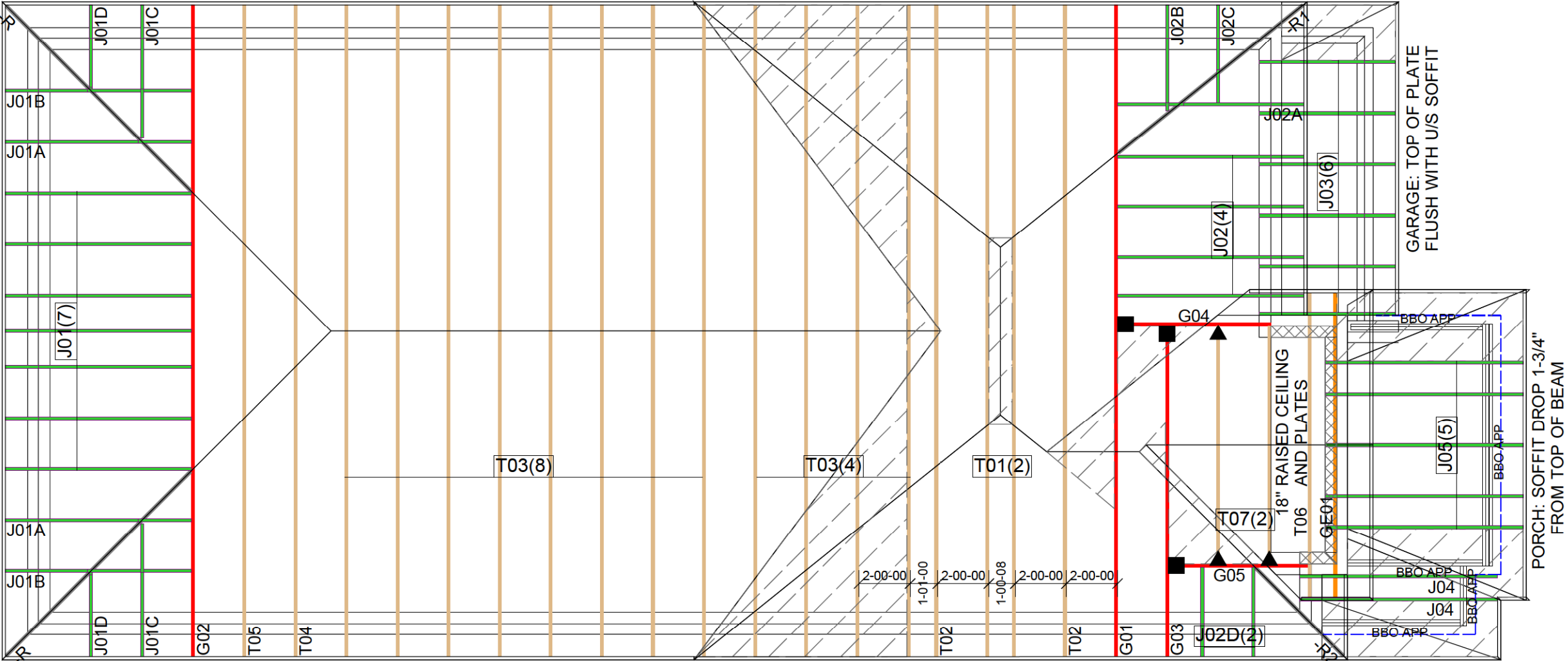




MHP 23021



UPPER LEVEL: TOP OF PLATE FLUSH WITH U/S SOFFIT

Hanger Name	Symbol	QTY
LUS24	▲	3
LJS26DS	■	3



CONVENTIONAL
FRAMING BY OTHERS

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 BRACED SO THAT UNBRACED LENGTH DOES NOT EXCEED 6'. DESIGN OF CONVENTIONAL FRAMING IS THE RESPONSIBILITY OF THE PROJECT ENGINEER.

JOB INFORMATION

Customer	GREENPARK GROUP
Job #	23-00071R0
Address	ZADORRA ESTATES ZADORRA ESTATES INC OSHAWA,ON
Model	RIVER 1-2
Sales Rep	RALPH MIRIGELLO
Designer	LI
Date	2023-04-20
Path	C:\MITEK\CA\JOBS\GREENPARK GROUP\ZADORRA ESTATES\MODELS\RIVER 1\RIVER 1-2\T-RIVE

DESIGN INFORMATION

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft ²
TC DL	6.0 lb/ft ²
BC LL	0.0 lb/ft ²
BC DL	7.3 lb/ft ²
Deflection	LL=L/360 TL=L/360
Spacing	24" O/C unless otherwise noted
Complies With	OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014

IMPORTANT INFORMATION

Hangers and Fasteners to be installed as per manufacturer

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

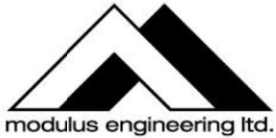
Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

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 clear span >40 ft use 3-1/4" nails @ each bearing in addition to the appropriate hurricane tie.

KOTT Inc.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400





General Guidelines for Truss Manufacturer and Installer on Reading Truss Component Drawings



**Read Carefully Prior to
Manufacture and Installation**

Note: It is important that all information on the truss component drawing is understood by all interested parties. If clarification is required, please contact your truss supplier prior to installation of the trusses

Standard Design Loading:

Standard loading is indicated on the drawing legend for the top and bottom chords, for snow, live and dead loads where indicated. Actual panel UDL is further indicated for individual panels in the body of the truss drawing.

Non-Standard Loading:

Additional uniform loading is included in individual panel loading. Concentrated loads are noted in a separate table in the body of the drawing.

Reactions:

Factored gross reactions are indicated as Maximum Factored Reactions, not necessarily for the load case outlined on the drawing. Includes vertical, horizontal and uplift.

Lumber size and Grade:

The member size and grade is indicated in the lumber table. The truss must be manufactured with the same size and species noted but may be an equal or better grade than indicated.

Plates sizes:

Plate sizes are noted as Width x Length, where the plate slot direction is parallel to the plate length. Plate sizes indicated are the minimum required and may be increased.

Plate location:

Plates are centred on the joint unless an x-y offset is indicated. If clarification of placement is required prior to manufacture or during inspection, additional detail on plate placement is available from the truss manufacturer.

Bearing:

In most cases, input bearing size (input by designer) and minimum required bearing are indicated on the drawing. In cases where the bearing capacity has been enhanced by using a bearing block, bearing enhancer or flush plate, the bearing required will match the input bearing even where the required bearing might be less than what is indicated

Ply to ply connection:

Where the truss is designed for 2 or more plys, the individual truss plys must be fastened together. A nailing chart will be included which includes nails size, type, spacing and rows for each member. For 4 ply trusses, bolts or structural screws may also be noted

Building Code:

The truss will be designed as Part 9, Part 4 or Farm and will be noted in the legend. In certain cases, wind loading will also be required and will be outlined on the drawing, including information pertaining to location, building height, exposure class and opening size. TPIC requires that some non-triangulated frames such as attic trusses and gambrel arches be designed Part 4 even though the building itself might meet the requirements of Part 9.

Chord Bracing:

Minimum spacing for bracing for the top and bottom chord is clearly indicated. This can also be achieved when suitable sheathing is directly connected to the top chord and when a suitable ceiling is directly connected to the bottom chord. For large cantilevers where there is typically not a directly connected ceiling, care should be taken to meet the bracing criteria noted. The base truss for piggyback situations must have 2x4 purlins (max truss spacing 24" o/c) connected at a maximum of 24" o/c along the flat top chord section. Additional x-bracing may be required in the plane of the purlins.

Web Bracing:

Requirements for individual web bracing will be indicated on the drawing. This will either be a lateral brace or T-brace. Where a T-brace is specified, size, grade and nailing requirement will be noted. For a lateral brace, a 1x4 minimum is required. Note: The building designer is responsible for ensuring adequate load transfer from the individual lateral braces into the overall structure.

Design Results:

Axial forces for load case 1 are indicated on the drawing. Other load case results can be supplied upon request. Maximum stress indices are also indicated for both the lumber and plates. Maximum deflection is indicated, both allowable and calculated.

Manufacturing tolerances:

Tolerances for plate placement as outlined in TPIC Appendix G are noted on each truss component drawing.

Failure to follow these guidelines could cause property damage and personal injury

1. Additional stability bracing for truss system, e.g. diagonal or xbracing is always required. Consult **BCSI-CANADA** for installation requirements (copies available from your truss supplier or from www.sbcindustry.com)

2. Truss bracing must be designed by an engineer. Individual lateral braces shown in truss drawings must be incorporated into overall structure through connection to diaphragm or other means.

3. Never exceed the design loading shown and never stack building materials on inadequately braced trusses

4. Provide copies of truss component drawings to the building department, erection supervisor, property owner and all interested parties (e.g. Building designer where required)

5. Cut members to bear tightly against one another

6. Place plates on each face of truss at each joint and use proper roller or hydraulic press. Knots and wane at locations are regulated by TPIC Appendix G

7. Design assumes trusses will be suitably protected from the environment in accordance with TPIC

8. Unless otherwise noted, MC of lumber shall not exceed 19% at time of manufacture

9. Unless expressly noted, this design is not applicable for fire retardant, preservative treatment or green lumber nor for use in a corrosive environment

10. Connections not shown are the responsibility of others

11. Do not cut or alter truss members or plates without prior approval of an engineer

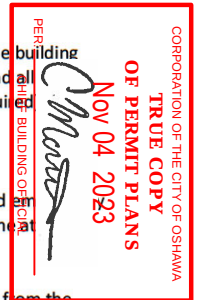
12. Install and load vertically unless otherwise noted

13. Review all portions of this design including all notes. Reviewing pictures alone is not sufficient

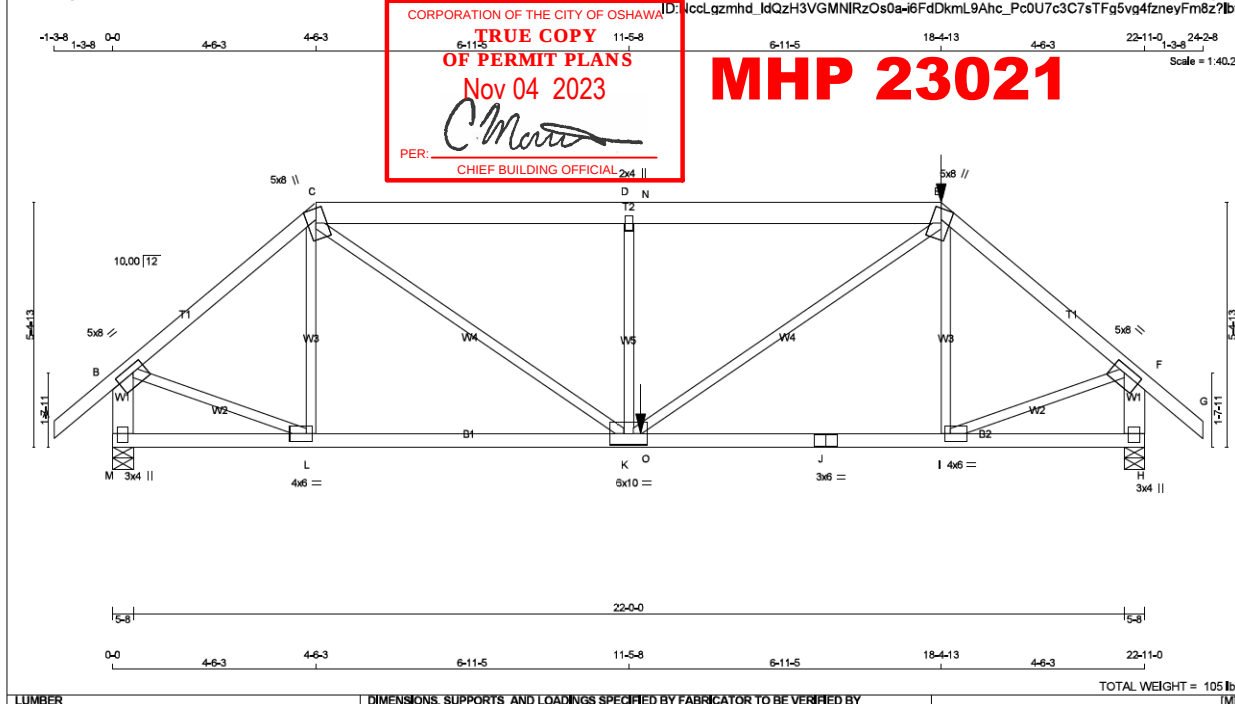
14. Design assumes manufactured in accordance with TPIC Quality criteria as outlined in Appendix G

16. Building designer must review individual component drawings to ensure they are suitable for the structure

15. Not designed for solar panels unless specifically noted



MHP 23021



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

DRY: SEASONED LUMBER,

PLATES (table is in inches)

J	T	PLATES	W	LEN	Y	X
B	TMWV4	MT20	5.0	8.0	1.75	3.25
C	TMWV+m	MT20	5.0	8.0	Edge	
D	TMW+ w	MT20	2.0	4.0		
E	TMWV+m	MT20	5.0	8.0	Edge	
F	TMWV4	MT20	5.0	8.0	1.75	3.25
H	BMV1+p	MT20	3.0	4.0	2.25	1.50
I	BMWV4	MT20	4.0	6.0	2.00	1.50
J	BS-t	MT20	3.0	6.0		
K	BMWVWV-t	MT20	6.0	10.0		
L	BMWV4	MT20	4.0	6.0	2.00	1.50
M	BMV1+p	MT20	3.0	4.0	2.25	1.50

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

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

BUILDING BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
M	2616	0	2616	0	0	5-8	3-0
H	3175	0	3175	0	0	5-8	4-13

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN, COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1825	1338 / 0	0 / 0	0 / 0	0 / 0	487 / 0	0 / 0
H	2218	1610 / 0	0 / 0	0 / 0	0 / 0	608 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.05 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED (LBS)	FACTORED VERT. LOAD (PLF)	MAX LOAD LC1 CS (L)	MAX UNBRAC LC (C)	MEMB.	MAX. FACTORED (LBS)	MAX CS (L)
FR-TO		FROM TO		LENGTH FR-TO			
B	0 / 53	-119.4	-119.4	0.18 (1)	10.00	L-C	-453 / 0
B-C	-2489 / 0	-119.4	-119.4	0.86 (1)	3.63	C-K	0 / 2544
C-D	-3983 / 0	-119.4	-119.4	0.83 (1)	3.16	K-D	-1430 / 0
D-N	-3983 / 0	-119.4	-119.4	0.87 (1)	3.05	K-E	0 / 1950
E-E	-3983 / 0	-225.2	-225.2	0.87 (1)	3.05	E-E	-476 / 61
N-F	-3111 / 0	-119.4	-119.4	0.76 (1)	3.18	B-L	0 / 1997
N-G	0 / 53	-119.4	-119.4	0.18 (1)	10.00	I-F	0 / 2497
M-B	-2589 / 0	0.0	0.0	0.24 (1)	5.41		
H-F	-3128 / 0	0.0	0.0	0.24 (1)	5.83		
M-L	0 / 0	-18.2	-18.2	0.13 (4)	10.00		
L-K	0 / 1924	-18.2	-18.2	0.47 (1)	10.00		
K-C	0 / 2405	-18.2	-18.2	0.62 (1)	10.00		
C-J	0 / 2405	-34.4	-34.4	0.82 (1)	10.00		
J-I	0 / 2405	-34.4	-34.4	0.82 (1)	10.00		
I-H	0 / 0	-34.4	-34.4	0.32 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	18-4-13	-404	-404	—	FRONT	VERT	TOTAL	—	C1
K	11-8-12	-1037	-1037	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

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

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REVIEW FOR TRUSS COMPONENT ONLY

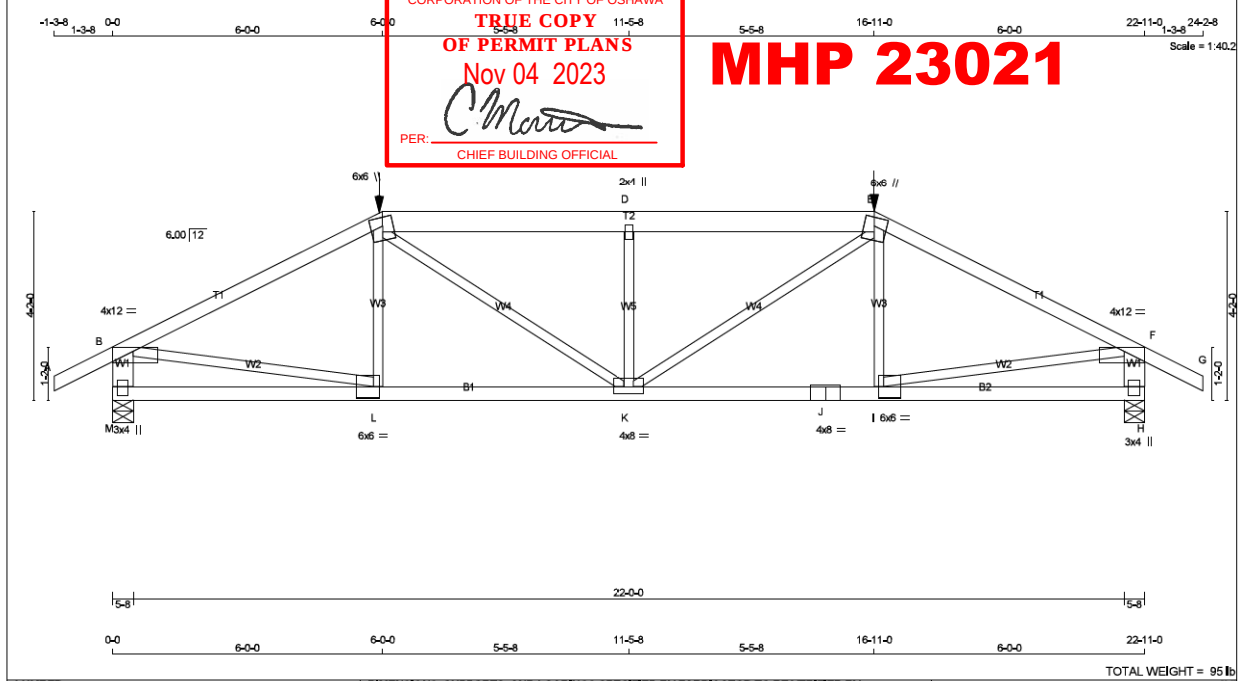
NOTE: ALTERING THIS DOCUMENT
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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TC01 (VER 06/2017) BEFORE USE.

Design input for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design: parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult

TPIC Appendix G - Minimum quality Manufacturing Criteria available from www.tpica.ca and **BCSI-CANADA (Building Component Safety Information)** available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								DESIGN CRITERIA	
N. L. G. A. RULES				BEARINGS								SPECIFIED LOADS:	
CHORDS	SIZE	LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL	DL	PSF		
A - C	2x4	DRY	2100F 1.8E	SPF	GROSS REACTION	BRG	BRG						
C - E	2x6	DRY	No.2	SPF	DOWN	HORIZ	UPLIFT	IN-SX					
E - G	2x4	DRY	2100F 1.8E	SPF	MT	VERT							
M - B	2x6	DRY	No.2	SPF	H	3039	0	3039	0	5-8	4-6		
H - F	2x6	DRY	No.2	SPF		3039	0	3039	0	5-8	4-6		
M - J	2x4	DRY	No.2	SPF									
J - H	2x4	DRY	No.2	SPF									
ALL WEBS				UNFACTORED REACTIONS								SPACING = 24.0 IN. C/C	
EXCEPT	2x3	DRY	No.2	SPF	1ST CASE	MAX./MIN. COMPONENT REACTIONS						LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM	
					JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
					M	2123	1542 / 0	0 / 0	0 / 0	0 / 0	581 / 0	0 / 0	
					H	2123	1542 / 0	0 / 0	0 / 0	0 / 0	581 / 0	0 / 0	
DRY: SEASONED LUMBER,													

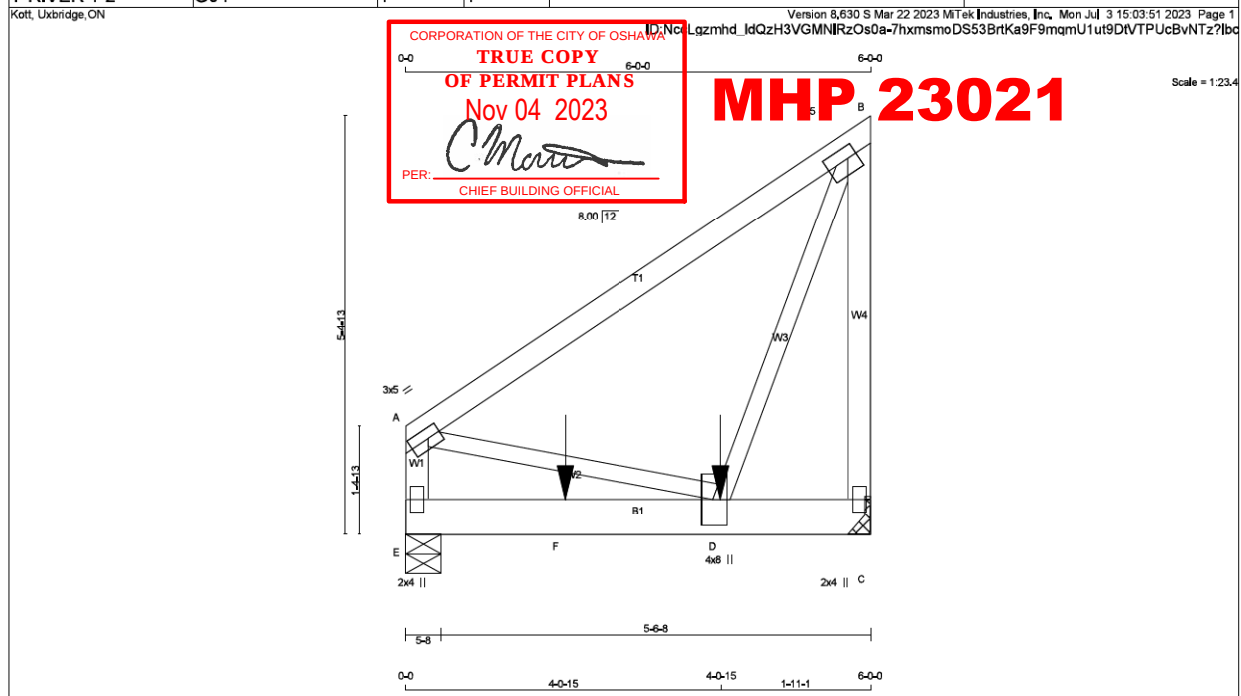
FACTORED CONCENTRATED LOADS (LBS)				CONNECTION REQUIREMENTS			
JT	LOC.	LC1	MAX+ MAX-	FACE	DIR.	TYPE	CONN.
C	6'-0"	-537	-537	FRONT	VERT	TOTAL	C1
E	16'-11"	-537	-537	FRONT	VERT	TOTAL	C1
1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.							

CHORDS				WEBS			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX CSJ (LC)	MEMB.	FORCE (LBS)	MAX CSJ (LC)	
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	
A-B	0 / 36	-119.4	-119.4	0.11 (1)	10.00	L-C	-330 / 106
B-C	-4244 / 0	-119.4	-119.4	0.84 (1)	3.37	C-K	0 / 1490
C-D	-5035 / 0	-225.2	-225.2	0.68 (1)	3.09	K-D	-1538 / 0
D-E	-5035 / 0	-225.2	-225.2	0.68 (1)	3.09	K-E	0 / 1490
E-F	-4244 / 0	-119.4	-119.4	0.84 (1)	3.37	I-E	-330 / 106
F-G	0 / 36	-119.4	-119.4	0.11 (1)	10.00	B-L	0 / 3844
M-B	-2955 / 0	0.0	0.0	0.21 (1)	6.07	I-F	0 / 3844
H-F	-2955 / 0	0.0	0.0	0.21 (1)	6.07		
M-L	0 / 0	-34.4	-34.4	0.30 (4)	10.00		
L-K	0 / 3813	-34.4	-34.4	0.83 (1)	10.00		
K-J	0 / 3813	-34.4	-34.4	0.83 (1)	10.00		
J-I	0 / 3813	-34.4	-34.4	0.83 (1)	10.00		
I-H	0 / 0	-34.4	-34.4	0.30 (4)	10.00		

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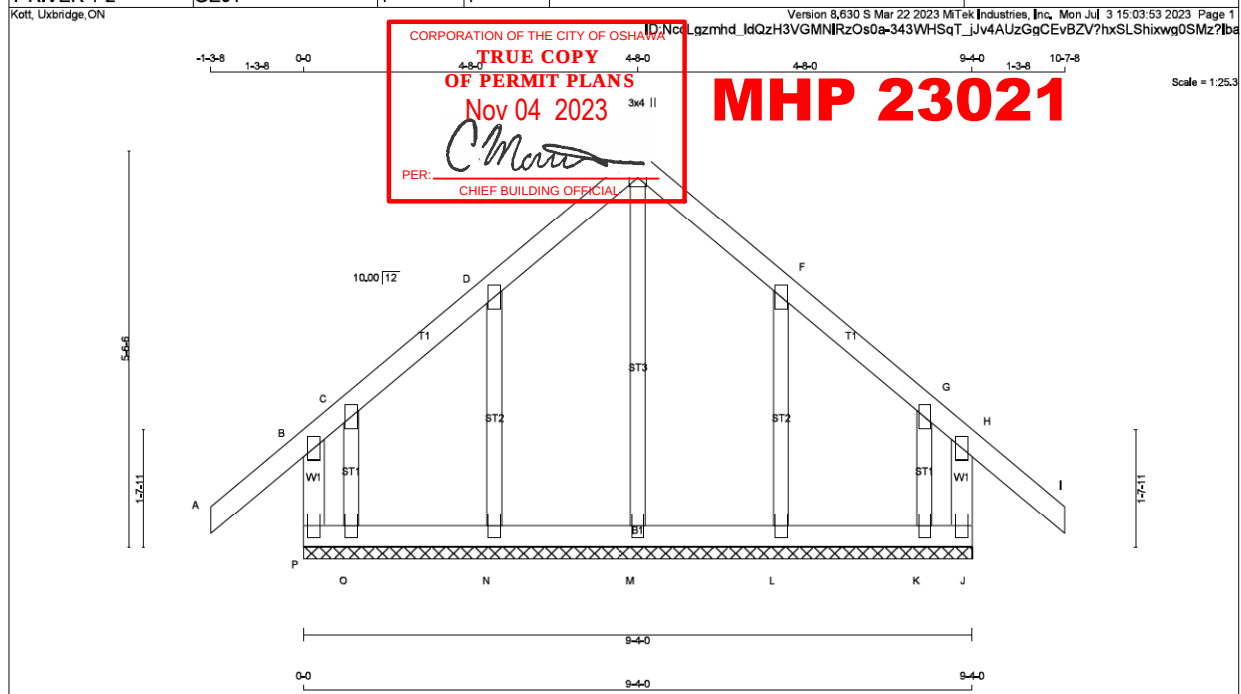
07/04/2023
D. A. SHERMAN
100123373
PROVINCE OF ONTARIO

REVIEW FOR TRUSS COMPONENT ONLY
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS			DESIGN CRITERIA		
E - A	2x4	DRY	No.2	SPF		*** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE		
A - B	2x4	DRY	2100F 1.8E	SPF		SPECIFIED LOADS: TOP CH. LL = 34.8 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.3 PSF TOTAL LOAD = 48.1 PSF		
C - B	2x4	DRY	No.2	SPF		SPACING = 24.0 IN. G.C. *** NON STANDARD GIRDER *** ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.		
E - C	2x6	DRY	No.2	SPF		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014		
ALL WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER.			A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 1-8.			(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.20") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.20") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06") CSI: TC=0.65/1.00 (B-C:1), BC=0.45/1.00 (D-E:1), WB=0.37/1.00 (B-D:1), SS=0.27/1.00 (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		
PLATES (table is in inches) JT TYPE PLATES W LEN Y X A TMW4 MT20 3.0 5.0 1.50 2.00 B TMW4 MT20 4.0 5.0 1.75 1.50 C BMV1+p MT20 2.0 4.0 D BMWV+t MT20 4.0 8.0 4.00 1.75 E BMV1+p MT20 2.0 4.0			UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL E 811 587 / 0 0 / 0 0 / 0 224 / 0 0 / 0 C 924 669 / 0 0 / 0 0 / 0 256 / 0 0 / 0			 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014		
			BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E			 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		
			BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.			 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		
			LOADING TOTAL LOAD CASES: (4) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. UNBRACED LENGTH (L) MEMB. MAX. FACTORED FORCE (LBS)			 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		
			FR-TO FROM TO CSI (L/C) UNBRACED LENGTH (L) FR-TO E-A -846 / 0 0.0 0.0 0.09 (1) 7.81 A-D 0 / 551 0.14 (1) A-B -644 / 0 -119.4 +119.4 0.56 (1) 6.25 D-B 0 / 1491 0.37 (1) C-B -1393 / 0 0.0 0.0 0.65 (1) 6.86			 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		
			E-F 0 / 0 -18.2 -18.2 0.45 (1) 10.00 F-D 0 / 0 -18.2 -18.2 0.45 (1) 10.00 D-C 0 / 0 -18.2 -18.2 0.12 (1) 10.00			 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		
			FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE HEEL CONN. D 4-0-12 -1013 -1013 - FRONT VERT TOTAL - C1 F 2-0-12 -644 -644 - FRONT VERT TOTAL - C1			 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		
			CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.			 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		
MODULUS ENGINEERING LTD. REVIEW FOR TRUSS COMPONENT ONLY NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEERS SEAL						 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		





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. P - B 2x4 DRY No.2 SPF A - E 2x4 DRY No.2 SPF E - I 2x4 DRY No.2 SPF J - H 2x4 DRY No.2 SPF P - J 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2'-0" OC.		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 = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4)		DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 34.8 PSF DL = 8.0 PSF BOT CH. LL = 0.0 PSF DL = 7.3 PSF TOTAL LOAD = 48.1 PSF SPACING = 24.0 IN. G.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, NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014 DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.16/1.00 (A-B-1), BC=0.02/1.00 (M-N-4), WB=0.13/1.00 (E-M-1), SSI=0.10/1.00 (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 MT20 650 371 1747 788 1987 1873 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.37 (E) (INPUT = 0.90) JSI METAL= 0.14 (B) (INPUT = 1.00)	
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMV+p MT20 2.0 4.0 C, D, F, G C TMV+w MT20 2.0 4.0 E TMV+p MT20 3.0 4.0 2.50 1.50 H TMV+p MT20 2.0 4.0 J BMV1+p MT20 2.0 4.0 K, L, M, N, O K BMV1+w MT20 2.0 4.0 P BMV1+p MT20 2.0 4.0		CHORDS MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. UNBRACED LENGTH (L) FR-TO P-B -281 / 0 0.0 0.0 0.04 (1) 7.81 A-B 0 / 53 -119.4 -119.4 0.16 (1) 10.00 B-C -36 / 0 -119.4 -119.4 0.11 (1) 6.25 C-D 0 / 37 -119.4 -119.4 0.07 (1) 10.00 D-E 0 / 37 -119.4 -119.4 0.07 (1) 10.00 E-F 0 / 37 -119.4 -119.4 0.07 (1) 10.00 F-G 0 / 37 -119.4 -119.4 0.07 (1) 10.00 G-H -36 / 0 -119.4 -119.4 0.11 (1) 6.25 H-I 0 / 53 -119.4 -119.4 0.16 (1) 10.00 J-H -281 / 0 0.0 0.0 0.04 (1) 7.81 P-O -21 / 0 -18.2 -18.2 0.01 (4) 6.25 O-N -24 / 0 -18.2 -18.2 0.02 (4) 6.25 N-M -30 / 0 -18.2 -18.2 0.02 (4) 6.25 M-L -30 / 0 -18.2 -18.2 0.02 (4) 6.25 L-K -24 / 0 -18.2 -18.2 0.02 (4) 6.25 K-J -21 / 0 -18.2 -18.2 0.01 (4) 6.25		WEBS MAX. FACTORED FORCE (LBS) MAX. UNBRACED LENGTH (L) FR-TO M-E -294 / 0 0.13 (1) N-D -252 / 0 0.06 (1) O-C -43 / 0 0.01 (1) L-F -252 / 0 0.06 (1) K-G -43 / 0 0.01 (1)	



TOTAL WEIGHT = $7 \times 17 = 120 \text{ lb}$



PLATES (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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
JT		518	0	518	0	0	5-8
E		175	0	175	0	0	1-8
C		45	0	51	0	0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN, COMPONENT REACTIONS					SC	
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND		DEAD
E	362		265 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
C	120		102 / 0	0 / 0	0 / 0	0 / 0	18 / 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 APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LOAD LC1 CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
		FROM TO		FR-TO					
E-B	-454 / 0	0.0	0.0	0.13 (4)	7.81				
A-B	0 / 36	-119.4	-119.4	0.16 (1)	10.0				
B-C	-26 / 0	-119.4	-119.4	0.31 (1)	6.25				
E-D	0 / 0	-18.2	-18.2	0.13 (4)	10.0				

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD =		48.1	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 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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=0.31/1.00 (B-C:1), BC=0.13/1.00 (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

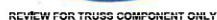
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES						
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	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.

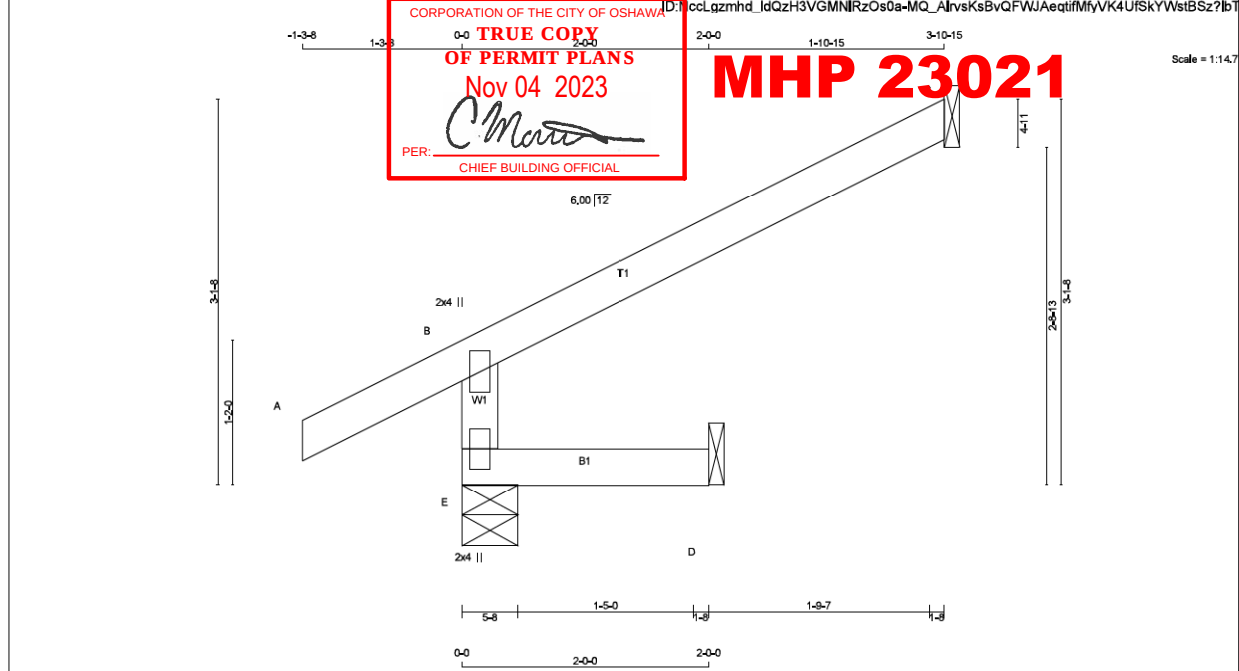
JSI GRIP= 0.25 (B) (INPUT = 0.90)
JSI METAL= 0.19 (B) (INPUT = 1.00)



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCDD01 (VER 06/2017) BEFORE USE.
Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult

TPIC Appendix G - Minimum quality Manufacturing Criteria available from www.tpica.ca and **BCSI-CANADA (Building Component Safety Information)** available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.bscindustry.com





TOTAL WEIGHT = 2 X 10 = 20 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	SPF	SPF	SPF	SPECIFIED LOADS:	TOP CH.	LL	PSF
E - B	2x4	DRY	No.2		SPF			TOP CH. LL	34.8	PSF	
A - C	2x4	DRY	No.2		SPF			DL	6.0	PSF	
E - D	2x4	DRY	No.2		SPF			BOT CH. LL	0.0	PSF	
DRY: SEASONED LUMBER.								DL	7.3	PSF	
								TOTAL LOAD	48.1	PSF	

PER: CHIEF BUILDING OFFICIAL

Scale = 1:147

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	326	265 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
C	120	102 / 0	0 / 0	0 / 0	0 / 0	18 / 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 APPLIED.

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO			
E-B	-454 / 0	0.0	0.0 (0.1) (4)	7.81			
A-B	0 / 36	-119.4	-119.4 (0.16) (1)	10.00			
B-C	-26 / 0	-119.4	-119.4 (0.31) (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.

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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=0.31/1.00 (B-C-1) BC=0.02/1.00 (D-E-4) ,

WB=0.00/1.00 (n/a.0) , SSJ=0.20/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (B) (INPUT = 0.99)

JSI METAL= 0.19 (B) (INPUT = 1.00)

MODULUS ENGINEERING LTD.



REVIEW FOR TRUSS COMPONENT ONLY

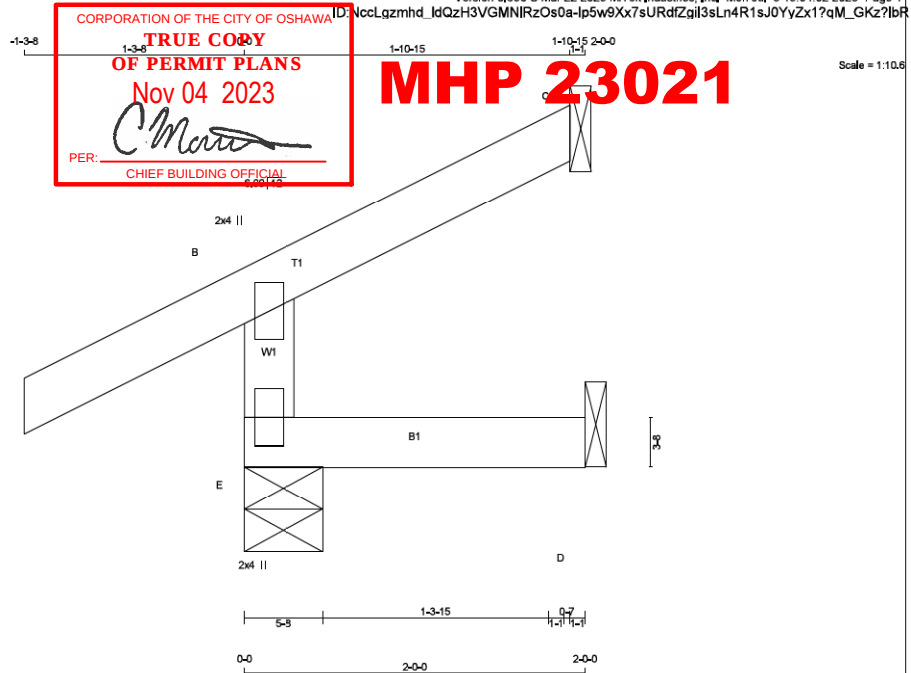
NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEER'S SEAL

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KOTT



LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR. SPF

E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORIZ
E	324	0	324	0
C	86	0	86	0
D	16	0	16	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	224	177 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	59	50 / 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, 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 APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. (LBS)	MIN. (LBS)	MAX. FORCE (LBS)	MIN. (LBS)	MAX. (LBS)	MIN. (LBS)
FR-TO								
E-B	-304 / 0	0.0	0.0	0.01 (4)	7.81			
A-B	0 / 36	-119.4	-119.4	0.16 (1)	10.00			
B-C	-12 / 0	-119.4	-119.4	0.07 (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.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. G.C.

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

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

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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=0.16/1.00 (A-B 1) BC=0.02/1.00 (D-E 4) ,
WB=0.00/1.00 (n/a 0) , SSI=0.11/1.00 (A-B 1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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
MT20 650 371 1747 788 1987 1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.99)
JSI METAL= 0.13 (B) (INPUT = 1.00)

MODULUS ENGINEERING LTD.

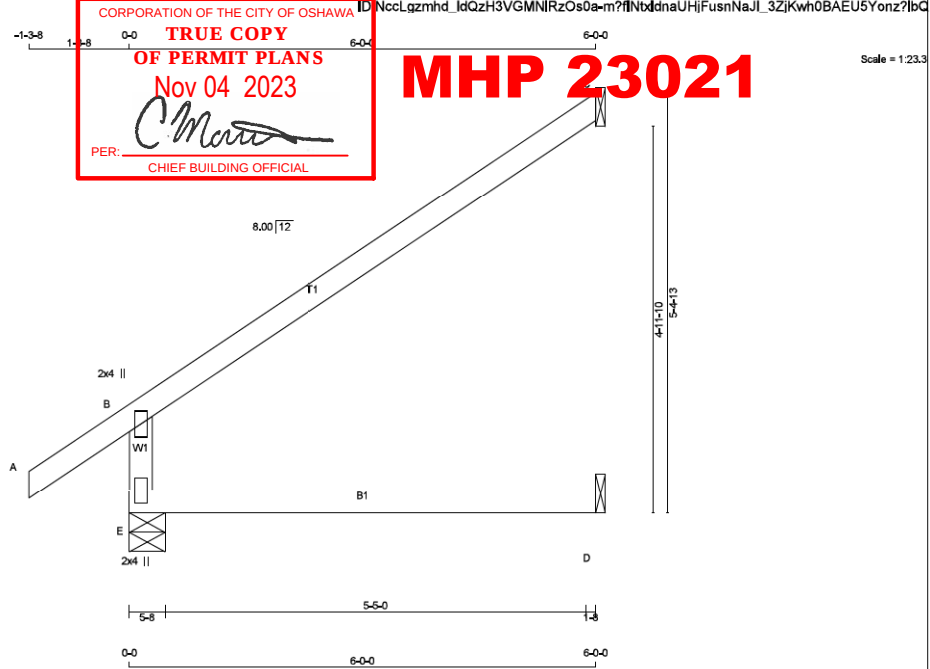


REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR. SPF
E - B 2x4 DRY No.2 SPF
A - C 2x4 DRY No.2 SPF
E - D 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UP/LIFT	IN-SX
E	675	0	0	5-8
C	269	0	0	1-8
D	46	0	0	1-8

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	469	357 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
C	184	157 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0
D	37	0 / 0	0 / 0	0 / 0	0 / 0	37 / 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 APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOAD LC1	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)	
FR-TO		FROM TO			FR-TO				
E-B	-612 / 0	0.0	0.0	0.13 (4)	7.81				
A-B	0 / 45	-119.4	-119.4	0.16 (1)	10.00				
B-C	-50 / 0	-119.4	-119.4	0.73 (1)	6.25				
E-D	0 / 0	-18.2	-18.2	0.14 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. G/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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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) = $L/999$ (0.04")

CSI: TC=0.73/1.00 (B-C-1) BC=0.14/1.00 (D-E-4) ,
WB=0.00/1.00 (n/a.0) , SSJ=0.29/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
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= 0.38 (B) (INPUT = 0.99)
JSI METAL= 0.31 (B) (INPUT = 1.00)

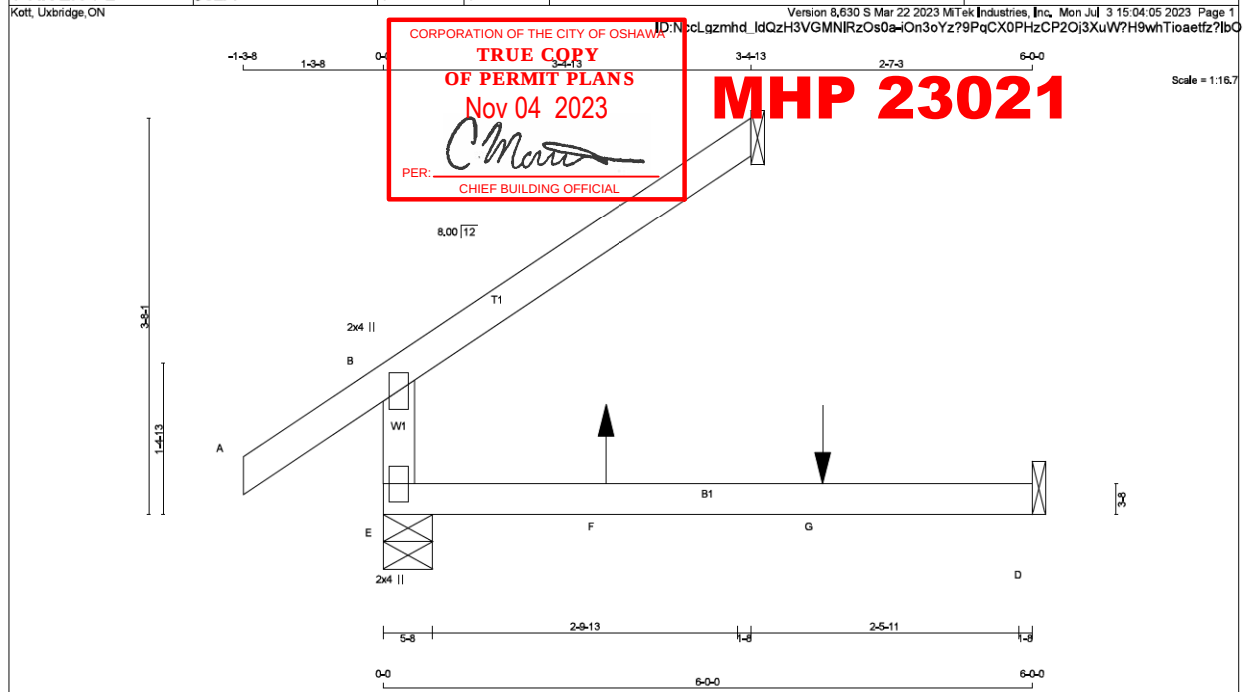
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REVIEW FOR TRUSS COMPONENT ONLY
NOTE: ALTERING THIS DOCUMENT
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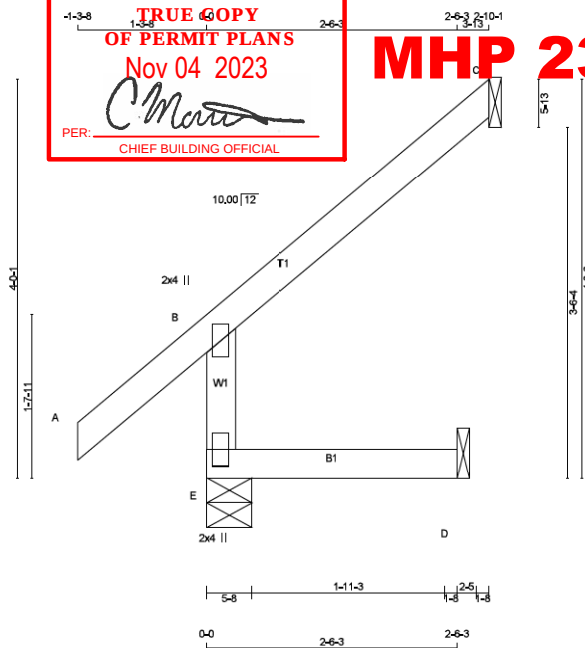
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF E - B 2x4 DRY No.2 SPF A - C 2x4 DRY No.2 SPF E - D 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQ'D BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX E 478 0 478 0 0 5-8 1-8 C 152 0 152 0 0 1-8 1-8 D 46 0 53 0 0 1-8 1-8	DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 34.8 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.3 PSF TOTAL LOAD = 48.1 PSF SPACING = 24.0 IN. G.C. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014 DESIGN ASSUMPTIONS - OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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 (0.04") CSI: TC=0.23/1.00 (B-C:1) BC=0.14/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.16/1.00 (B-C:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) 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= 0.26 (B) (INPUT = 0.99) JSI METAL= 0.21 (B) (INPUT = 1.00)
PLATES (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	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 335 240 / 0 0 / 0 0 / 0 95 / 0 0 / 0 C 104 89 / 0 0 / 0 0 / 0 0 / 0 15 / 0 0 / 0 D 37 0 / -1 0 / 0 0 / 0 0 / 0 38 / 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 APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.	
	LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. CSI (L/C) MAX. UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. CSI (L/C) FR-TO FROM TO E-B -417 / 0 0.0 0.0 0.13 (4) 7.81 A-B 0 / 45 -119.4 -119.4 0.16 (1) 10.00 B-C -28 / 0 -119.4 -119.4 0.23 (1) 6.25 E-F 0 / 0 -18.2 -18.2 0.14 (4) 10.00 F-G 0 / 0 -18.2 -18.2 0.14 (4) 10.00 G-D 0 / 0 -18.2 -18.2 0.14 (4) 10.00	
	FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX. MAX+ FACE DIR. TYPE HEEL CONN. F 2-0-12 S 1 5 FRONT VERT TOTAL C1 G 4-0-12 -2 -2 - FRONT VERT TOTAL C1	
	CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.	

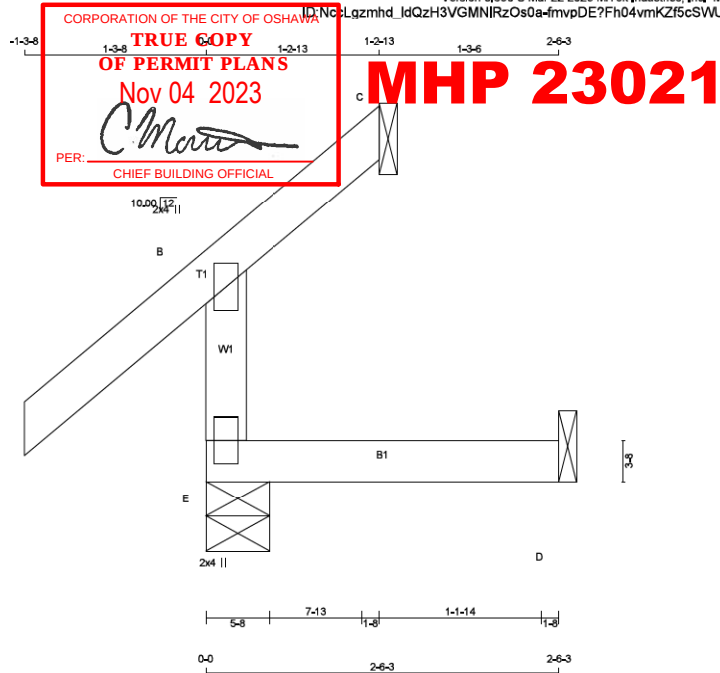
MODULUS ENGINEERING LTD.

07/04/2023
D. A. SHERMAN
100123373
PROVINCE OF ONTARIO
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KOTT





LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
E	345	0	345	0	0	5-8	1-8	5-8	1-8
C	0	0	4	0	-64	1-8	1-8	1-8	1-8
D	13	0	23	0	0	1-8	1-8	1-8	1-8

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

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
E	238	189 / 0	0 / 0	49 / 0	0 / 0
C	0	0 / -43	0 / 0	0 / 0	3 / 0
D	12	0 / -5	0 / 0	0 / 0	16 / 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 APPLIED.

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD LC1	MAX. CS (LC)	MEMB.	FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM	TO	UNBRAC	LENGTH	FR-TO	
E-B	-313 / 0	0.0	0.0	0.04 (5)	7.81		
A-B	0 / 53	-119.4	-119.4	0.16 (1)	10.00		
B-C	-47 / 0	-119.4	-119.4	0.12 (1)	6.25		
E-D	0 / 0	-18.2	-18.2	0.04 (5)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. G.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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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")

CS: TC=0.16/1.00 (A-B:1) BC=0.04/1.00 (D-E:5) ,
WB=0.00/1.00 (n/a:0) , SSJ=0.10/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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
MT20 650 371 1747 788 1987 1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.99)
JSI METAL= 0.17 (B) (INPUT = 1.00)

MODULUS ENGINEERING LTD.

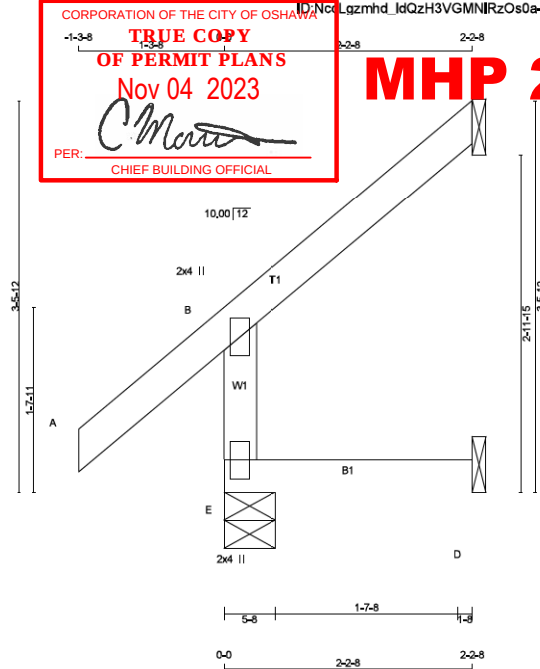


REVIEW FOR TRUSS COMPONENT ONLY

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TOTAL WEIGHT = $2 \times 9 = 18$ lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS						
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
E	352	0	352	0	0	5-8
C	100	0	100	0	0	1-8
D	18	0	21	0	0	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	243	192 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0
C	68	58 / 0	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0
D	15	0 / 0	0 / 0	0 / 0	0 / 0	15 / 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 APPLIED.

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LOAD LC1 (LC)	MAX. UNBRACED LENGTH FT-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO							
E-B	-330 / 0	0.0	0.0	0.01 (4)		7.81			
A-B	0 / 53	-119.4	-119.4	0.16 (1)		10.00			
B-C	-21 / 0	-119.4	-119.4	0.10 (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.

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD		=	48.1 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 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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=0.16/1.00 (A-B:1), BC=0.02/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SS=0.10/1.00 (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
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0,18 (B) (INPUT = 1,00)



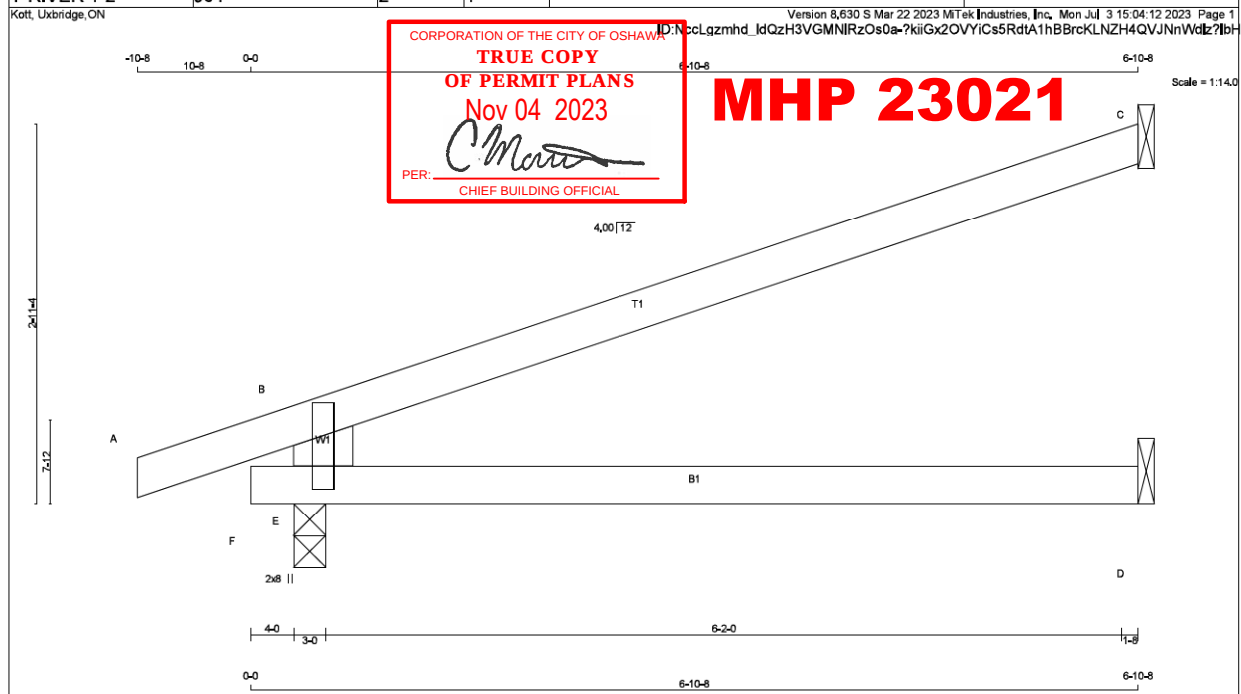
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TPIC Appendix G - Minimum quality Manufacturing Criteria available from www.tpica.ca and **BCSI-CANADA (Building Component Safety Information)** available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com







TOTAL WEIGHT = 2 X 18 = 36 lbs		[M][F]																																																													
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF E - B 2x6 DRY No.2 SPF A - C 2x4 DRY No.2 SPF F - D 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>E</td><td>719</td><td>0</td><td>719</td><td>0</td></tr><tr><td>C</td><td>293</td><td>0</td><td>293</td><td>0</td></tr><tr><td>D</td><td>45</td><td>0</td><td>50</td><td>0</td></tr></table> SEE MTEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D			FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG	JT	VERT	HORZ	DOWN	HORZ	E	719	0	719	0	C	293	0	293	0	D	45	0	50	0																																			
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG																																																											
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E	719	0	719	0																																																											
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PLATES (table is in inches) <table><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr><tr><td>B</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>E</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>E</td><td>TMBMV1+p</td><td>MT20</td><td>2.0</td><td>8.0</td><td></td><td></td></tr></table>		JT	TYPE	PLATES	W	LEN	Y	X	B							E							E	TMBMV1+p	MT20	2.0	8.0			UNFACTORED REACTIONS <table><tr><th>JT</th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>E</td><td>501</td><td>372 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>129 / 0</td><td>0 / 0</td></tr><tr><td>C</td><td>200</td><td>171 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>29 / 0</td><td>0 / 0</td></tr><tr><td>D</td><td>36</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>36 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C		JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	E	501	372 / 0	0 / 0	0 / 0	0 / 0	129 / 0	0 / 0	C	200	171 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0	D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0
JT	TYPE	PLATES	W	LEN	Y	X																																																									
B																																																															
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E	501	372 / 0	0 / 0	0 / 0	0 / 0	129 / 0	0 / 0																																																								
C	200	171 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0																																																								
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0																																																								
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07/04/2023

D. A. SHERMAN

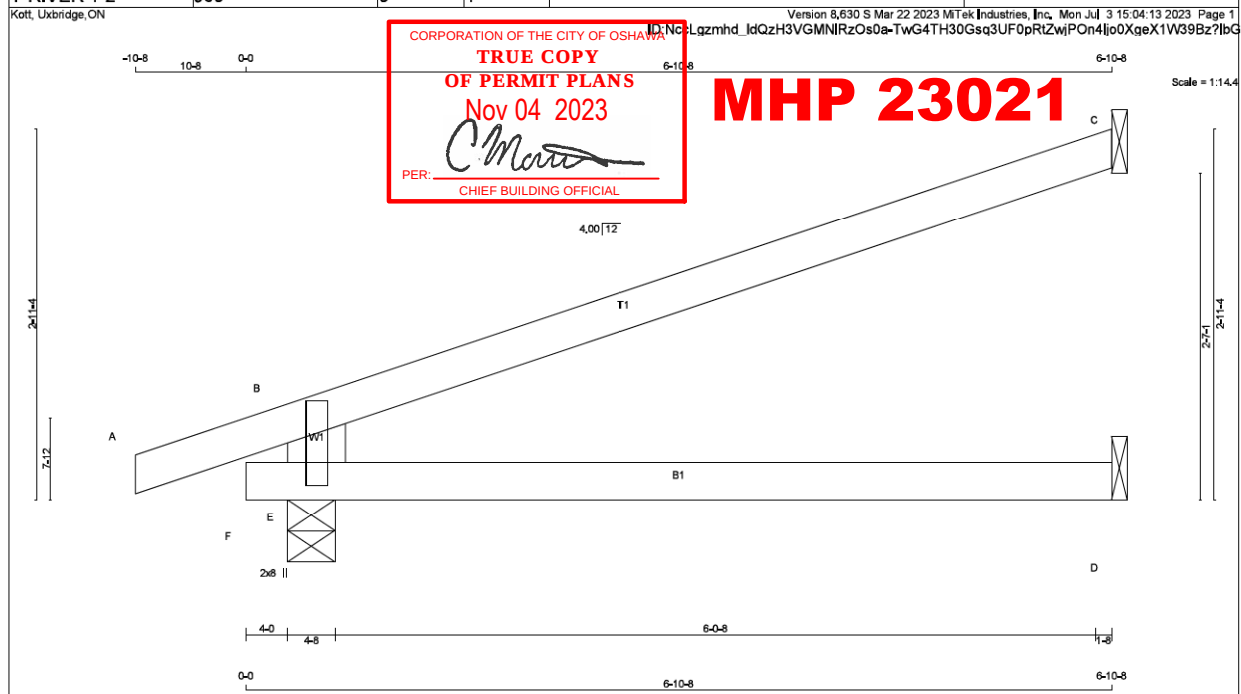
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LICENSED PROFESSIONAL ENGINEER

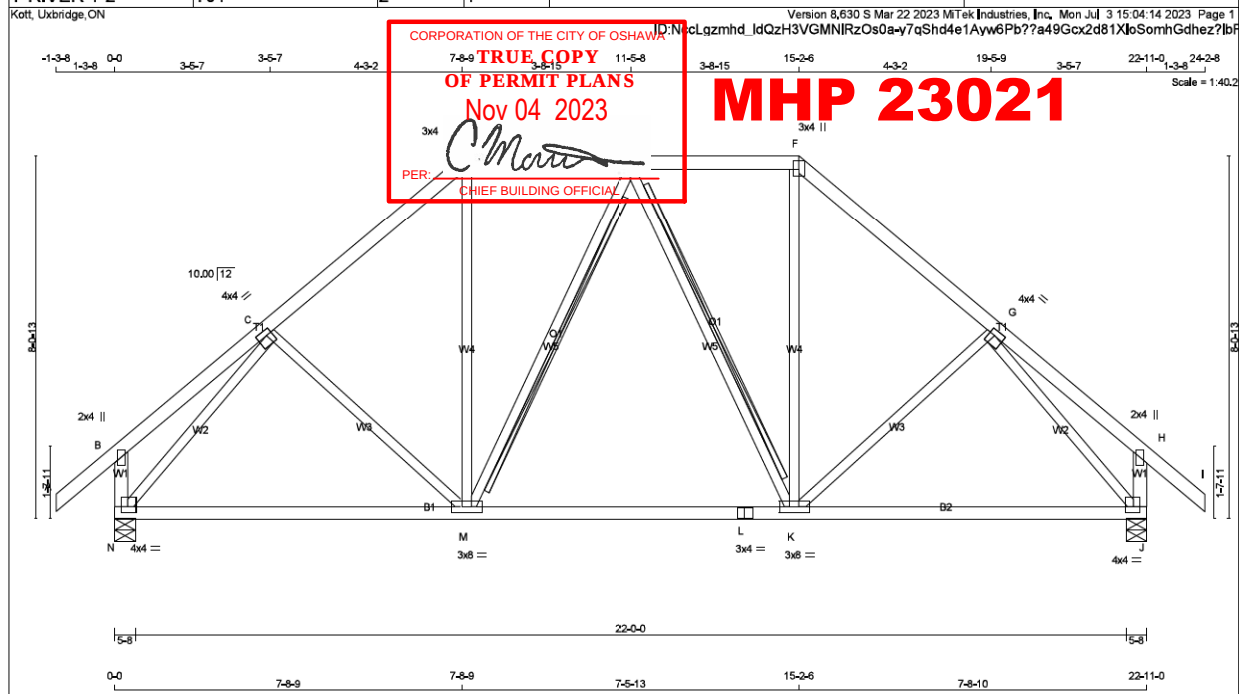
PROVINCE OF ONTARIO

REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEERS SEAL



TOTAL WEIGHT = 5 X 18 = 89 LB		[M/F]																																	
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF E - B 2x6 DRY No.2 SPF A - C 2x4 DRY No.2 SPF F - D 2x4 DRY No.2 SPF DRY, SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>E</td><td>719</td><td>0</td><td>719</td><td>0</td></tr><tr><td>C</td><td>293</td><td>0</td><td>293</td><td>0</td></tr><tr><td>D</td><td>45</td><td>0</td><td>50</td><td>0</td></tr></table>			FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	E	719	0	719	0	C	293	0	293	0	D	45	0	50	0							
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PLATES (table is in inches) <table><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr><tr><td>B</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>E</td><td>TMBMV1+p</td><td>MT20</td><td>2.0</td><td>8.0</td><td></td><td></td></tr></table>		JT	TYPE	PLATES	W	LEN	Y	X	B							E	TMBMV1+p	MT20	2.0	8.0			SEE MTEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D												
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LUMBER N, L, G, A, RULES <table><tr><td>CHORDS</td><td>SIZE</td><td>LUMBER</td><td>DESCR.</td></tr><tr><td>A - D</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>D - F</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>F - I</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>N - B</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>J - H</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>N - L</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>L - J</td><td>2x4</td><td>DRY</td><td>No.2</td></tr></table> ALL WEBS EXCEPT 2x3 DRY No.2 SPF DRY, SEASONED LUMBER,				CHORDS	SIZE	LUMBER	DESCR.	A - D	2x4	DRY	No.2	D - F	2x4	DRY	No.2	F - I	2x4	DRY	No.2	N - B	2x4	DRY	No.2	J - H	2x4	DRY	No.2	N - L	2x4	DRY	No.2	L - J	2x4	DRY	No.2	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td>JT</td><td>FACTORED GROSS REACTION</td><td>MAXIMUM FACTORED GROSS REACTION</td><td>INPUT BRG</td><td>REQRD BRG</td></tr><tr><td>N</td><td>VERT 1743</td><td>DOWN 0</td><td>0</td><td>5-8</td></tr><tr><td>J</td><td>HORZ 1743</td><td>HORZ 0</td><td>0</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><td>JT</td><td>1ST CASE</td><td>MAX./MIN. COMPONENT REACTIONS</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>N</td><td>COMBINED</td><td>SNOW 894 / 0</td><td>LIVE 0 / 0</td><td>PERM.LIVE 0 / 0</td><td>0 / 0</td></tr><tr><td>J</td><td>COMBINED</td><td>SNOW 894 / 0</td><td>LIVE 0 / 0</td><td>PERM.LIVE 0 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, J BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.19 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. 2x4 DRY SPF No.2 T-BRACE AT E-M, E-K FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) <table><tr><th colspan="2">CHORDS</th><th colspan="2">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th></tr><tr><td>FR-TO</td><td>FROM TO</td><td>FR-TO</td><td>FROM TO</td></tr><tr><td>A-B</td><td>0 / 53</td><td>C-M</td><td>-105 / 22</td></tr><tr><td>B-C</td><td>0 / 41</td><td>M-D</td><td>0 / 490</td></tr><tr><td>C-D</td><td>-1404 / 0</td><td>M-E</td><td>-297 / 0</td></tr><tr><td>D-E</td><td>-1058 / 0</td><td>E-K</td><td>-296 / 0</td></tr><tr><td>E-F</td><td>-1058 / 0</td><td>K-F</td><td>0 / 490</td></tr><tr><td>F-G</td><td>-1404 / 0</td><td>K-G</td><td>-106 / 22</td></tr><tr><td>G-H</td><td>0 / 41</td><td>N-C</td><td>-1787 / 0</td></tr><tr><td>H-I</td><td>0 / 53</td><td>G-J</td><td>-1787 / 0</td></tr><tr><td>N-B</td><td>-300 / 0</td><td></td><td></td></tr><tr><td>J-H</td><td>-300 / 0</td><td></td><td></td></tr><tr><td>N-M</td><td>0 / 1130</td><td></td><td></td></tr><tr><td>M-L</td><td>0 / 1184</td><td></td><td></td></tr><tr><td>L-K</td><td>0 / 1184</td><td></td><td></td></tr><tr><td>K-J</td><td>0 / 1130</td><td></td><td></td></tr></table>				JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	N	VERT 1743	DOWN 0	0	5-8	J	HORZ 1743	HORZ 0	0	5-8	JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL	N	COMBINED	SNOW 894 / 0	LIVE 0 / 0	PERM.LIVE 0 / 0	0 / 0	J	COMBINED	SNOW 894 / 0	LIVE 0 / 0	PERM.LIVE 0 / 0	0 / 0	CHORDS		WEBS		MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO	FROM TO	FR-TO	FROM TO	A-B	0 / 53	C-M	-105 / 22	B-C	0 / 41	M-D	0 / 490	C-D	-1404 / 0	M-E	-297 / 0	D-E	-1058 / 0	E-K	-296 / 0	E-F	-1058 / 0	K-F	0 / 490	F-G	-1404 / 0	K-G	-106 / 22	G-H	0 / 41	N-C	-1787 / 0	H-I	0 / 53	G-J	-1787 / 0	N-B	-300 / 0			J-H	-300 / 0			N-M	0 / 1130			M-L	0 / 1184			L-K	0 / 1184			K-J	0 / 1130			DESIGN CRITERIA SPECIFIED LOADS: <table><tr><td>TOP CH.</td><td>LL</td><td>=</td><td>34.8</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>6.0</td><td>PSF</td></tr><tr><td>BOT CH.</td><td>LL</td><td>=</td><td>0.0</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>7.3</td><td>PSF</td></tr><tr><td>TOTAL LOAD</td><td>=</td><td>48.1</td><td>PSF</td><td></td></tr></table> SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, NBC-2019AE - PART 9 OF CBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014 (55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.76") CALCULATED VERT. DEFL.(LL) = L/999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.76") CALCULATED VERT. DEFL.(TL) = L/999 (0.13") CSI: TC=0.30/1.00 (G-H), BC=0.32/1.00 (K-M), WB=0.80/1.00 (G-J), SSI=0.21/1.00 (D-E) 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 <table><tr><td>PLATE</td><td>GRIP(DRY)</td><td>SHEAR</td><td>SECTION</td></tr><tr><td></td><td>(PSI)</td><td>(PLI)</td><td>(PLI)</td></tr><tr><td>MT20</td><td>MAX 371</td><td>MIN 1747</td><td>MAX 1887</td></tr><tr><td></td><td>MIN 371</td><td>MIN 1747</td><td>MIN 1887</td></tr></table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (D) (INPUT = 0.90) JSI METAL= 0.59 (C) (INPUT = 1.00)				TOP CH.	LL	=	34.8	PSF		DL	=	6.0	PSF	BOT CH.	LL	=	0.0	PSF		DL	=	7.3	PSF	TOTAL LOAD	=	48.1	PSF		PLATE	GRIP(DRY)	SHEAR	SECTION		(PSI)	(PLI)	(PLI)	MT20	MAX 371	MIN 1747	MAX 1887		MIN 371	MIN 1747	MIN 1887
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E-F	-1058 / 0	K-F	0 / 490																																																																																																																																																																																						
F-G	-1404 / 0	K-G	-106 / 22																																																																																																																																																																																						
G-H	0 / 41	N-C	-1787 / 0																																																																																																																																																																																						
H-I	0 / 53	G-J	-1787 / 0																																																																																																																																																																																						
N-B	-300 / 0																																																																																																																																																																																								
J-H	-300 / 0																																																																																																																																																																																								
N-M	0 / 1130																																																																																																																																																																																								
M-L	0 / 1184																																																																																																																																																																																								
L-K	0 / 1184																																																																																																																																																																																								
K-J	0 / 1130																																																																																																																																																																																								
TOP CH.	LL	=	34.8	PSF																																																																																																																																																																																					
	DL	=	6.0	PSF																																																																																																																																																																																					
BOT CH.	LL	=	0.0	PSF																																																																																																																																																																																					
	DL	=	7.3	PSF																																																																																																																																																																																					
TOTAL LOAD	=	48.1	PSF																																																																																																																																																																																						
PLATE	GRIP(DRY)	SHEAR	SECTION																																																																																																																																																																																						
	(PSI)	(PLI)	(PLI)																																																																																																																																																																																						
MT20	MAX 371	MIN 1747	MAX 1887																																																																																																																																																																																						
	MIN 371	MIN 1747	MIN 1887																																																																																																																																																																																						

MODULUS ENGINEERING LTD.

07/04/2023

D. A. SHERMAN

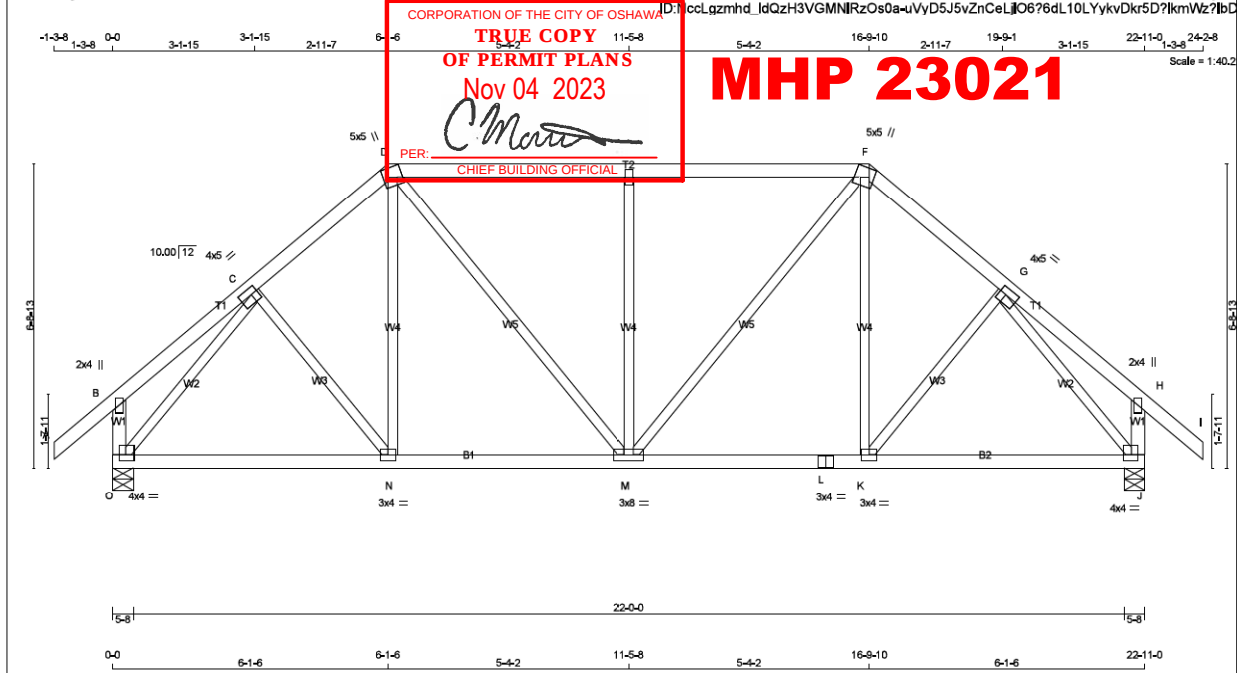
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PROVINCE OF ONTARIO

REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEERS SEAL





$$\text{TOTAL WEIGHT} = 2 \times 107 = 214 \text{ g}$$

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - J	2x4	DRY	No.2

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
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DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	PLATES	W	LEN	Y	X
B	TMV+p MT20	2.0	4.0		
C	TMVW4 MT20	4.0	5.0	1.75	1.75
D	TMVW+m MT20	5.0	5.0	2.25	1.25
E	TMV+w MT20	2.0	4.0		
F	TMVW+m MT20	5.0	5.0	2.25	1.25
G	TMVW4 MT20	4.0	5.0	1.75	1.75
H	TMV+p MT20	2.0	4.0		
J	BMVW4 MT20	4.0	4.0	1.50	1.75
K	BMVW4 MT20	3.0	4.0		
L	BS-t MT20	3.0	4.0		
M	BMVWVW4 MT20	3.0	8.0		
N	BMVW4 MT20	3.0	4.0		
O	BMVW4 MT20	4.0	4.0	1.50	1.75

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

BUILDING BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	1743	0	1743	0	0	5-8	1-14
J	1743	0	1743	0	0	5-8	1-14

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1216	894 / 0	0 / 0	0 / 0	0 / 0	321 / 0	0 / 0
O	1216	894 / 0	0 / 0	0 / 0	0 / 0	321 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSJ (L)	MAX. UNBRAC	MEMBL	MAX. FACTORED FORCE (LBS)	MAX CSJ (L)
FR-TO		FROM TO		LENGTH	FR-TO		
B	0/53	-119.4 -19.4	0.16 (1)	10.00	C-N	0/45	0.02 (4)
B-C	0/25	-119.4 -19.4	0.16 (1)	10.00	N-D	0/109	0.04 (4)
C-D	-1475/0	-119.4 -19.4	0.15 (1)	5.26	D-M	0/558	0.13 (1)
D-E	-1469/0	-119.4 -19.4	0.46 (1)	4.83	E-M	-779/0	0.59 (1)
E-F	-1469/0	-119.4 -19.4	0.46 (1)	4.83	M-F	0/558	0.13 (1)
F-G	-1475/0	-119.4 -19.4	0.15 (1)	5.26	K-F	0/110	0.04 (4)
G-H	0/25	-119.4 -19.4	0.16 (1)	10.00	K-G	0/45	0.02 (4)
H-I	0/25	-119.4 -19.4	0.16 (1)	10.00	G-J	-1771/0	0.68 (1)
C-B	-307/0	0.0 0.0	0.03 (1)	7.81	G-J	-1771/0	0.68 (1)
J-H	-307/0	0.0 0.0	0.03 (1)	7.81			
G-N	0/1099	-18.2 -18.2	0.26 (1)	10.00			
N-M	0/1112	-18.2 -18.2	0.27 (1)	10.00			
M-L	0/1112	-18.2 -18.2	0.27 (1)	10.00			
L-K	0/1112	-18.2 -18.2	0.27 (1)	10.00			
K-J	0/1099	-18.2 -18.2	0.26 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	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 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (0.76")
CALCULATED VERT. DEFL(LL) = $L/999$ (0.05")
ALLOWABLE DEFL.(TL)= $L/360$ (0.76")
CALCULATED VERT. DEFL(TL) = $L/999$ (0.08")

CSI: TC=0,46/1,00 (D-E:1) , BC=0,27/1,00 (K-M:1) ,
WB=0,68/1,00 (G-J:1) , SSI=0,31/1,00 (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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	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= 0,88 (G) (INPUT = 0,90)
JSI METAL= 0,47 (C) (INPUT = 1,00)



REVIEW FOR TRUSS COMPONENT ONLY

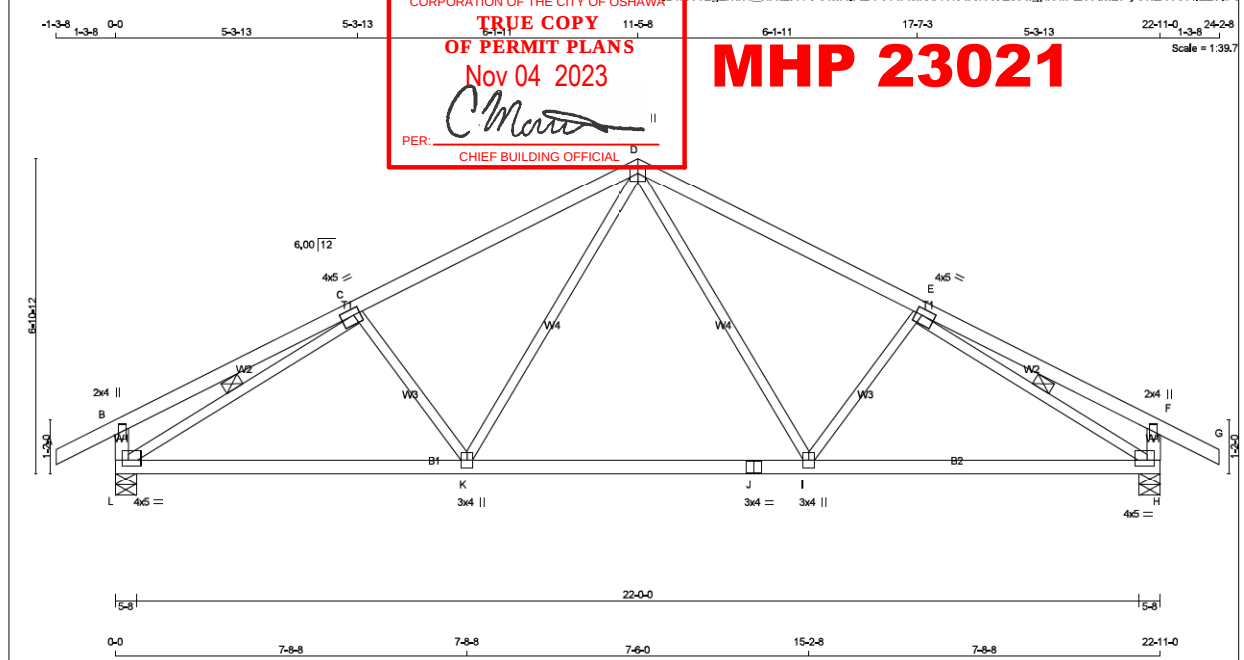
NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEERS SEAL

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TC001 (VER 06/2017) BEFORE USE.

Design input for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design: parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult

TPIC Appendix G - Minimum quality Manufacturing Criteria available from www.tpica.ca and **BCSI-CANADA (Building Component Safety Information)** available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com





TOTAL WEIGHT = 12 X 89 = 1068 lb

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER,

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW+1	MT20	4.0	5.0	1.75	1.75
D	TTVMW+p	MT20	4.0	4.0		
E	TMWW+2	MT20	4.0	5.0	1.75	1.75
F	TMV+p	MT20	2.0	4.0		
H	BMVW+1	MT20	4.0	5.0	1.50	1.75
I	BMVW+1	MT20	3.0	4.0		
J	BS4	MT20	3.0	4.0		
K	BMVW+1	MT20	3.0	4.0		
L	BMVW+1	MT20	4.0	5.0	1.50	1.75

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
L	1740	0	1740	0	0	5-8	1-14	1-14	1-14
H	1740	0	1740	0	0	5-8	1-14	1-14	1-14

UNFACTORED REACTIONS

JT	1ST CASE	2ND CASE	MAX. MIN. COMPONENT REACTIONS
L	1213	892 / 0	0 / 0
H	1213	892 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.13 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-L, E-H.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)
FR-TO				FR-TO			
A-B	0 / 36	-119.4	-119.4	D-I	0 / 622	0.14	(1)
B-C	0 / 41	-119.4	-119.4	E-H	-480 / 0	0.15	(1)
C-D	-1906 / 0	-119.4	-119.4	K-D	0 / 622	0.14	(1)
D-E	-1906 / 0	-119.4	-119.4	C-K	-480 / 0	0.15	(1)
E-F	0 / 41	-119.4	-119.4	L-C	-2346 / 0	0.64	(1)
F-G	0 / 36	-119.4	-119.4	E-H	-2346 / 0	0.64	(1)
L-B	-383 / 0	0.0	0.0				
H-F	-383 / 0	0.0	0.0				
L-K	0 / 1954	-18.2	-18.2				
K-J	0 / 1367	-18.2	-18.2				
J-I	0 / 1367	-18.2	-18.2				
I-H	0 / 1954	-18.2	-18.2				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. G.C.

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

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CS: TC=0.65/1.00 (B-C-1), BC=0.44/1.00 (K-L-1), WB=0.64/1.00 (C-L-1), SS=0.31/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

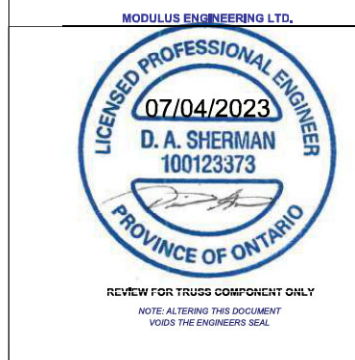
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1973

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90)
JSI METAL= 0.61 (E) (INPUT = 1.00)





DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.3 PSF

TOTAL LOAD = 48.1 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

OR SMALL BUILDING REQUIREMENTS OF PART
9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 8 OF NBC 2012 (2018 AMENDMENT)

- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED

ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= $L/360$ (0.76")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
ALLOWABLE DEFL.(TL)= $L/360$ (0.76")

CALCULATED VERT. DEFL(TL) = $L^3 / 813$ (0.34")

CSI: IC=0.70/1.00 (C-D:1), BC=0.53/1.00 (I-J:1),
WB=0.70/1.00 (C-M:1), SSI=0.33/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE

RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

	(1)		(2)		(3)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

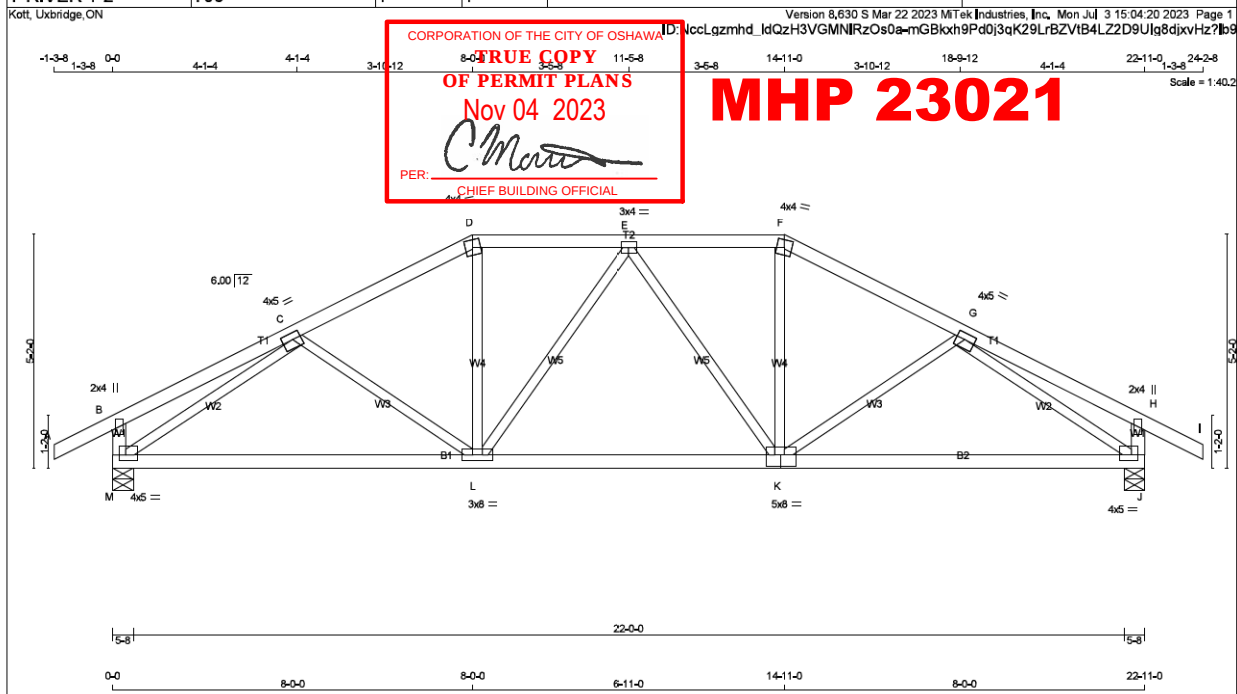
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

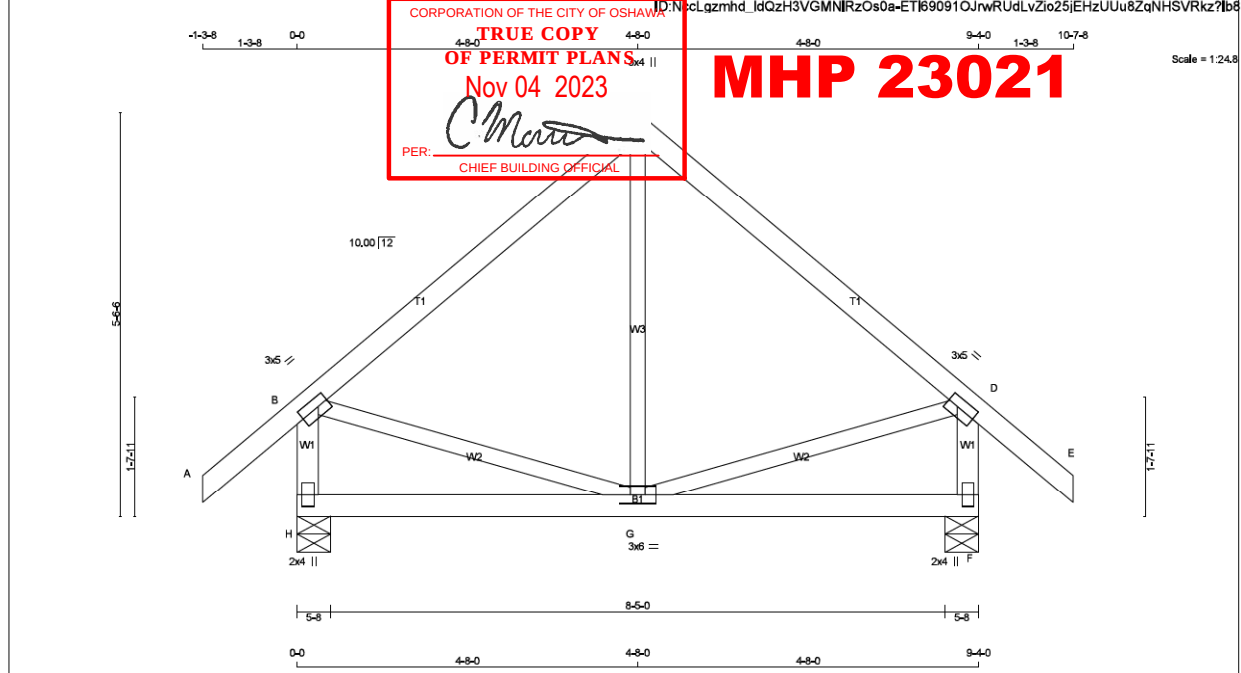
JSI GRIP= 0.88 (K) (INPUT = 0.90)
JSI METAL= 0.89 (K) (INPUT = 1.00)



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TOTAL WEIGHT = 91 T	
[M/F]	
LUMBER	
N. L. G. A. RULES	
CHORDS SIZE LUMBER	
DESCR.	
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.

A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW4	MT20	3.0	5.0	1.50	1.75
C	TTW+p	MT20	3.0	4.0	2.50	1.50
D	TMVW4	MT20	3.0	5.0	1.50	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BMVW4	MT20	3.0	6.0		
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
H	808	0	808	0	0	5-8	1-8		
F	808	0	808	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS
H	562	421 / 0	0 / 0
F	562	421 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED (PLF)	MAX CSJ (LC)	MEMB.	FORCE (LBS)	FACTORED (PLF)	MAX CSJ (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 53	-119.4 -119.4	0.16 (1)	G-C	-62 / 69	0.03 (1)	
B-C	-387 / 0	-119.4 -119.4	0.33 (1)	B-G	0 / 309	0.07 (1)	
C-D	-387 / 0	-119.4 -119.4	0.33 (1)	G-D	0 / 309	0.07 (1)	
D-E	0 / 53	-119.4 -119.4	0.16 (1)				
H-B	-775 / 0	0.0 0.0	0.08 (1)				
F-D	-775 / 0	0.0 0.0	0.08 (1)				
H-G	0 / 0	-18.2 -18.2	0.11 (4)				
G-F	0 / 0	-18.2 -18.2	0.11 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF

TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. GIC

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

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.33/1.00 (B-C-1), BC=0.11/1.00 (G-H-4), WB=0.07/1.00 (D-G-1), SSI=0.17/1.00 (C-D-1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (B) (INPUT = 0.90)
JSI METAL= 0.19 (B) (INPUT = 1.00)



