) 0/26 (2/0 (5/0 (6/0) (8/0 (8/0 (8/0 (8/0) (8/0) (8/0) (8/0) (8/0)	VERT. LC (PI FROM -84.3 -84.3 -158.9 -158.9 -158.9	DAD LC1 LF) TO -84.3 -84.3 -84.3 -158.9 -158.9 -158.9	1 MAX CSI (LC) 0.12 (1) 0.36 (1) 0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	MAX. UNBRAC LENGTH 10.00 3.19 2.94 2.99 2.81 2.81	FR-TO T- C C- S S- D D- R R- E	(LBS) -958 / 0 0 / 642 -246 / 61 0 / 2453	CSI (LC) 0.17 (1) 0.16 (1) 0.07 (1) 0.61 (1)
15 / 0 10 / 0 18 / 0 18 / 0 15 / 0	-84.3 -158.9 -158.9 -158.9	-84.3 -158.9 -158.9 -158.9	0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	2.94 2.99 2.81 2.81	D-R R-E	0 / 2453	0.07 (1)
15 / 0 10 / 0 18 / 0 18 / 0 15 / 0	-84.3 -158.9 -158.9 -158.9	-84.3 -158.9 -158.9 -158.9	0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	2.94 2.99 2.81 2.81	D-R R-E	0 / 2453	0.07 (1)
15 / 0 10 / 0 18 / 0 18 / 0 15 / 0	-84.3 -158.9 -158.9 -158.9	-84.3 -158.9 -158.9 -158.9	0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	2.94 2.99 2.81 2.81	D-R R-E	0 / 2453	0.07 (1)
15 / 0 10 / 0 18 / 0 18 / 0 15 / 0	-84.3 -158.9 -158.9 -158.9	-84.3 -158.9 -158.9 -158.9	0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	2.94 2.99 2.81 2.81	D-R R-E	0 / 2453	0.07 (1)
15 / 0 10 / 0 18 / 0 18 / 0 15 / 0	-84.3 -158.9 -158.9 -158.9	-84.3 -158.9 -158.9 -158.9	0.39 (1) 0.68 (1) 0.74 (1) 0.74 (1)	2.94 2.99 2.81 2.81	D-R R-E	0 / 2453	0.07 (1)
8 / 0 8 / 0 8 / 0 0 / 0 5 / 0	-158.9 -158.9	-158.9 -158.9	0.74 (1) 0.74 (1) 0.74 (1)	2.81 2.81	R-E	0 / 2453 -1333 / 0	0.61 (1)
8 / 0 8 / 0 8 / 0 0 / 0 5 / 0	-158.9 -158.9	-158.9 -158.9	0.74 (1) 0.74 (1) 0.74 (1)	2.81 2.81	R-E	-1333 / 0	0.37(1)
8 / 0 0 / 0 5 / 0	-158.9	-158.9	0.74(1)	2.81	- 0		
8 / 0 0 / 0 5 / 0	-158.9	-158.9	0.74(1)		E- Q	0 / 742	0.18(1)
0/0	-158.9 -84.3	-158.9		2.81	Q-F	-753 / 0	0.21(1)
5/0	-84.3		0.68(1)	2.99	Q-H	0/742	0.18(1)
		-84.3	0.39(1)	2.94	P-H	-1333 / 0	0.37(1)
2/0	-84.3	-84.3	0.36(1)	3.19	P-1	0 / 2453	0.61(1)
0/26	-84.3	-84.3	0.12(1)	10.00	0-1	0 / 2453 -246 / 61	0.07(1)
3/0	0.0	0.0	0.22(1)	5.98	O- J	0 / 642 -958 / 0	0.16(1)
3/0	0.0	0.0	0.22(1)	5.98	N-J	-958 / 0	0.17(1)
					B-T	0 / 3785	
0/0	-34.4	-34.4	0.06(1)	10.00	N-K	0 / 3785	
0 / 3648	-34.4	-34.4	0.36(1)	10.00			\$1000000000000000000000000000000000000
0 / 4141	-34.4	-34.4	0.40(1)	10.00			
0 / 6070	-34.4	-34.4	0.58 (1)	10.00			
0 / 6070	-34 4	-34 4	0.58 (1)	10.00			
0 / 4141	-34.4	-34.4	0.40(1)	10.00			
0 / 3648	-34.4	-34.4	0.36(1)	10.00			
0/0	-34.4	-34.4	0.06(1)	10.00			
000	/ 6070 / 4141 / 3648 / 0	/ 6070 -34.4 / 4141 -34.4 / 3648 -34.4 / 0 -34.4	// 6070 -34.4 -34.4 // 4141 -34.4 -34.4 // 3648 -34.4 -34.4 // 0 -34.4 -34.4	7/6070 -34.4 -34.4 0.58 (1) 7/4141 -34.4 -34.4 0.40 (1) 7/3648 -34.4 -34.4 0.36 (1)	//4141 -34.4 -34.4 0.40 (1) 10.00 //3648 -34.4 -34.4 0.36 (1) 10.00 //0 -34.4 -34.4 0.06 (1) 10.00	//6070 -34.4 -34.4 0.58 (1) 10.00 //4141 -34.4 -34.4 0.40 (1) 10.00 //3648 -34.4 -34.4 0.36 (1) 10.00 //0 -34.4 -34.4 0.06 (1) 10.00	// 6070

FRONT

VERT

TOTAL

C1 C1

CONNECTION REQUIREMENTS

-379

6-0-0

D

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

-379

TOTAL WEIGHT = 2 X 128 = 256 lb

DESIGN CRITERIA SPECIFIED LOADS

CH. DL 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD 35.9 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 = 6-0-0 END SETBACK = 6-0-0 END WALL WIDTH = 5-8 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 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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F.

RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.33") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/665 (0.58")

CSI: TC=0.74/1.00 (E-F:1), BC=0.58/1.00 (Q-R:1),

WB=0.94/1.00 (K-N:1), SSI=0.40/1.00 (D-E: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

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

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI) MAY MIN PMAY MIN MAY MIN HILL 650 371 1747 788 1987 1873 HILL BUILDIN CONTINUED ON PAGE 2 MT20



Per: ioshua.nabua

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM1021-021	G01	2	1	TRUSS DESC.	
	'	'		Version 8.500 S Aug 16 2021 MiT ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-O2vrCWFq	ek Industries, Inc. Tue Oct 5 10:30:48 2021 Page 2 5bMfmW99T42ZIhz64SFr2JZIv74i OvWVh

MT18HS 586 403 2455 1382 3163 3004
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90)
JSI METAL= 0.81 (Q) (INPUT = 1.00)



October 05, 2021



TOTAL WEIGHT = 46 lb

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 G02 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:49 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-tETDQsFSsvUVNgkL0nZorvVPHsdVntev8nqFWsyWVha 6-6-0 6-6-0 Scale = 1:21.7 3x5 C 4.00 12 3x4 = 3x4 = D B 4x6 ~ E 4x6 = 2.8 W4 W3 11-3 W2 W2 B1 1-12 1-12 G 4x5 = 4x6 = 4x5 = 13-0-0

	MBER				
N. L	G. A. F	RULES			
CH	ORDS	SIZE		LUMBER	DESCR.
A -	C	2x4	DRY	No.2	SPF
C -	E	2x4	DRY	No.2	SPF
J -	A	2x4	DRY	No.2	SPF
F -	E	2x4	DRY	No.2	SPF
J -	F	2x4	DRY	No.2	SPF
	WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

BMV1+p

PL	ATES (table	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	2.00	2.50
В	TMWW-t	MT20	3.0	4.0		
C	TTW+p	MT20	3.0	5.0	3.00	1.50
D	TMWW-t	MT20	3.0	4.0		
E	TMVW-t	MT20	4.0	6.0	2.00	2.50
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	4.0	5.0	1.75	1.75
H	BMWWW-t	MT20	4.0	6.0		
1	BMWW-t	MT20	4.0	5.0	1.75	1.75

2.0 4.0

MT20

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

BEA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1333	0	1333	0	0	5-8	1-8
F	1333	0	1333	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	933	665 / 0	0/0	0/0	0/0	268 / 0	0/0
F	933	665 / 0	0/0	0/0	0/0	268 / 0	0/0

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

CH	ORDS					W E	BS	
MAX	X. FACTORED	FACTO	RED				MAX. FACTO	DRED
MEMB.	FORCE	VERT. LC	DAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(P	LF)	CSI (LC)	UNBRAC	:	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	-2080 / 0	-84.3	-84.3	0.20(1)	4.49	H-C	0/829	0.21(1)
B- C	-1673 / 0	-84.3	-84.3	0.15(1)	4.96	H- D	-455 / 0	0.11(1)
C-D	-1673 / 0	-84.3	-84.3	0.15(1)	4.96	G-D	0/69	0.03(4)
D-E	-2080 / 0	-84.3	-84.3	0.20(1)	4.49	B-H	-455 / 0	0.11(1)
J- A	-1156 / 0	0.0	0.0	0.13(1)	7.37	I-B	0/69	0.03(4)
F-E	-1156 / 0	0.0	0.0	0.13(1)	7.37	A-1	0 / 2014	0.50(1)
						G-E	0 / 2014	0.50(1)
J-1	0/0	-120.8	-120.8	0.19(1)	10.00			
I- H	0 / 1979	-120.8	-120.8	0.49 (1)	10.00			
H- G	0 / 1979	-120.8	-120.8	0.49 (1)	10.00			
G-F	0/0	-120.8	-120.8	0.19(1)	10.00			



SPECIFIED LOADS: LL = DL = LL = DL = CH. 3.0 0.0 7.3 PSF BOT CH. PSF TOTAL LOAD 35.9 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 6-0-0 END DISTANCE = 13-0-0 END SPAN CARRIED = 6-0-0 END WALL WIDTH = 0-0 APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL. (DEFINED BY USER)

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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.43") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.43") CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

CSI: TC=0.20/1.00 (A-B:1) , BC=0.49/1.00 (H-I:1) , WB=0.50/1.00 (A-I:1) , SSI=0.20/1.00 (I-J: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

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

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873





DRWG NO.		PLY	QUANTITY	TRUSS NAME	JOB NAME
		1	1	G02	IM1021-021
k Industries, Inc. Tue Oct 5 10:30:49 2021 Page 2 JVNgkL0nZorvVPHsdVntev8nqFWsyWVha					
TE PLACEMENT TOL. = 0.250 inches	PLA				
TE ROTATION TOL. = 5.0 Deg.	PLA				
GRIP= 0.90 (G) (INPUT = 0.90) METAL= 0.54 (I) (INPUT = 1.00)					



October 05, 2021



TOTAL WEIGHT = 38 lb

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 G03 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:49 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-tETDQsFSsvUVNgkL0nZorvVRQsfynvrv8nqFWsyWVha

5-4-0 5-4-0 Scale = 1:18.0 3x4 || С 4.00 12 3x4 = 3x4 = D 3x6 = 3x6 = W5 E 2-8 2-8 W3 W3 Wi WI 11-3 11-3 ₩2 W2 1-8 1 Н G 4x4 = 4x4 = 3x6 10-8-0

LUI	MBER				
N. L	G. A. F	RULES			
CH	ORDS	SIZE		LUMBER	DESCR.
A -	C	2x4	DRY	No.2	SPF
C -	- E	2x4	DRY	No.2	SPF
J -	· A	2x4	DRY	No.2	SPF
F -	- E	2x4	DRY	No.2	SPF
J -	F	2x4	DRY	No.2	SPF
	WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PL	ATES (table i	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	6.0	1.50	2.50
В	TMWW-t	MT20	3.0	4.0		
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMWW-t	MT20	3.0	4.0		
E	TMVW-t	MT20	3.0	6.0	1.50	2.50
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	4.0	4.0	1.50	1.50
H	BMWWW-t	MT20	3.0	6.0		
1	BMWW-t	MT20	4.0	4.0	1.50	1.50
J	BMV1+p	MT20	2.0	4.0		

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

BE/	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1031	0	1031	0	0	5-8	1-8
F	1031	0	1031	0	0	5-8	1-8

UNFACTORED REACTIONS

NO TOTAL	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	722	515/0	0/0	0/0	0/0	207 / 0	0/0
F	722	515/0	0/0	0/0	0/0	207 / 0	0/0

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

СН	ORDS					WE	BS	
MAX	X. FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	DAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(P	LF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	-1481 / 0	-84.3	-84.3	0.13(1)	5.24	H-C	0 / 588	0.15(1)
B- C	-1232 / 0	-84.3	-84.3	0.10(1)	5.65	H- D	-286 / 0	0.06(1)
C-D	-1232 / 0	-84.3	-84.3	0.10(1)	5.65	G-D	-21 / 41	0.02(4)
D-E	-1481 / 0	-84.3	-84.3	0.13(1)	5.24	B- H	-286 / 0	0.06(1)
J- A	-895 / 0	0.0	0.0	0.10(1)	7.81	I-B	-21 / 41	0.02(4)
F-E	-895 / 0	0.0	0.0	0.10(1)	7.81	A-1	0 / 1445	0.36(1)
						G-E	0 / 1445	0.36(1)
J-1	0/0	-109.0	-109.0	0.13(1)	10.00			
I- H	0 / 1408	-109.0	-109.0	0.34(1)	10.00			
H- G	0 / 1408	-109.0	-109.0	0.34(1)	10.00			
G-F	0/0	-109.0	-109.0	0.13(1)	10.00			



SPEC	IFIED	LOA	DS:		
TOP	CH.	LL	=	25.6	PSF
		DL	=	3.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	35.9	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 6-0-0 END DISTANCE = 10-8-0 END SPAN CARRIED = 6-0-0 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL. (DEFINED BY USER)

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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.36") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.36") CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.13/1.00 (D-E:1) , BC=0.34/1.00 (G-H:1) , WB=0.36/1.00 (E-G:1) , SSI=0.14/1.00 (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

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

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873





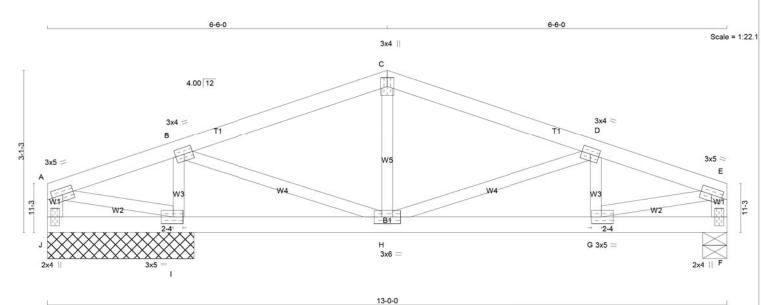
JOB NAME	TRUSS NAME	QUANTIT		RK - ROUNDEL HOMES - GLENROWAN - GR41-03-3 JOB DESC.	IM1021-021-R1 Page 7 of 2
	The second second second second second	191		Section to contribute the section of	DAWG NO.
IM1021-021	G03	1	1	TRUSS DESC. Version 8.500 S Aug	16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:49 2021 Page 2
				ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-t	i 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:49 2021 Page 2 ETDQsFSsvUVNgkL0nZorvVRQsfynvrv8nqFWsyWVha
					PLATE PLACEMENT TOL. = 0.250 inches
					PLATE ROTATION TOL. = 5.0 Deg.
					JSI GRIP= 0.90 (E) (INPUT = 0.90) JSI METAL= 0.48 (I) (INPUT = 1.00)
	OFFS				
	PROFESSIONAL CZ				
188					



October 05, 2021



JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 GE01 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:50 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-LQ1bdCG4dCcM?qJYaV41O62b8G11WP?2NRZp2lyWVhZ



LUMBER				
N. L. G. A.	RULES			
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
J - A	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
J - F	2x4	DRY	No.2	SPF
ALL WEBS	S 2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0		
В	TMWW-t	MT20	3.0	4.0		
C	TTW+p	MT20	3.0	4.0		
D	TMWW-t	MT20	3.0	4.0		
E	TMVW-t	MT20	3.0	5.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	3.0	5.0	1.50	2.25
Н	BMWWW-t	MT20	3.0	6.0		
1	BMWW1-t	MT20	3.0	5.0	1.50	2.25
J	BMV1+p	MT20	2.0	4.0		

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

BEA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	45	0	45	0	0	2-9-8	1-8
F	518	0	518	0	0	5-8	1-8
1	769	0	769	0	0	2-9-8	1-8

	UNFACTOR	RED REA	ACTIONS
--	----------	---------	---------

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
J	32	23/0	0/0	0/0	0/0	9/0	0/0			
F	363	259 / 0	0/0	0/0	0/0	104 / 0	0/0			
1	E30	20110	010	010	010	15E 10	010			

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

BRACING
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 FITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING TOTAL LOAD CASES: (4)

CH	ORDS					WE	BS	
MAX	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	F) (CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO	15 15	FROM	TO	50 150	LENGTH	FR-TO	15. 15.	25 25
A-B	0 / 47	-84.3	-84.3	0.19(1)	10.00	H- C	0 / 59	0.02(4)
B-C	-473 / 0	-84.3	-84.3	0.15(1)	6.25	H- D	-320 / 0	0.10(1)
C-D	-471 / 0	-84.3	-84.3	0.15(1)	6.25	G-D	-134 / 19	0.02(1)
D-E	-765 / 0	-84.3	-84.3	0.12(1)	6.25	B- H	0 / 497	0.11(1)
J-A	-35 / 3	0.0	0.0	0.00(1)	7.81	I-B	-688 / 0	0.10(1)
F-E	-495 / 0	0.0	0.0	0.05(1)	7.81	A-1	-29 / 0	0.00(1)
						G-E	0 / 762	0.17(1)
J-1	0/0	-18.2	-18.2	0.05(4)	10.00			
I- H	-28 / 0	-18.2	-18.2	0.05 (4)	6.25			
H- G	0 / 738	-18.2	-18.2	0.15(1)	10.00			
G-F	0/0	-18 2	-18 2	0.03 (4)	10.00			



SPEC	IFIED	LOA	DS:		
TOP	CH.	LL	=	25.6	PSF
		DL	=	3.0	PSF
BOT	CH.	LL	=	0.0	PSF

TOTAL LOAD 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 46 lb

[M][F]

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.35") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.01") ALLOWABLE DEFL.(TL)= L/360 (0.35") CALCULATED VERT. DEFL.(TL)= L/999 (0.03")

CSI: TC=0.19/1.00 (A-B:1), BC=0.15/1.00 (G-H:1), WB=0.17/1.00 (E-G:1), SSI=0.15/1.00 (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.

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (H) (INPUT = 0.90) JSI METAL= 0.23 (A) (INPUT = 1.00)





JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 GE02 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:51 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-pdbzrYHiOWkDd_tk8CbGwKbl8fOVFu5Cc5JMblyWVhY 6-6-0 4-2-0 Scale = 1:18.7 3x4 || C 4.00 12 D T2 ST2 W3 W2 11-3

CH	10	RDS	SIZE		LUMBER	DESCR
J	-	A	2x4	DRY	No.2	SPF
A		C	2x4	DRY	No.2	SPF
C	-	E	2x4	DRY	No.2	SPF
F	-	E	2x4	DRY	No.2	SPF
J		F	2x4	DRY	No.2	SPF
AL	L	WEBS	2x3	DRY	No.2	SPF
AL	L	GABLE	WEBS			
			2x3	DRY	No.2	SPF

GABLE STUDS SPACED AT 2-0-0 OC.

PL	ATES (table	is in inches)			
JT	TYPE	PLATES	W	LEN Y	X
A	TMV+p	MT20	2.0	4.0	
В	TMW+w	MT20	2.0	4.0	
C	TTW+p	MT20	3.0	4.0	
D	TMW+w	MT20	2.0	4.0	
E	TMV+p	MT20	2.0	4.0	
F	BMV1+p	MT20	2.0	4.0	
G,	H, I				
G	BMW1+w	MT20	2.0	4.0	
J	BMV1+p	MT20	2.0	4.0	
K	NP+w	MT20	2.0	4.0	
L	NP+w	MT20	2.0	4.0	

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

10-8-0

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

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

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

LOADING TOTAL LOAD CASES: (4)

CHO	ORDS					WE	BS	
MAX	FACTORED	FACTO	RED				MAX. FACTO	DRED
MEMB.	FORCE	VERT. LC	DAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PI	LF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
J- A	-201 / 0	0.0	0.0	0.10(1)	7.81	H- C	-58 / 4	0.01(1)
A-B	-77 / 0	-84.3	-84.3	0.18(1)	6.25	I-B	-342 / 0	0.05(1)
B-C	-91 / 0	-84.3	-84.3	0.18(1)	6.25	G-D	-170 / 0	0.03(1)
C-D	-75 / 0	-84.3	-84.3	0.04(1)	6.25			
D-E	-81 / 0	-84.3	-84.3	0.08(1)	6.25			
F-E	-128 / 0	0.0	0.0	0.08 (1)	7.81			
J- I	0/76	-18.2	-18.2	0.08 (4)	10.00			
I- H	0/69	-18.2	-18.2	0.08(4)	10.00			
H- G	0/69	-18.2	-18.2	0.03(1)	10.00			
G-F	0/72	-18.2	-18.2	0.07 (1)	10.00			



G

SPECIFIED LOADS: LL = DL = CH. 3.0 PSF BOT CH. LL 0.0 7.3 PSF

TOTAL LOAD 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 33 lb

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.18/1.00 (A-B:1), BC=0.08/1.00 (I-J:4), WB=0.05/1.00 (B-I:1) , SSI=0.15/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90) JSI METAL= 0.13 (A) (INPUT = 1.00)





JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 GE03 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:51 2021 Page 1 5-4-0 5-4-0 Scale = 1:17.1 3x4 || С 4.00 12 D В ST2 Ε ST1 ST W3 W1 W3 W1 **B**1 н G F 10-8-0

CH	ORDS	SIZE		LUMBER	DESCR
J .	- A	2x4	DRY	No.2	SPF
A ·	- C	2x4	DRY	No.2	SPF
C .	- E	2x4	DRY	No.2	SPF
F .	- E	2x4	DRY	No.2	SPF
J .	- F	2x4	DRY	No.2	SPF
ALI	L WEBS	2x3	DRY	No.2	SPF
ALI	GABLE	WEBS			
		2x3	DRY	No.2	SPF

GABLE STUDS SPACED AT 2-0-0 OC.

JT	ATES (table TYPE	PLATES	w	LEN Y	X
A	TMV+p	MT20	2.0	4.0	
В	TMW+w	MT20	2.0	4.0	
C	TTW+p	MT20	3.0	4.0	
D	TMW+w	MT20	2.0	4.0	
E	TMV+p	MT20	2.0	4.0	
F	BMV1+p	MT20	2.0	4.0	
G.	H, I				
G	BMW1+w	MT20	2.0	4.0	
J	BMV1+p	MT20	2.0	4.0	
K,	L, M, N				
			-		

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

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

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

LOADING TOTAL LOAD CASES: (4)

CHC	ORDS					W E	BS	
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	F) (CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
J- A	-174 / 0	0.0	0.0	0.08(1)	7.81	H- C	-55 / 7	0.01(1)
A-B	-115/0	-84.3	-84.3	0.09(1)	6.25	I-B	-249 / 0	0.04(1)
B-C	-116 / 0	-84.3	-84.3	0.09(1)	6.25	G-D	-249 / 0	0.04(1)
C-D	-116 / 0	-84.3	-84.3	0.09(1)	6.25			
D-E	-115 / 0	-84.3	-84.3	0.09(1)	6.25			
F-E	-174 / 0	0.0	0.0	0.08 (1)	7.81			
J- I	0 / 109	-18.2	-18.2	0.04 (4)	10.00			
I- H	0 / 102	-18.2	-18.2	0.04 (4)	10.00			
H- G	0 / 102	-18.2	-18.2	0.04 (4)	10.00			
G-F	0 / 109	-18.2	-18.2	0.04(4)	10.00			



SPECIFIED LOADS: CH.

LL = DL = 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 32 lb

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.09/1.00 (D-E:1) , BC=0.04/1.00 (F-G:4) , WB=0.04/1.00 (D-G:1), SSI=0.10/1.00 (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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.90) JSI METAL= 0.15 (A) (INPUT = 1.00)

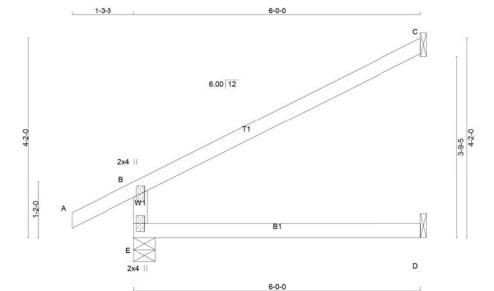




Scale: 1/2"=1"

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 J01 22 1

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:52 2021 Page 1



TOTAL WEIGHT = 22 X 17 = 376 lb DESIGN CRITERIA

SPECIFIED LOADS: CH.

LL = DL = 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD = 35.9 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)

- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.03")

CSI: TC=0.52/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.22/1.00 (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 PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**



LUMBER N. L. G. A. RULES CHORDS SIZE SIZE LUMBER DESCR E - B A - C No.2 No.2 2×4 DRY SPF DRY A - C E - D DRY 2x4 No.2 SPF DRY: SEASONED LUMBER.

PLATES (table is in inches) TYPE TMV+p W LEN Y X 2.0 4.0 BMV1+p 2.0

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

ARINGS						
FACTORED		MAXIMU	M FACT	INPUT	REQRE	
GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
495	0	495	0	0	5-8	1-8
190	0	190	0	0	1-8	1-8
45 0		51	0	0	1-8	1-8
	FACTO GROSS R VERT 495 190	FACTORED GROSS REACTION VERT HORZ 495 0 190 0	FACTORED MAXIMU GROSS REACTION GROSS VERT HORZ DOWN 495 0 495 190 0 190	FACTORED MAXIMUM FACT GROSS REACTION GROSS REACTION VERT HORZ DWN HORZ 495 0 495 0 190 0 190 0	FACTORED	FACTORED MAXIMUM FACTORED INPUT GROSS REACTION GROSS REACTION BRG VERT HORZ DOWN HORZ UPLIFT IN-SX 495 0 0 5-8 190 0 190 0 1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
E	343	261/0	0/0	0/0	0/0	82 / 0	0/0			
C	129	115/0	0/0	0/0	0/0	14/0	0/0			
D	36	0/0	0/0	0/0	0/0	36 / 0	0/0			

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

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

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

LOADING TOTAL LOAD CASES: (4)

	C + O R D S MAX. FACTORED FACTORED				W E B S MAX, FACTORED				
IVIAA.	PACIONED	FACIO	KED				MAN. FACIC	INEU	
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(P	LF)	CSI (LC)	UNBRAG		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
E-B	-430 / 0	0.0	0.0	0.13(4)	7.81				
A-B	0/26	-84.3	-84.3	0.11(1)	10.00				
B- C	-28 / 0	-84.3	-84.3	0.52 (1)	6.25				
E-D	0/0	-18.2	-18.2	0.13 (4)	10.00				



KTT - GREENPARK - ROUNDEL HOMES - GLENROWAN - GR41-03-3 IM1021-021-R1 Page 12 of 27 JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 J02 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:52 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-Hp9L2uIL9qs4E8Swiw6VTX7vD3jp_LALqk2w7ByWVhX 1-3-8 3-10-15 Scale = 1:18.9 6.00 12 2x4 ||

LUM	BER				
N. L.	G. A.	RULES			
CHO	RDS	SIZE		LUMBER	DESCR.
E -	В	2x4	DRY	No.2	SPF
A -	C	2x4	DRY	No.2	SPF
E -	D	2x4	DRY	No.2	SPF

1-2-0

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches)			
JT	TYPE	PLATES	W	LEN Y	X
B	TMV+p	MT20	2.0	4.0	
E	BMV1+p	MT20	2.0	4.0	

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

3-10-15

В1

BEA	ARINGS						
	FACTORED		DRED MAXIMUM FACTORED		INPUT	REQRD BRG	
	GROSS R	GROSS REACTION		GROSS REACTION			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	385	0	385	0	0	5-8	1-8
C	124	0	124	0	0	1-8	1-8
D	45	0	51	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNE	UNFACTORED REACTIONS										
	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	NS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
E	269	194 / 0	0/0	0/0	0/0	74/0	0/0				
C	84	75/0	0/0	0/0	0/0	9/0	0/0				
D	36	0/0	0/0	0/0	0/0	36 / 0	0/0				

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

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

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

LOADING TOTAL LOAD CASES: (4)

WI

CHO	ORDS					WEB	S	
MAX	FACTORED	FACTO	RED			٨	MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PI	LF)	CSI (LC)	UNBRAG	C	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
E-B	-320 / 0	0.0	0.0	0.13(4)	7.81			
A-B	0/26	-84.3	-84.3	0.11(1)	10.00			
B- C	-18/0	-84.3	-84.3	0.22 (1)	6.25			
F- D	0/0	-18 2	-18 2	0.13 (4)	10.00			

DESIGN CRITERIA

D

SPECIFIED LOADS: LL = DL = TOP CH. 3.0 PSF BOT CH. LL 0.0 7.3 PSF

TOTAL LOAD = 35.9 PSF

SPACING = 24.0 IN. C/C

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

3-8

TOTAL WEIGHT = 4 X 14 = 58 lb

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.03")

CSI: TC=0.22/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (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 PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)

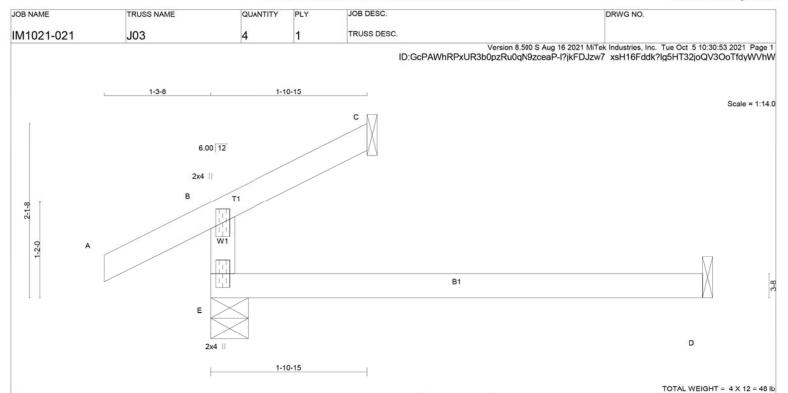
CITY OF RICHMOND HILL **BUILDING DIVISION**



ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

READ ALL NOTES ON THIS PAGE AND ON THE





JM	BER				
L.	G. A. I	RULES			
10	RDS	SIZE		LUMBER	DESCR.
-	В	2x4	DRY	No.2	SPF
	C	2x4	DRY	No.2	SPF
-	D	2x4	DRY	No.2	SPF
	L. 10	ORDS - B - C	L. G. A. RULES HORDS SIZE - B 2x4 - C 2x4	L. G. A. RULES HORDS SIZE - B 2x4 DRY - C 2x4 DRY	L. G. A. RULES HORDS SIZE LUMBER - B 2x4 DRY No.2 - C 2x4 DRY No.2

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

BEA	RINGS						
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT	REQRD
						BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	279	0	279	0	0	5-8	1-8
C	61	0	61	0	0	1-8	1-8
D	45	0	51	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNF	UNFACTORED REACTIONS										
	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
E	197	130 / 0	0/0	0/0	0/0	67 / 0	0/0				
C	41	37 / 0	0/0	0/0	0/0	4/0	0/0				
D	36	0/0	0/0	0/0	0/0	36 / 0	0/0				

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

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

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

LOADING TOTAL LOAD CASES: (4)

	R D S FACTORED	FACTO	PED			WEB	S MAX. FACTO	DED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(P	LF)	CSI (LC)	UNBRAG	3	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
E-B	-214 / 0	0.0	0.0	0.13(4)	7.81			
A-B	0/26	-84.3	-84.3	0.11(1)	10.00			
B-C	-9/0	-84.3	-84.3	0.05 (1)	10.00			
E-D	0/0	-18.2	-18.2	0.13 (4)	10.00			



SPECIFIED LOADS:

LL = DL = TOP CH. 3.0 PSF 0.0 7.3 BOT CH. LL PSF PSF TOTAL LOAD = 35.9 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)

- TPIC 2014

DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.03")

CSI: TC=0.13/1.00 (B-E:4), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (D-E:4)

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 PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

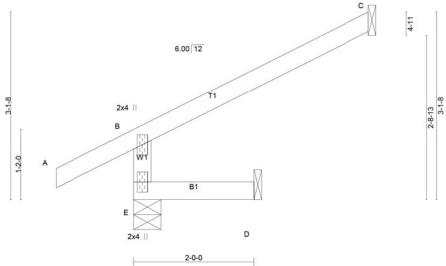
JSI GRIP= 0.12 (B) (INPUT = 0.90)



Per: joshua.nabua



JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. IM1021-021 J04 TRUSS DESC 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:54 2021 Page 1 ID: GcPAWhRPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNRPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNRPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNRPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pzRu0qN9zceaP-DBH6TZJbhR6oURcJpL8zYyDFjtR7SFgel2X0B4yWVhVNPxUR3b0pxUR3b01-3-8 2-0-0 1-10-15 Scale = 1:19.2



TOTAL WEIGHT = 4 X 10 = 39 lb

JLES			
SIZE		LUMBER	DESCR.
2x4	DRY	No.2	SPF
2x4	DRY	No.2	SPF
2x4	DRY	No.2	SPF
NEDII	IMPED		
	2x4 2x4 2x4	SIZE 2x4 DRY 2x4 DRY	SIZE LUMBER 2x4 DRY No.2 2x4 DRY No.2 2x4 DRY No.2

2.0

PLATES (table is in inches) TYPE TMV+p W LEN Y X

BMV1+p

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

BEF	ARINGS						
	FACTO	RED	MAXIMUM FACTORED			INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	340	0	340	0	0	5-8	1-8
C	124	0	124	0	0	1-8	1-8
D	16	0	18	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNE	FACTORED	REA	CTIONS
	1ST LCA	SE	MA
CT	COMPINI	ED	CNIOIA

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	233	194 / 0	0/0	0/0	0/0	39 / 0	0/0
C	84	75/0	0/0	0/0	0/0	9/0	0/0
D	13	0/0	0/0	0/0	0/0	13/0	0/0

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

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

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

LOADING TOTAL LOAD CASES: (5)

CHO	CHORDS					WE	BS		
MAX.	FACTORED	FACTO	RED				MAX. FAC	TORE)
MEMB.	FORCE (LBS)	VERT. LC		1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	FORC (LBS)		AX SI (LC)
FR-TO	40.00	FROM	TO		LENGTH	FR-TO			
E-B	-320 / 0	0.0	0.0	0.01 (4)	7.81				
A-B	0/26	-84.3	-84.3	0.11(1)	10.00				
B- C	-18 / 0	-84.3	-84.3	0.22 (1)	6.25				
E-D	0/0	-18.2	-18.2	0.02 (4)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

BOT CH. LL 0.0 7.3 PSF TOTAL LOAD = 35.9 PSF

DESIGN CRITERIA

SPECIFIED LOADS: LL = DL =

TOP CH.

SPACING = 24.0 IN. C/C

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

3.0 PSF

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.22/1.00 (B-C:1), BC=0.02/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (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 PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)



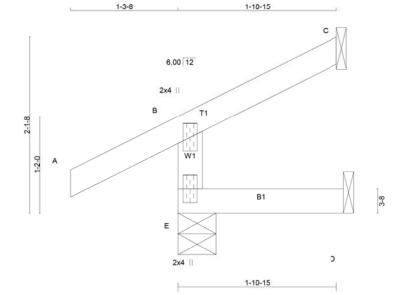


Per:

Scale = 1:13.9

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. J05 IM1021-021 TRUSS DESC 1

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:55 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-hOqUgvKDRIEf5bBVN2gC5AlSAHnMBivnWiHakWyWVhU



LUMBER N. L. G. A. RULES CHORDS SIZE SIZE LUMBER DESCR. E - B A - C 2×4 DRY No.2 SPF A - C E - D DRY 2x4 No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches) TYPE TMV+p W LEN Y X 2.0 4.0 BMV1+p 2.0

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

BEA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRE
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	235	0	235	0	0	5-8	1-8
C	61	0	61	0	0	1-8	1-8
D	16	0	18	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	162	130 / 0	0/0	0/0	0/0	31/0	0/0
C	41	37 / 0	0/0	0/0	0/0	4/0	0/0
D	13	0/0	0/0	0/0	0/0	13/0	0/0

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

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

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

LOADING TOTAL LOAD CASES: (5)

CHO	RDS					WE	BS	
MAX.	FACTORED	FACTO	RED				MAX. FACTO	DRED
MEMB.	FORCE (LBS)	VERT. LC		1 MAX CSI (LC)	MAX. UNBRAC	МЕМВ.	FORCE (LBS)	MAX CSI (LC)
FR-TO	4.15.50	FROM	TO		LENGTH	FR-TO		
E-B	-214 / 0	0.0	0.0	0.01(4)	7.81			
A-B	0/26	-84.3	-84.3	0.11(1)	10.00			
B-C	-9/0	-84.3	-84.3	0.05 (1)	10.00			
E-D	0/0	-18.2	-18.2	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.



October 05, 2021

READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

DESIGN CRITERIA

SPECIFIED LOADS: LL = DL = CH. 3.0 PSF BOT CH. PSF

LL 0.0 7.3 TOTAL LOAD = 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 4 X 7 = 29 II

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.11/1.00 (A-B:1), BC=0.02/1.00 (D-E:4), WB=0.00/1.00 (n/a:0) , SSI=0.08/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (B) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**

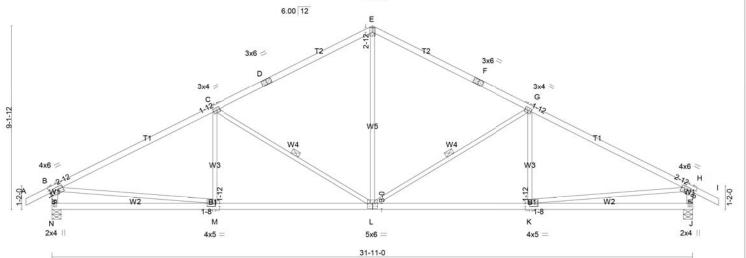


Per: joshua.nabua

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. T01 8 TRUSS DESC IM1021-021 1

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:55 2021 Page 1 ID: GcPAWhRPxUR3b0pzRu0qN9zceaP-hOqUgvKDRIEf5bBVN2gC5AlEcHfXBb9nWiHakWyWVhUller (Control of the Control of th

1-3-8 15-11-8 15-11-8 1-3-8 Scale = 1:57.4 3x5 || 6.00 12



CHC	RDS	SIZE		LUMBER	DESCR
A -	D	2x4	DRY	No.2	SPF
D -	E	2x4	DRY	No.2	SPF
E -	F	2x4	DRY	No.2	SPF
F -	1	2x4	DRY	No.2	SPF
N -	В	2x4	DRY	No.2	SPF
J -	H	2x4	DRY	No.2	SPF
N -	L	2x4	DRY	No.2	SPF
L -	J	2x4	DRY	No.2	SPF
ALL	WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches					
JT	TYPE	PLATES	W	LEN	Y	X	
В	TMVW-t	MT20	4.0	6.0	1.50	2.75	
C	TMWW-t	MT20	3.0	4.0	1.50	1.75	
D	TS-t	MT20	3.0	6.0			
E	TTW+p	MT20	3.0	5.0	2.75	1.50	
F	TS-t	MT20	3.0	6.0			
G	TMWW-t	MT20	3.0	4.0	1.50	1.75	
H	TMVW-t	MT20	4.0	6.0	1.50	2.75	
J	BMV1+p	MT20	2.0	4.0			
K	BMWW-t	MT20	4.0	5.0	1.75	1.50	
L	BSWWW-I	MT20	5.0	6.0	3.00	3.00	
M	BMWW-t	MT20	4.0	5.0	1.75	1.50	
N	BMV1+p	MT20	2.0	4.0			

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

BEA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
N	1750	0	1750	0	0	5-8	2-3
J	1750	0	1750	0	0	5-8	2-3

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
IT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
1	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0
1	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-L. C-L. DBS = 20-0-0 . CBF = 103 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"X3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END \forall ERTICAL(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

M- L L- K

MAX	. FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PI	_F)	CSI (LC)	UNBRAC	0	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0 / 26	-84.3	-84.3	0.11(1)	10.00	L-E	0/979	0.22(1)
B- C	-2394 / 0	-84.3	-84.3	0.98 (1)	3.23	L-G	-820 / 0	0.50(1)
C-D	-1688 / 0	-84.3	-84.3	0.82 (1)	3.94	K-G	-54 / 137	0.05(4)
D-E	-1688 / 0	-84.3	-84.3	0.82(1)	3.94	C-L	-820 / 0	0.50(1)
E-F	-1688 / 0	-84.3	-84.3	0.82(1)	3.94	M-C	-54 / 137	0.05(4)
F- G	-1688 / 0	-84.3	-84.3	0.82 (1)	3.94	B- M	0 / 2185	0.49(1)
G-H	-2394 / 0	-84.3	-84.3	0.98 (1)	3.23	K-H	0 / 2185	0.49(1)
H-I	0 / 26	-84.3	-84.3	0.11(1)	10.00			
N-B	-1692 / 0	0.0	0.0	0.17(1)	6.39			
J- H	-1692 / 0	0.0	0.0	0.17 (1)	6.39			
N- M	0/0	-18.2	-18.2	0.33 (4)	10.00			
M-L	0 / 2173	-18.2	-18.2	0.52(1)	10.00			
L-K	0 / 2173	-18.2	-18.2	0.52(1)	10.00			

-18.2 0.33 (4)

WEBS

DESIGN CRITERIA

SPECIFIED LOADS: CH. LL = DL =

3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 8 X 124 = 992 lb

[M][F]

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.13") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.29")

CSI: TC=0.98/1.00 (G-H:1) , BC=0.52/1.00 (K-L:1) , WB=0.50/1.00 (G-L:1) , SSI=0.29/1.00 (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.

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (M) (INPUT = 0.90) JSI METAL= 0.62 (H) (INPUT = 1.00)

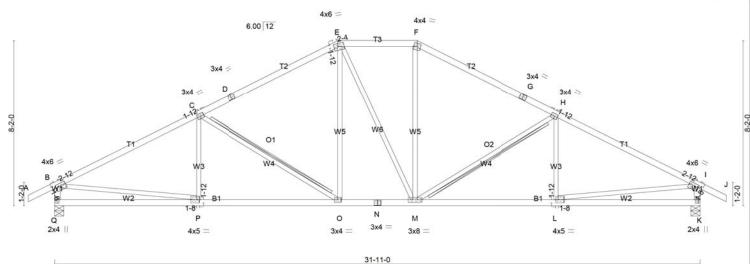




JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 T02 2 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:56 2021 Page 1

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1-3-8 14-0-0 3-11-0 14-0-0 1-3-8 Scale = 1:57.0



LUM					
	G. A. R				
CHO	RDS	SIZE		LUMBER	DESCR.
A -	D	2x4	DRY	No.2	SPF
D -	E	2x4	DRY	No.2	SPF
E -	F	2x4	DRY	No.2	SPF
F -	G	2x4	DRY	No.2	SPF
G -	J	2x4	DRY	No.2	SPF
Q -	В	2x4	DRY	No.2	SPF
K -	1	2x4	DRY	No.2	SPF
Q -	N	2x4	DRY	No.2	SPF
N -	K	2x4	DRY	No.2	SPF
ALL \	WEBS EPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PL	ATES (table i	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
В	TMVW-t	MT20	4.0	6.0	1.50	2.75
C	TMWW-t	MT20	3.0	4.0	1.50	1.75
D	TS-t	MT20	3.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.25
F	TTW-m	MT20	4.0	4.0		
G	TS-t	MT20	3.0	4.0		
Н	TMWW-t	MT20	3.0	4.0	1.50	1.75
1	TMVW-t	MT20	4.0	6.0	1.50	2.75
K	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	5.0	1.75	1.50
M	BMWWW-t	MT20	3.0	8.0		
N	BS-t	MT20	3.0	4.0		
0	BMWW-t	MT20	3.0	4.0		
P	BMWW-t	MT20	4.0	5.0	1.75	1.50
0	BMV1+n	MT20	20	40		

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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

DIMENSIONS, SUPPORTS	AND LOADINGS SPECIFIE	D BY FABRICATOR TO	BE VERIFIED BY
BUILDING DESIGNER			
BEARINGS			

BEA	ARINGS							
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD	
	GROSS REACTION		GROSS REACTION			BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
Q	1750	0	1750	0	0	5-8	2-3	
K	1750	0	1750	0	0	5-8	2-3	

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0
K	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT C-O. H-M

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY 0F 3' COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

CH	ORDS					WE	BS	
MAX	K. FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	
	(LBS)	(PL	.F)	CSI (LC)	UNBRAG		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0/26	-84.3	-84.3	0.11(1)	10.00	P-C	-118 / 94	0.04(1)
B-C	-2405 / 0	-84.3	-84.3	0.72(1)	3.69	C- O	-644 / 0	0.34(1)
C-D	-1860 / 0	-84.3	-84.3	0.63(1)	4.20	O-E	0 / 434	0.10(1)
D-E	-1860 / 0	-84.3	-84.3	0.63(1)	4.20	E- M	0/2	0.00(1)
E-F	-1641 / 0	-84.3	-84.3	0.20(1)	4.99	M-F	0 / 436	0.10(1)
F- G	-1861 / 0	-84.3	-84.3	0.63 (1)	4.19	M- H	-643 / 0	0.34(1)
G-H	-1861 / 0	-84.3	-84.3	0.63(1)	4.19	L- H	-119 / 94	0.04(1)
H- I	-2405 / 0	-84.3	-84.3	0.72(1)	3.69	B-P	0 / 2195	0.49(1)
I- J	0/26	-84.3	-84.3	0.11(1)	10.00	L-1	0 / 2195	0.49(1)
	-1697 / 0				6.38			
K- I	-1696 / 0	0.0	0.0	0.17 (1)	6.38			
Q-P	0/0	-18.2	-18.2	0.23 (4)	10.00			
P- 0	0 / 2179	-18.2	-18.2	0.46(1)	10.00			
0- N	0 / 1640	-18.2	-18.2	0.33(1)	10.00			
N-M	0 / 1640	-18.2	-18.2	0.33(1)	10.00			
M-L	0/2179	-18.2	-18.2	0.46 (1)	10.00			
L- K	0/0	-18.2	-18.2	0.23 (4)	10.00			

DESIGN CRITERIA

TOTAL WEIGHT = 2 X 132 = 263 lb

SPECIFIED LOADS:

CH. LL = DL = 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD 35.9 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 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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL) = L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.72/1.00 (B-C:1) , BC=0.46/1.00 (O-P:1) WB=0.49/1.00 (B-P:1) , SSI=0.26/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (P) (INPUT = 0.90)





Per: ioshua.nabua

1-3-8 Scale = 1:56.2

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 T03 2 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:57 2021 Page 1 $ID: GcPAWhRPxUR3b0pzRu0qN9zceaP-emyE5bMTzMUNLvLuUTigAbriU4LrfVj4_0mhoOyWVhSigAbriU4LrfVj4_0mho$

7-11-0

4x5 \\ 4x5 = D F **T2** 6.00 12 4x6 4x6 < 212 G В -12 W W2 W2 1-8 11-8 L N J M K 3x6 = 4x5 = 2x4 | 3x8 = 2x4 ||

N. L. G. A.	DIIIEC			
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
1 - G	2x4	DRY	No.2	SPF
0 - L	2x4	DRY	No.2	SPF
L - 1	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
D - K	2x4	DRY	No.2	SPF

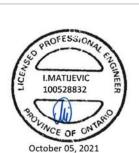
DRY: SEASONED LUMBER.

PLATES (table is in inches)

1-3-8

12-0-0

JT	TYPE	PLATES	W	LEN	Y	X	
В	TMVW-t	MT20	4.0	6.0	1.50	2.75	
C	TMWW-t	MT20	3.0	4.0	1.50	1.75	
D	TTWW+m	MT20	4.0	5.0	2.00	1.75	
E	TTW-m	MT20	4.0	5.0			
F	TMWW-t	MT20	3.0	4.0	1.50	1.75	
G	TMVW-t	MT20	4.0	6.0	1.50	2.75	
1	BMV1+p	MT20	2.0	4.0			
J	BMWW-t	MT20	4.0	5.0	1.75	1.50	
K	BMWWW-t	MT20	3.0	8.0			
L	BS-t	MT20	3.0	6.0			
M	BMWW-t	MT20	3.0	4.0			
N	BMWW-t	MT20	4.0	5.0	1.75	1.50	
0	BMV1+p	MT20	2.0	4.0			



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

31-11-0

BEA	ARINGS							
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD	
	GROSS REACTION		GROSS REACTION			BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
0	1750	0	1750	0	0	5-8	2-3	
1	1750	0	1750	0	0	5-8	2-3	

UNFACTORED	REACT	TONS
4OTIOA	0.5	1111

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
0	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0		
1	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0		

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

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LOADING TOTAL LOAD CASES: (4)

CH	ORDS		WEBS					
MAX	X. FACTORED	FACTO	RED				MAX. FACTO	DRED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PI	LF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0/26	-84.3	-84.3	0.11(1)	10.00	N-C	-198 / 41	0.05(1)
B- C	-2395 / 0	-84.3	-84.3	0.50(1)	3.97	C-M	-428 / 0	0.40 (1)
C-D	-2047 / 0	-84.3	-84.3	0.46 (1)	4.28	M- D	0/374	0.08(1)
D-E	-1806 / 0	-84.3	-84.3	0.35(1)	5.50	D-K	0/0	0.00(1)
E-F	-2048 / 0	-84.3	-84.3	0.46(1)	4.28	K-E	0/374	0.08(1)
F- G	-2395 / 0	-84.3	-84.3	0.50(1)	3.97	K-F	-427 / 0	0.40(1)
G-H	0/26	-84.3	-84.3	0.11(1)	10.00	J-F	-198 / 41	0.05(1)
O-B	-1700 / 0	0.0	0.0	0.17(1)	6.38	B-N	0 / 2187	0.49(1)
I- G	-1700 / 0	0.0	0.0	0.17 (1)	6.38	J- G	0 / 2187	0.49 (1)
0- N	0/0	-18.2	-18.2	0.14 (4)	10.00			
N- M	0 / 2166	-18.2	-18.2	0.46 (1)	10.00			
M-L	0 / 1806	-18.2	-18.2	0.41(1)	10.00			
L-K	0 / 1806	-18.2	-18.2	0.41(1)	10.00			
K-J	0 / 2166	-18.2	-18.2	0.46 (1)	10.00			
J-I	0/0	-18.2	-18.2	0.14 (4)	10.00			

DESIGN CRITERIA

12-0-0

SPECIFIED LOADS: CH.

LL = DL = LL = DL = 3.0 PSF BOT CH. 0.0 7.3 PSF PSF TOTAL LOAD = 35.9 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 2015

TOTAL WEIGHT = 2 X 135 = 270 lb

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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.25")

CSI: TC=0.50/1.00 (B-C:1) , BC=0.46/1.00 (J-K:1) , WB=0.49/1.00 (B-N:1), SSI=0.22/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (N) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**

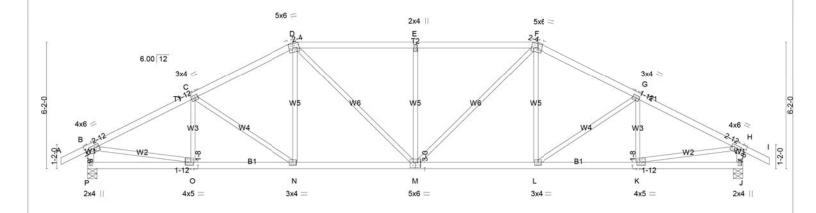


Per: joshua.nabua

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 T04 2 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:58 2021 Page 1

ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-6zWdJxM5kgcEy3w42ADvioNtsUijOy3EDgVEKryWVhR

10-0-0 11-11-0 10-0-0 1-3-8 Scale = 1:56.2



LUMBER N. L. G. A. RULES CHORDS SIZE SIZE LUMBER DESCR. A - D D - F 2×4 DRY No.2 SPF 2x4 DRY No.2 2x4 No.2 SPF ВН 2x4 2x4 DRY No.2 No.2 SPF SPF M 2x4 DRY No.2 SPF SPF No.2 ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

1-3-8

PL	ATES (table	is in inches)					
JT	TYPE	PLATES	W	LEN	Y	X	
В	TMVW-t	MT20	4.0	6.0	1.50	2.75	
C	TMWW-t	MT20	3.0	4.0	1.50	1.75	
D	TTWW-m	MT20	5.0	6.0	2.50	2.25	
E	TMW+w	MT20	2.0	4.0			
F	TTWW-m	MT20	5.0	6.0	2.50	2.25	
G	TMWW-t	MT20	3.0	4.0	1.50	1.75	
H	TMVW-t	MT20	4.0	6.0	1.50	2.75	
J	BMV1+p	MT20	2.0	4.0			
K	BMWW-t	MT20	4.0	5.0	1.50	1.75	
L	BMWW-t	MT20	3.0	4.0			
M	BSWWW-I	MT20	5.0	6.0	3.00	3.00	
N	BMWW-t	MT20	3.0	4.0			
0	BMWW-t	MT20	4.0	5.0	1.50	1.75	
P	BMV1+p	MT20	2.0	4.0			



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

31-11-0

3EA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JΤ	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
0	1750	0	1750	0	0	5-8	2-3
J	1750	0	1750	0	0	5-8	2-3

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0
J	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.06 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

	CH	ORDS					WE	BS	
	MAX	. FACTORED	FACTO	RED				MAX. FACTO	RED
		FORCE	VERT. LC	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX
		(LBS)	(Pl	LF) (CSI (LC)	UNBRAC		(LBS)	CSI (LC)
	FR-TO		FROM	TO		LENGTH	FR-TO		
	A-B	0 / 26	-84.3	-84.3	0.11(1)	10.00	0- C	-271/6	0.06(1)
	B- C	-2363 / 0	-84.3	-84.3	0.34(1)	4.17	C-N	-255 / 0	0.16(1)
	C-D	-2171 / 0	-84.3	-84.3	0.32(1)	4.33	N-D	0 / 261	0.06(1)
	D-E	-2282 / 0	-84.3	-84.3	0.46 (1)	4.06	D-M	0 / 501	0.11(1)
	E-F	-2282 / 0	-84.3	-84.3	0.46 (1)	4.06	M-E	-615 / 0	0.37 (1)
	F-G	-2171 / 0	-84.3	-84.3	0.32(1)	4.33	M-F	0 / 501	0.11(1)
	G-H	-2363 / 0	-84.3	-84.3	0.34(1)	4.17	L-F	0 / 261	0.06(1)
	H- I	0/26	-84.3	-84.3	0.11(1)	10.00	L-G	-255 / 0	0.16(1)
	P-B	-1707 / 0	0.0	0.0	0.17(1)	6.36	K-G	-271 / 6	0.06(1)
	J- H	-1707 / 0	0.0	0.0	0.17(1)	6.36	B-O	0 / 2162	0.49(1)
							K-H	0 / 2162	0.49(1)
	P- 0	0/0	-18.2	-18.2	0.10(4)	10.00			
	0- N	0 / 2132	-18.2	-18.2	0.42(1)	10.00			
	N-M	0 / 1926	-18.2	-18.2	0.39(1)	10.00			
i	M-L	0 / 1926	-18.2	-18.2	0.39 (1)	10.00			
1	L-K	0 / 2132	-18.2	-18.2	0.42 (1)	10.00			
1	K-J	0/0	-18.2	-18.2	0.10 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

CH. LL = DL = 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD 35.9 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 2015**

TOTAL WEIGHT = 2 X 130 = 259 lb

[M][F]

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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23*)

CSI: TC=0.46/1.00 (D-E:1), BC=0.42/1.00 (K-L:1), WB=0.49/1.00 (H-K: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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (F) (INPUT = 0.90)

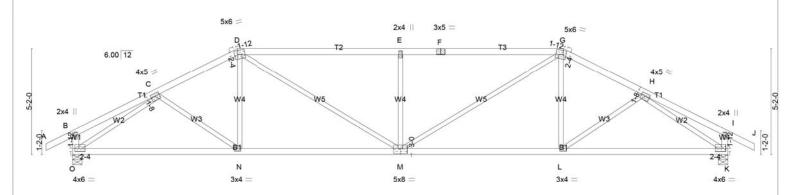
CITY OF RICHMOND HILL **BUILDING DIVISION**



Per: ioshua.nabua

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 T05 2 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:58 2021 Page 1 ID: GcPAWhRPxUR3b0pzRu0qN9zceaP-6zWdJxM5kgcEy3w42ADvioNIUUhMOqLEDgVEKryWVhRQueder (Control of the Control of

1-3-8 8-0-0 15-11-0 8-0-0 1-3-8 Scale = 1:56.2



31-11-0

LUMBER N. L. G. A. RULES CHORDS SIZE SIZE LUMBER DESCR. A - D
D - F
F - G
G - J
O - B
K - I
O - M
M - K 2×4 DRY No.2 SPF DRY 2100F 1.8E 2x4 No.2 SPF 2x4 2x4 2x4 2x4 DRY No.2 No.2 SPF SPF DRY No.2 SPF SPF 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches)					
JT	TYPE	PLATES	W	LEN	Y	X	
В	TMV+p	MT20	2.0	4.0			
C	TMWW-t	MT20	4.0	5.0	1.50	2.50	
D	TTWW-m	MT20	5.0	6.0	2.25	1.75	
E	TMW+w	MT20	2.0	4.0			
F	TS-t	MT20	3.0	5.0			
G	TTWW-m	MT20	5.0	6.0	2.25	1.75	
H	TMWW-t	MT20	4.0	5.0	1.50	2.50	
1	TMV+p	MT20	2.0	4.0			
K	BMVW1-t	MT20	4.0	6.0	1.75	2.25	
L	BMWW-t	MT20	3.0	4.0			
M	BSWWW-I	MT20	5.0	8.0	3.00	4.00	
N	BMWW-t	MT20	3.0	4.0			
0	BMVW1-t	MT20	4.0	6.0	1.75	2.25	
N	BMWW-t	MT20	3.0	4.0			

	OFFSSIO	
LICENSES	I.MATUEVIC 100528832	ENGINEER
	OCTOBER 05, 2021	

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

DIMENSIONS, SUPPORTS	AND LOADINGS SPECIFIE	D BY FABRICATOR TO	BE VERIFIED BY
BUILDING DESIGNER			
BEARINGS			

					INPUT BRG	REQRD BRG
VERT	HORZ	DOWN	HORZ			IN-SX
1750	0	1750	0	0	5-8	1-14
1750	0	1750	0	0	5-8	1-14
	GROSS R VERT 1750	FACTORED GROSS REACTION VERT HORZ 1750 0	FACTORED MAXIMU GROSS REACTION GROSS VERT HORZ DOWN 1750 0 1750	FACTORED MAXIMUM FACTOROSS REACTION GROSS REACTION USERT HORZ DOWN HORZ 1750 0	FACTORED MAXIMUM FACTORED GROSS REACTION GROSS REACTION VERT HORZ DOWN HORZ UPLIFT 1750 0 0 0 0	FACTORED MAXIMUM FACTORED INPUT GROSS REACTION BRG VERT HORZ DOWN HORZ UPLIFT IN-SX 1750 0 1750 0 5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS								
IT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
0	1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0				
(1223	886 / 0	0/0	0/0	0/0	337 / 0	0/0				

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

CH	ORDS					W E	BS	
MAX	FACTORED	FACTO	RED				MAX. FACTO	RED
						MEMB	FORCE	MAX
	(LBS)	(PL	.F) (CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0/26	-84.3	-84.3	0.11(1)	10.00	C-N	0/77	0.03(4)
B- C	0 / 15	-84.3	-84.3	0.19(1)	10.00	N-D	0 / 165	0.05 (4)
C-D	-2299 / 0	-84.3	-84.3	0.27 (1)	4.28	D- M	0 / 903	0.20(1)
D-E	-2815 / 0	-84.3	-84.3	0.85 (1)	4.02	M-E	-833 / 0	0.33(1)
E-F	-2815 / 0	-84.3	-84.3	1.00 (1)	3.35	M-G	0 / 903	0.20(1)
F-G	-2815 / 0	-84.3	-84.3	1.00 (1)	3.35	L-G	0 / 165	0.05 (4)
G-H	-2299 / 0	-84.3	-84.3	0.27 (1)	4.28	L-H	0/77	0.03(4)
H-1	0 / 15	-84.3	-84.3	0.19(1)	10.00	0- C	-2483 / 0	0.98 (1)
I- J	0/26	-84.3	-84.3	0.11(1)	10.00	H-K	-2483 / 0	0.98 (1)
O-B	-250 / 0	0.0	0.0	0.03(1)	7.81			
K-1	-250 / 0	0.0	0.0	0.03 (1)	7.81			
0- N	0 / 2021	-18.2	-18.2	0.51 (1)	10.00			
N-M	0 / 2044	-18.2	-18.2	0.51(1)	10.00			
M-L	0 / 2044	-18.2	-18.2	0.51 (1)	10.00			
L-K	0 / 2021	-18.2	-18.2	0.51 (1)	10.00			
	MAX MEMB. FR-TO A- B B- C C- D E- F G- H H- I I- O- N M- L	MEMB. FORCE (LBS) FR-TO A-B 0/26 B-C 0/15 C-D -2299/0 D-E -2815/0 F-G -2815/0 F-G -2815/0 H-I 0/15 I-J 0/26 O-B -250/0 K-I -250/0 O-N 0/2021 N-M 0/2044 M-L 0/2044	MAX. FACTORED FACTO MEMB. FORCE (LBS) FR-T0 FR-T	MAX. FACTORED FACTORED (BS) (PLF) (CBS) (PLF) (P	MAX. FACTORED FACTORED FORCE (LBS) FR-TO (LBS) (PLF) CSI (LC) FROM TO -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.27 (1) -84.3 -84.3 0.30 (1) -84.3 -84.3 0.30 (1) -84.3 -84.3 0.30 (1) -84.3 -84.3 0.30 (1) -94.3 -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3 0.30 (1) -94.3 -94.3	MAX. FACTORED MEMB. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX MAX. MAX. MAX. FR-TO B-C (LBS) (PLF) CSI (LC) UNBRAC LENGTH B-C 0 / 15 -84.3 -84.3 0.19 (1) 10.00 C- D -2299 / 0 -84.3 -84.3 0.27 (1) 4.28 D-E -2815 / 0 -84.3 -84.3 1.00 (1) 3.35 F- G -2815 / 0 -84.3 -84.3 1.00 (1) 3.35 G- H -2299 / 0 -84.3 -84.3 0.27 (1) 4.28 H- I 0 / 15 -84.3 -84.3 1.00 (1) 3.35 G- H -2299 / 0 -84.3 -84.3 0.17 (1) 4.28 H- I 0 / 15 -84.3 -84.3 0.17 (1) 4.28 H- I 0 / 26 -84.3 -84.3 0.17 (1) 4.28 O- B -250 / 0 0.0 0.0 0.03 (1) 7.81 C- N 0 / 2021 -18.2 -18.2 0.51 (1	MAX. FACTORED MEMB. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX MAX. MEMB FR-T0 (LBS) FROM TO CSI (LC) UNBRAC UNBRAC FROM TO -84.3 -84.3 0.11 (1) 10.00 C-N D B- C 0 / 15 -84.3 -84.3 0.19 (1) 10.00 C-N D C- D -2299 / 0 -84.3 -84.3 0.27 (1) 4.28 D-M D D- E -2815 / 0 -84.3 -84.3 1.00 (1) 3.35 M-G F- G -2815 / 0 -84.3 -84.3 1.00 (1) 3.35 M-G G- H -2299 / 0 -84.3 -84.3 0.11 (1) 10.00 O-C H- I 0 / 15 -84.3 -84.3 1.00 (1) 3.35 L-G G- H -2299 / 0 -84.3 -84.3 0.11 (1) 10.00 O-C H- I 0 / 15 -84.3 -84.3 0.11 (1) 10.00 O-C G- B -250 / 0 0.0 <td< td=""><td>MAX. FACTORED FORCE (LBS) FACTORED FORCE (LBS) MAX. MAX. MAX. MAX. FACTORED FORCE (LBS) FR-TO (LBS) FROM TO (LBS) CSI (LC) UNBRAC (LBS) UNBRAC (LBS) (LBS) FROM TO -2299 / 0 -84.3 -84.3 0.19 (1) 10.00 C-N 0/77 0/77 B- C 0/15 -34.3 -84.3 0.19 (1) 10.00 N-D 0/165 0/165 N-B N-B N-B N-B N-B N-B N-B N-B N-B N-B</td></td<>	MAX. FACTORED FORCE (LBS) FACTORED FORCE (LBS) MAX. MAX. MAX. MAX. FACTORED FORCE (LBS) FR-TO (LBS) FROM TO (LBS) CSI (LC) UNBRAC (LBS) UNBRAC (LBS) (LBS) FROM TO -2299 / 0 -84.3 -84.3 0.19 (1) 10.00 C-N 0/77 0/77 B- C 0/15 -34.3 -84.3 0.19 (1) 10.00 N-D 0/165 0/165 N-B

DESIGN CRITERIA

SPECIFIED LOADS: CH. LL = DL = 3.0 PSF BOT CH. PSF

LL 0.0 7.3 TOTAL LOAD 35.9 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 2015**

TOTAL WEIGHT = 2 X 121 = 242 lb

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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31")

CSI: TC=1.00/1.00 (E-G:1), BC=0.51/1.00 (L-M:1) WB=0.98/1.00 (H-K:1), SSI=0.33/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**



Per: joshua.nabua

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. TRUSS DESC. IM1021-021 T06 3 1 Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:59 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-a94?WHNkVzk5aDVGcuk8F0w2Xu5B7U4NRKFntHyWVhQ 6-6-0 6-6-0 Scale = 1:21.8 3x4 || B 4.00 12 3x5 = 3x5 = C 11-3 W2 W2 **B**1 E 3x8 13-0-0

	G. A. F	SIZE		LUMBER	DESCR
A -	В	2x4	DRY	No.2	SPF
B -	C	2x4	DRY	No.2	SPF
F -	A	2x4	DRY	No.2	SPF
D -	C	2x4	DRY	No.2	SPF
F-	D	2x4	DRY	No.2	SPF
ALL	WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0		
В	TTW+p	MT20	3.0	4.0		
C	TMVW-t	MT20	3.0	5.0		
D	BMV1+p	MT20	2.0	4.0		
E	BMWWW-t	MT20	3.0	8.0		
F	BMV1+p	MT20	2.0	4.0		

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

RINGS						
FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
666	0	666	0	0	5-8	1-8
666	0	666	0	0	5-8	1-8
	FACTO GROSS R VERT 666	FACTORED GROSS REACTION VERT HORZ 666 0	FACTORED MAXIMU GROSS REACTION GROSS VERT HORZ DOWN 666 0 666	FACTORED MAXIMUM FACTOR GROSS REACTION GROSS REACTION URTH HORZ DOWN HORZ 666 0 666 0	FACTORED MAXIMUM FACTORED GROSS REACTION GROSS REACTION VERT HORZ DOWN HORZ UPLIFT 666 0 0 0	FACTORED MAXIMUM FACTORED INPUT GROSS REACTION BRG VERT HORZ DOWN HORZ UPLIFT IN-SX 666 0 666 0 5-8

UNFACTORED REACTIONS

hondon	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
F	466	333 / 0	0/0	0/0	0/0	134 / 0	0/0			
D	466	333 / 0	0/0	0/0	0/0	134 / 0	0/0			

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

<u>BRACING</u>
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.96 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTA_ LOAD CASES: (4)

CHO	ORDS					WE	BS	
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(Pl	.F)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	-846 / 0	-84.3	-84.3	0.47 (1)	5.96	E-B	-13 / 115	0.04(4)
B- C	-846 / 0	-84.3	-84.3	0.47 (1)	5.96	A-E	0 / 806	0.18 (1)
F-A	-619 / 0	0.0	0.0	0.06(1)	7.81	E-C	0 / 806	0.18(1)
D-C	-619 / 0	0.0	0.0	0.06 (1)	7.81			
F-E	0/0	-18.2	-18.2	0.22 (4)	10.00			
E-D	0/0	-18.2	-18.2	0.22 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS: LL = DL = LL = DL = CH. 3.0 0.0 7.3 PSF BOT CH.

PSF PSF TOTAL LOAD = 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 3 X 44 = 131 lb

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.43") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.02") ALLOWABLE DEFL.(TL)= L/360 (0.43") CALCULATED VERT. DEFL.(TL)= L/999 (0.06")

CSI: TC=0,47/1.00 (A-B:1) , BC=0,22/1.00 (D-E:4) , WB=0.18/1.00 (A-E:1) , SSI=0.20/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (E) (INPUT = 0.90) JSI METAL= 0.27 (A) (INPUT = 1.00)





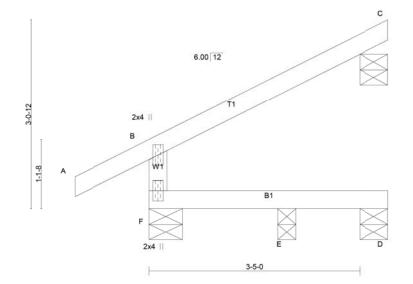
JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. IM1021-021 T07 5 1

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:30:59 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-a94?WHNkVzk5aDVGcuk8F0w6Wu8F7WvNRKFntHyWVhQ

3-0-12

1-2-8

Scale = 1:18.7



LUMBER N. L. G. A. RULES CHORDS SIZE SIZE LUMBER DESCR. A - C F - B No.2 No.2 2×4 DRY SPF DRY DRY D 2x4 No.2 SPF DRY: SEASONED LUMBER.

PLATES (table is in inches) TYPE TMV+p W LEN Y 2.0 BMV1+p 2.0

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

BEA	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRE
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
C	123	0	123	0	0	5-8	5-8
F	329	0	329	0	0	6-8	2-8
D	10	0	11	0	0	5-8	1-8
E	42	0	48	0	0	3-8	1-8

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

UNFACTORED REACTIONS

0.00	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTION	VS.		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	83	74/0	0/0	0/0	0/0	9/0	0/0
F	226	189 / 0	0/0	0/0	0/0	37 / 0	0/0
D	8	0/0	0/0	0/0	0/0	8/0	0/0
E	34	0/0	0/0	0/0	0/0	34 / 0	0/0

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

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

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

LOADING TOTAL LOAD CASES: (4)

CH	ORDS				WEBS				
MAX	. FACTORED	FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LC	DAD LC1	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PI	LF)	CSI (LC)	UNBRAG		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0/24	-84.3	-84.3	0.10(1)	10.00				
B-C	-18 / 0	-84.3	-84.3	0.21(1)	6.25				
F-B	-311 / 0	0.0	0.0	0.01 (4)	7.81				
F-E	0/0	-18.2	-18.2	0.02 (4)	10.00				
E-D	0/0	-18.2	-18.2	0.02 (4)	10.00				

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

DESIGN CRITERIA

SPECIFIED LOADS:

LL = DL = CH. 3.0 PSF BOT CH. LL 0.0 7.3 PSF TOTAL LOAD = 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 5 X 12 = 59 lb

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.21/1.00 (B-C:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (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 PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**



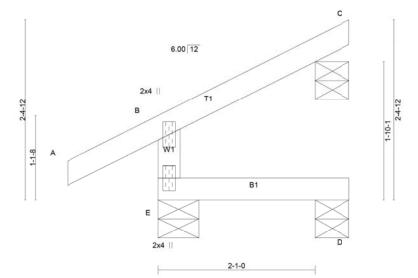
Per: joshua.nabua

JOB DESC. JOB NAME TRUSS NAME QUANTITY PLY DRWG NO. IM1021-021 T08 6 1

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Tue Oct 5 10:31:00 2021 Page 1 ID:GcPAWhRPxUR3b0pzRu0qN9zceaP-2LeNkdOMGHsyCM3TAbFNoDTJ6IUNsz9Wg LPjyWVhP

1-2-8 2-1-0

Scale = 1:15.3



LL	JM	BER				
N.	L.	G. A. F	RULES			
CH	10	RDS	SIZE		LUMBER	DESCR.
A	-	C	2x4	DRY	No.2	SPF
E	-	В	2x4	DRY	No.2	SPF
E	-	D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PL	ATES (table	is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

	ARINGS						
	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
C	81	0	81	0	0	5-8	5-8
E	267	0	267	0	0	6-8	2-8
D	20	0	23	0	0	5-8	1-8

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

UNFACTORED	REACTIONS	

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
C	55	49/0	0/0	0/0	0/0	6/0	0/0	
E	184	146 / 0	0/0	0/0	0/0	38 / 0	0/0	
D	16	0/0	0/0	0/0	0/0	16/0	0/0	

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

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

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

LOADING TOTAL LOAD CASES: (7)

CHO	ORDS	WEBS							
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(Pl	LF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0/24	-84.3	-84.3	0.10(1)	10.00				
B- C	-12/0	-84.3	-84.3	0.09(6)	6.25				
E-B	-241 / 0	0.0	0.0	0.02 (4)	7.81				
E-D	0/0	-18.2	-18.2	0.03 (4)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.



October 05, 2021

READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

DESIGN CRITERIA

SPECIFIED LOADS: LL = DL = CH.

3.0 PSF 0.0 7.3 BOT CH. LL PSF TOTAL LOAD = 35.9 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 6 X 9 = 52 lk

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)

- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10/1.00 (A-B:1), BC=0.03/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (B-C:6)

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 PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (B) (INPUT = 0.90)

CITY OF RICHMOND HILL **BUILDING DIVISION**



Per:

ioshua.nabua



STANDARD DETAIL MSD2015-H

Issued: SEPTEMBER 22, 2020 **APRIL 30, 2022**

Expiry:

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

NAIL TYPE	Length	Diameter		sistance per nail Lbs.)	WITHDRAWAL Resistance per nail (Lbs.)	
	(in)	(in)	SPF	D. FIR	SPF	D. FIR
COMMON	3.00	0.144	122	139	30	42
COMMON WIRE	3.25	0.144	127	144	32	45
WIKE	3.50	0.160	152	173	38	52
CONANAON	3.00	0.122	96	108	26	36
COMMON SPIRAL	3.25	0.122	97	108	28	40
SPIRAL	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail ty	ype:		Common wire	Common spiral	Common wire	Common spiral	Gun Nail
Diame	eter ((in.)	0.160	0.152	0.144	0.122	0.120
Length	h i	(in.)	3.50	3.50	3.00	3.00	3.25
LUMB	ER			MAXIMU	M NUMBER OF TO	E-NAILS	
2x4	SPF		2	2	3	3	3
2x6	SPF		4	4	4	5	5
2x4	D. FIR		2	2	2	2	2
2x6	D. FIR		3	3	3	4	4

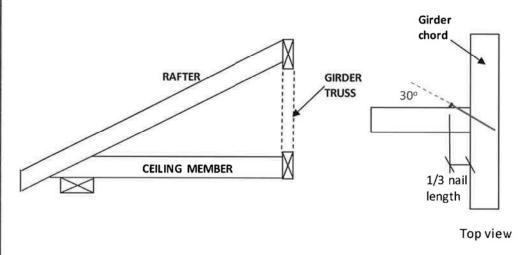


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

Page **1** of **2** ©2020 MiTek Canada Inc., 240 Stirling Crescent, Bradford, Ontario, L3Z 4L5 | (800) 268-3434, www.mitek.ca



CITY OF RICHMOND HILL December 21, 2020 DIVISION

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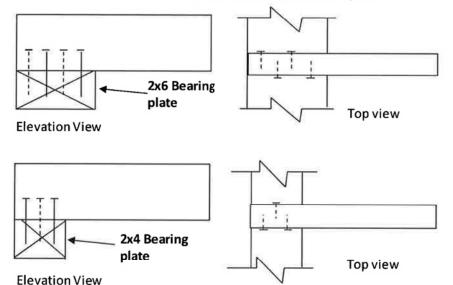


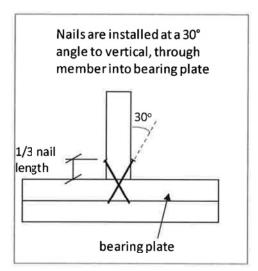
STANDARD DETAIL MSD2015-H

Issued: SEPTEMBER 22, 2020 Expiry: APRIL 30, 2022

TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift





NOTES:

- 1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
- 2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to wind or earthquake loads do not exceed the withdrawal resistance of the toe-nails. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is NOT permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
- 3. Tabulated toe-nail resistances on page 1 are for one toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
- 4. Nail values are based on specific gravity of G = 0.42 (SPF) and G = 0.49 (D. Fir).
- 5. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.
- For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.
- 7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
- 8. Nail values in this table comply with CSA 086-19, Clause 12.9.



CITY OF RICHMOND HILL
BUILDING DIVISION
December 21, 2020

OQ/22/2022

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Page 2 of 2

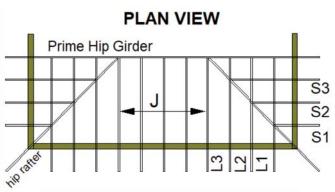
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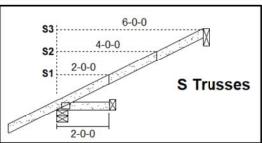


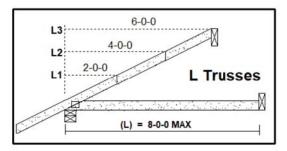
STANDARD DETAIL MSD2015-J

Issued: MARCH 17, 2021 Expiry: **APRIL 30, 2022**

STANDARD HIP END FRAMING

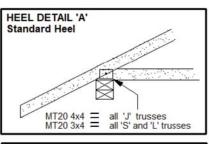


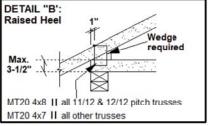


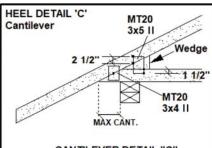


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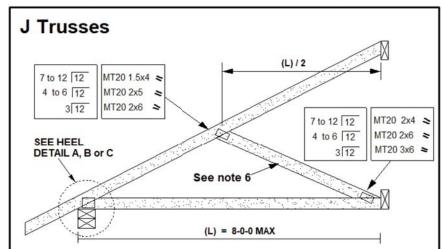
Top chord Live: 51.0 PSF or less 6.0 PSF or less Top chord Dead: Bottom chord Live: 0.0 PSF Bottom chord Dead: 7.3 PSF or less







CANTILEVER DETAIL "C"							
SLOPE	MAX CANT.	WEDGE PLATE	WEDGE SIZE				
3/12	17"	3 X 5	2 X 3				
4/12	14"	3 X 5	2 X 3				
5/12	12"	3 X 5	2 X 4				
6/12	10"	3 X 5	2 X 4				
7/12	9"	3 X 5	2 X 6				
8/12	8.5"	3 X 5	2 X 6				
9/12	8"	3 X 5	2 X 6				
10/12	7.5"	3 X 5	2 X 6				



NOTES:

- 1. This detail is valid only for projects conforming to PART 9 NBCC 2015 that do not require a wind analysis to be incorporated into the design of the trusses.
- 2. Overhang length shall not exceed 24 inches.
- 3. All lumber shall be 2x4 SPF (or D-Fir) DRY No. 2 grade or better.
- 4. All plates specified are MITEK MT20, pressed into both faces of each truss. Heel plates of all trusses shall conform to heel details 'A', 'B' or 'C'.
- 5. Diagonal hip rafter design shall conform to section 9.23.14.6 of NBCC 2015.
- 6. For 6.0 ft. or less span, diagonal web on truss 'J" is optional. Girder design must reflect choice of partial jack ('J' with diagonal web) or open jack ('J' without diagonal web)
- 7. All truss-to-rafter and truss-to-truss connections shall be specified as per MITEK standard detail 'MSD2015-H: Toe-Nail Capacity Details'



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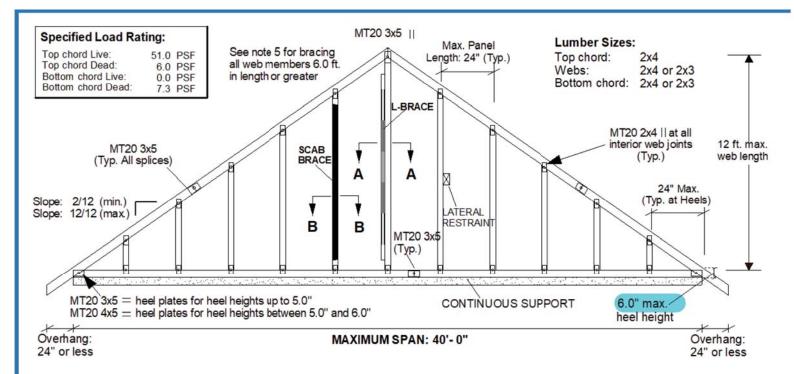
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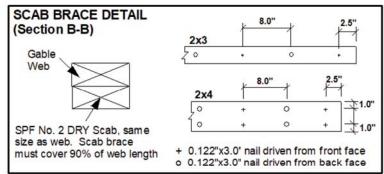


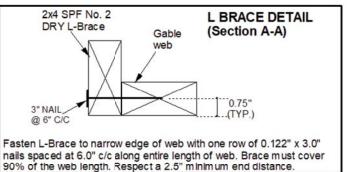
STANDARD DETAIL MSD2015-K

Issued: APRIL 12, 2021 Expiry: APRIL 30, 2022

STANDARD GABLE END DETAIL







Notes:

- This detail is only valid for projects conforming to Part 9, NBCC 2015 that do not require a wind analysis
 to be incorporated into the design of the truss.
- 2. This detail is for vertical (gravity) load rating of the truss only. Truss must be continuously supported over the entire length of bottom chord.
- **3.** Maximum web length not to exceed 12.0 ft. Spacing of gable stud webs in the truss not to exceed 24 inches cc.
- 4. Splice joints shall not be located in the first panel adjacent to the heel joint or peak joint.
- **5.** Lateral restraint required at half-length of all webs over 6.0 ft. long. Alternatively install an L-Brace or scab brace as shown above. Scab braces shall be limited to 10 ft. long webs or less.
- 6. All plates are MITEK MT20 pressed into both faces of truss.
- 7. All lumber to be SPF (or D-Fir) DRY and of No.2 grade or better.
- 8. Additional building bracing is typically installed to brace the face of the end wall assembly. See BCSI Canada 'Building Designer Responsibilities for Gable End Frame Bracing' for additional information on building bracing for gable-end assemblies.

