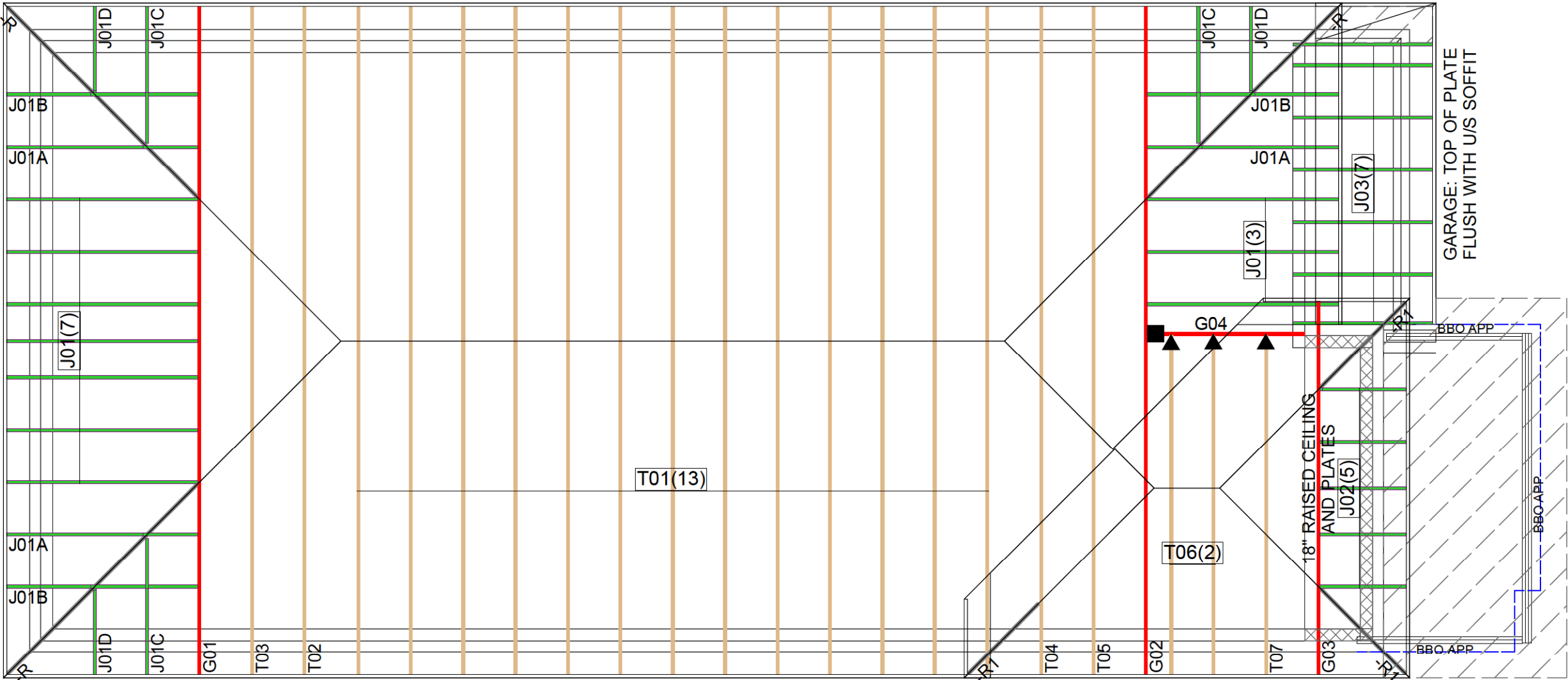




MHP 23021



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

Hanger Name	Symbol	QTY
LUS24	▲	3
LJS26DS	■	1



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 #	23-00072R0
Address	ZADORRA ESTATES ZADORRA ESTATES INC OSHAWA, ON
Model	RIVER 1-3
Sales Rep	RALPH MIRIGELLO
Designer	LI
Date	2023-04-20
Path	C:\MITEK\CA\JOBS\GREENPARK GROUP\ZADORRA ESTATES\MODELS\RIVER 1\RIVER 1-3\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

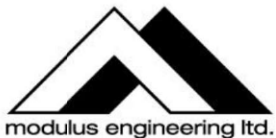
Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

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

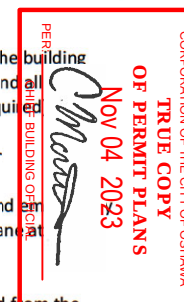
12. Install and load vertically unless otherwise noted

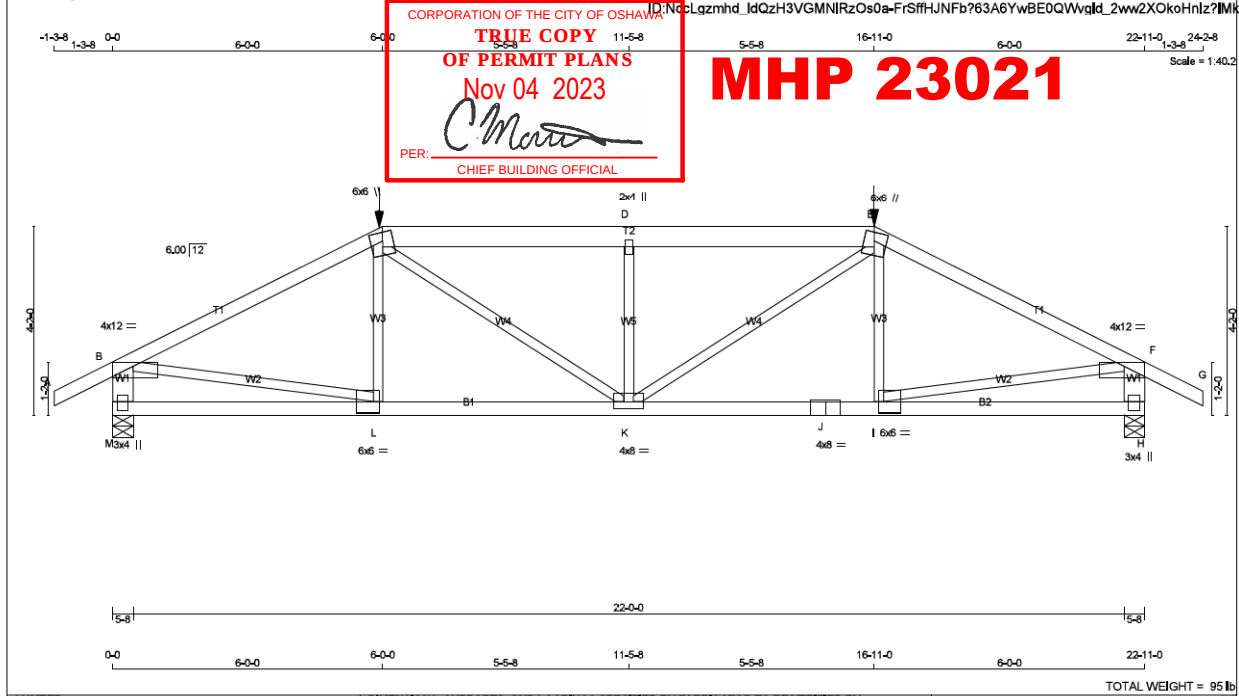
13. Review all portions of this design including all notes. Reviewing pictures alone is not sufficient

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





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.	BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:	
A - C	2x4	DRY	2100F 1.8E	SPF	JT	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 34.8 PSF	
C - E	2x4	DRY	No.2	SPF	M	VERT	DOWN	0	0	BOT CH. LL = 0.0 PSF	
E - G	2x4	DRY	2100F 1.8E	SPF	H	HORIZ	UP/LIFT	0	0	DL = 7.3 PSF	
M - B	2x6	DRY	No.2	SPF				5-8	4-6	TOTAL LOAD = 48.1 PSF	
H - F	2x6	DRY	No.2	SPF				5-8	4-6		
M - J	2x4	DRY	No.2	SPF							
J - H	2x4	DRY	No.2	SPF							
ALL WEBS	2x3	DRY	No.2	SPF							
EXCEPT											
DRY: SEASONED LUMBER,											

PLATES (table is in inches)				UNFACTORED REACTIONS				SPACING = 24.0 IN. G.C.			
JT	TYPE	PLATES	W LEN Y X	1ST CASE	MAX./MIN.	COMPONENT REACTIONS		LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
B	TMWw-p	MT20	4.0 12.0 1.00 5.50	JT	COMBINED	SNOW	LIVE	ORDER TYPE: CPrimeHip			
C	TTWw+m	MT20	6.0 6.0 2.25 2.75	M	2123	1542 / 0	0 / 0	SIDE SETBACK = 6'-0"			
D	TMWw-w	MT20	2.0 4.0	H	2123	1542 / 0	0 / 0	END SETBACK = 6'-0"			
E	TTWw+m	MT20	6.0 6.0 2.25 2.75					END WALL WIDTH = 5'-8"			
F	TMWw-p	MT20	4.0 12.0 1.00 5.50					CORNER FRAMING TYPE: CONVENTIONAL			
H	BMV1+p	MT20	3.0 4.0 2.25 1.50					END JACK TYPE: CONVENTIONAL			
I	BMWw4	MT20	6.0 6.0 3.00 1.50					APPLIED TO FRONT SIDE			
J	BS4	MT20	4.0 8.0					-ADDTL LOADS BASED ON 55 % OF GSL.			
K	BMWw4	MT20	4.0 8.0 1.75 4.00								
L	BMWw4	MT20	6.0 6.0 3.00 1.50								
M	BMV1+p	MT20	3.0 4.0 2.25 1.50								

A-B	0 / 36	-119.4	-119.4	0.11 (1)	10.00	L-C	-330 / 106	0.09 (1)	- CSA 086-14
B-C	-4244 / 0	-119.4	-119.4	0.84 (1)	3.37	C-K	0 / 1490	0.37 (1)	- TPIC 2014
C-D	-5035 / 0	-225.2	-225.2	0.68 (1)	3.09	K-D	-1538 / 0	0.40 (1)	
D-E	-5035 / 0	-225.2	-225.2	0.68 (1)	3.09	K-E	0 / 1490	0.37 (1)	(55 % of 48.1 P.S.F., G.S.L. PLUS 8.4 P.S.F.,
E-F	-4244 / 0	-119.4	-119.4	0.84 (1)	3.37	I-E	-330 / 106	0.09 (1)	RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED
F-G	0 / 36	-119.4	-119.4	0.11 (1)	10.00	B-L	0 / 3844	0.95 (1)	ROOF LIVE LOAD
M-B	-2955 / 0	0.0	0.0	0.21 (1)	6.07	I-F	0 / 3844	0.95 (1)	
H-F	-2955 / 0	0.0	0.0	0.21 (1)	6.07				ALLOWABLE DEFL.(LL)= L/360 (0.78")
									CALCULATED VERT. DEFL.(LL)= L/ 999 (0.17")
M-L	0 / 0	-34.4	-34.4	0.30 (4)	10.00				ALLOWABLE DEFL.(TL)= L/360 (0.76")
L-K	0 / 3813	-34.4	-34.4	0.83 (1)	10.00				CALCULATED VERT. DEFL.(TL)= L/ 941 (0.29")
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				CSJ: TC=0.84/1.00 (B-C-1), BC=0.83/1.00 (H-K-1),
I-H	0 / 0	-34.4	-34.4	0.30 (4)	10.00				WB=0.95/1.00 (F-I-1), SSI=0.49/1.00 (D-E-1)
FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	6-0-0	-537	-537	—	FRONT	VERT	TOTAL	—	C1
E	16-11-0	-537	-537	—	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									

FACTORED CONCENTRATED LOADS (LBS)				CONNECTION REQUIREMENTS			
JT	LOC.	LC1	MAX+ MAX-	FACE	DIR.	TYPE	HEEL 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.

MODULUS ENGINEERING LTD.

07/04/2023
D. A. SHERMAN
100123373

PROVINCE OF ONTARIO

REVIEW FOR TRUSS COMPONENT ONLY
NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEER'S SEAL

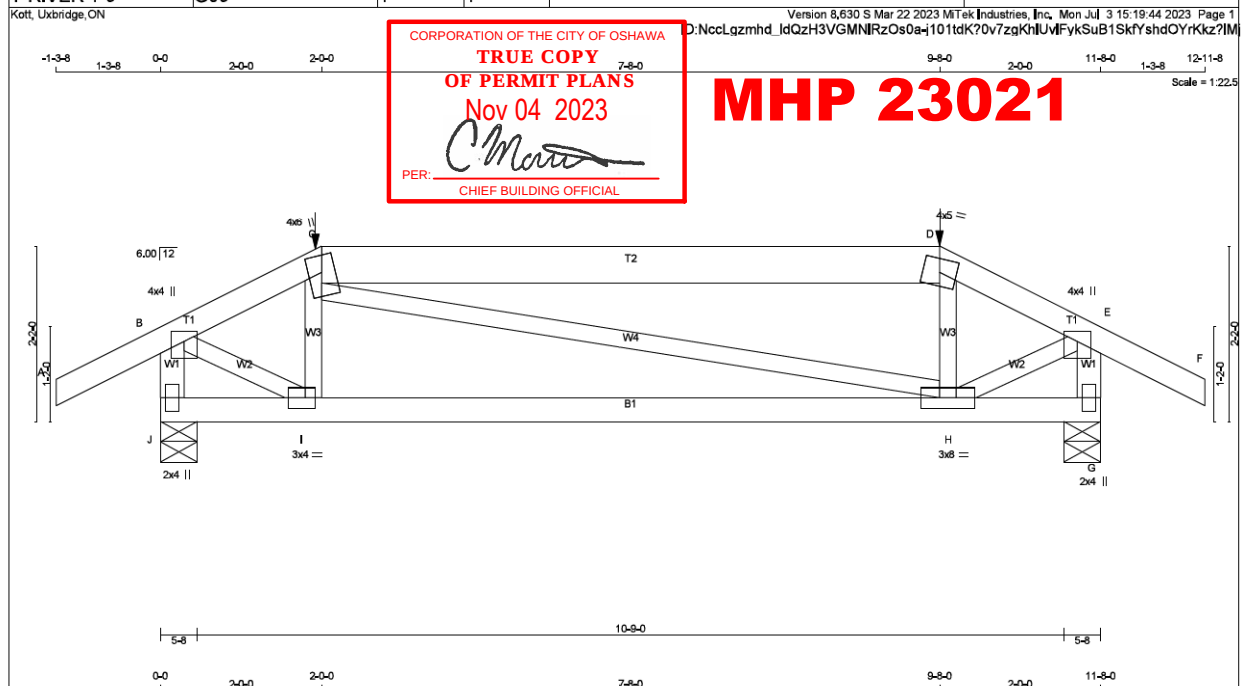
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCD01 (VER 06/2017) BEFORE USE.
Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design 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.bcsiindustry.com

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= 0.88 (L) (INPUT = 0.90)
JSI METAL= 0.87 (L) (INPUT = 1.00)





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		
A - C	2x4	DRY	No.2	SPF				
C - D	2x6	DRY	No.2	SPF				
D - F	2x4	DRY	No.2	SPF				
J - B	2x4	DRY	No.2	SPF				
G - E	2x4	DRY	No.2	SPF				
J - G	2x4	DRY	No.2	SPF				
ALL WEBS EXCEPT			2x3	DRY	No.2	SPF		
DRY: SEASONED LUMBER,								
PLATES (table is in inches)								
JT	TYPE	PLATES	W	LEN	Y	X		
B	TMVW+p	MT20	4.0	4.0	1.50	2.00		
C	TTWW+m	MT20	4.0	6.0	2.50	2.00		
D	TTW+n	MT20	4.0	5.0				
E	TMVW+p	MT20	4.0	4.0	1.50	2.00		
G	BMV1+p	MT20	2.0	4.0				
H	BMVWW+m	MT20	3.0	8.0				
I	BMVWW+m	MT20	3.0	4.0	1.50	1.50		
J	BMV1+p	MT20	2.0	4.0				
FACTORED CONCENTRATED LOADS (LBS)								
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL
C	2-0-0	-20	-20	-	FRONT	VERT	TOTAL	-
D	9-8-0	-20	-20	-	FRONT	VERT	TOTAL	-
CONNECTION REQUIREMENTS								
1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.								
MODULUS ENGINEERING LTD.								
REVIEW FOR TRUSS COMPONENT ONLY NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEER'S SEAL								
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCD01 (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.bcsiindustry.com								
KOTT								

TOTAL WEIGHT = 49lb

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-0-0
END SETBACK = 2-0-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
-ADDTL LOADS BASED ON 55 % OF GSL.

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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.66/1.00 (C-D:1), BC=0.28/1.00 (H-I:4), WB=0.21/1.00 (B-I:1), SSI=0.30/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 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= 0.86 (I) (INPUT = 0.90)
JSI METAL= 0.27 (I) (INPUT = 1.00)

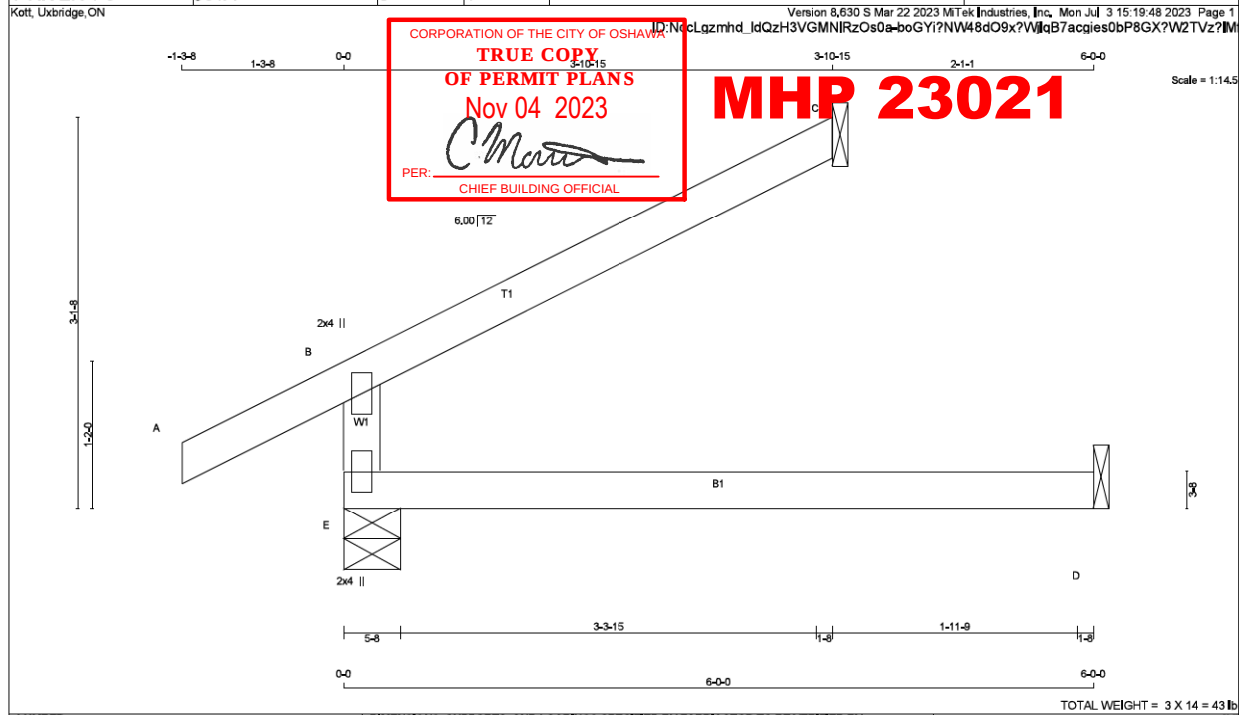


SPECIFIED LOADS:			
TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD =		48.1	PSF

JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)







LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

DESCR.

SPF

SPF

SPF

E - B

2x4

DRY

No.2

A - C

2x4

DRY

No.2

E - D

2x4

DRY

No.2

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	HORIZ	UPLIFT
E	518	0	518	0
C	175	0	175	0
D	45	0	51	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED
E	362
C	120
D	36

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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO			
E-B	-454 / 0	0.0	0.13 (4)
A-B	0 / 36	-119.4	0.16 (1)
B-C	-26 / 0	-119.4	0.31 (1)
E-D	0 / 0	-18.2	0.13 (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. 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 (0.03")

CSI: TC=0.31/1.00 (B-C-1) , BC=0.13/1.00 (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 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 1673

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)

MODULUS ENGINEERING LTD.

07/04/2023

D. A. SHERMAN

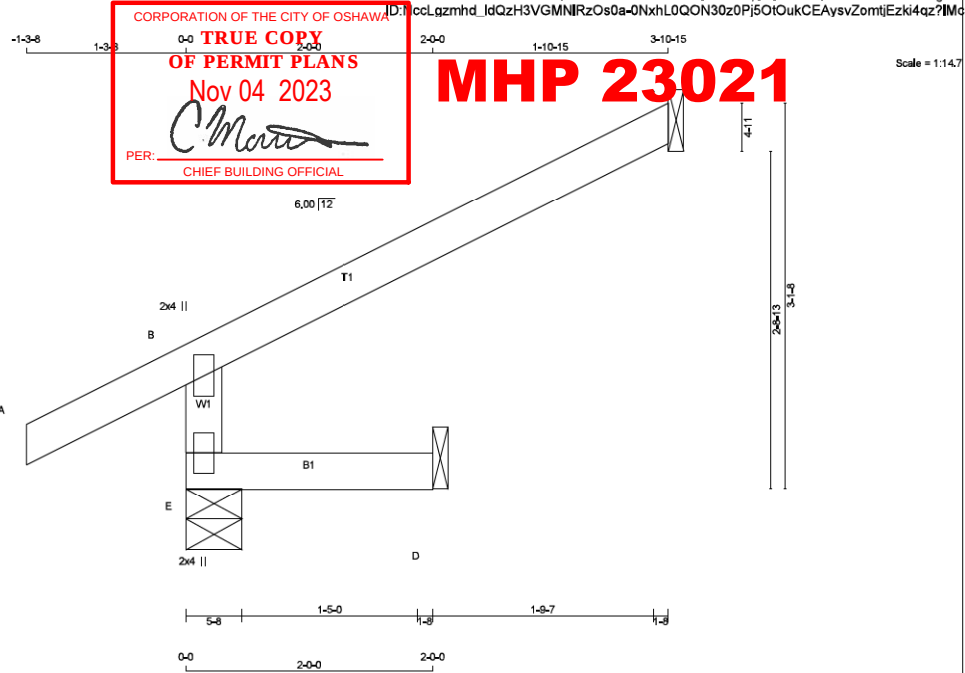
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PROVINCE OF ONTARIO

REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEERS SEAL





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	HORIZ	UPLIFT
E	474	0	474	0
C	175	0	175	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	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. LOAD LC1 (C)	MAX. CSI (L/C)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (L/C)	
FR-TO		FROM	TO			FR-TO			
E-B	-454 / 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	-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 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")

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 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 = 0.99)
JSI METAL= 0.19 (B) (INPUT = 1.00)

MODULUS ENGINEERING LTD.

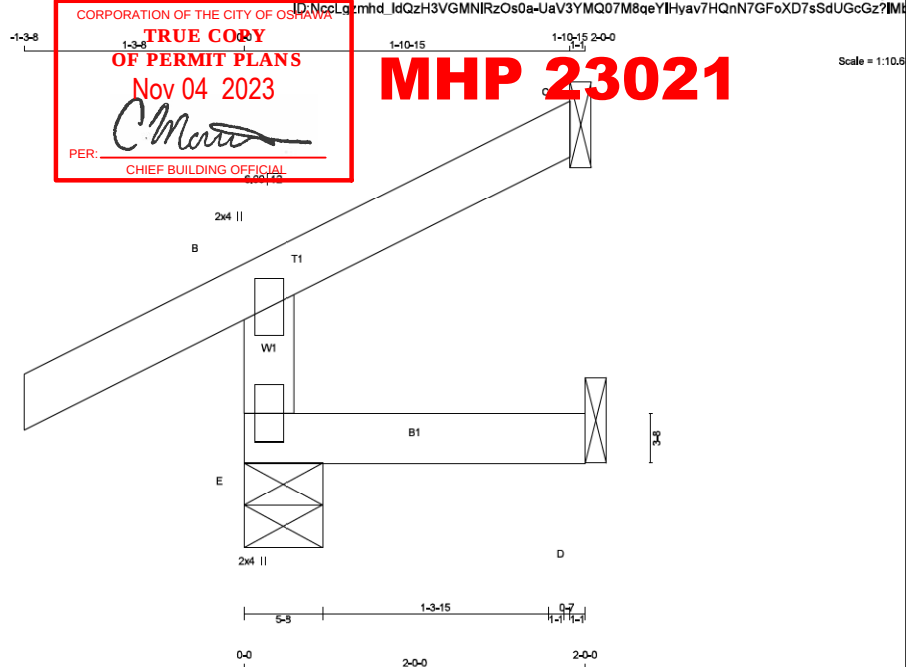


REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEER'S SEAL

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCD01 (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 BCSC-CANADA (Building Component Safety Information) available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com





TOTAL WEIGHT = 3 X 7 = 22 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	
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	

PLATES (table is in inches)				UNFACTORED REACTIONS				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
JT	TYPE	PLATES	W	LEN	Y	X		THIS DESIGN COMPLIES WITH:			
B	TMV+p	MT20	2.0	4.0				- PART 9 OF BCBC 2018, NBC-2019AE			
E	BMV1+p	MT20	2.0	4.0				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
								- CSA 086-14			
								- TPIC 2014			

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

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (L)	
FR-TO				FR-TO			
E-B	-304 / 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	-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.

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.

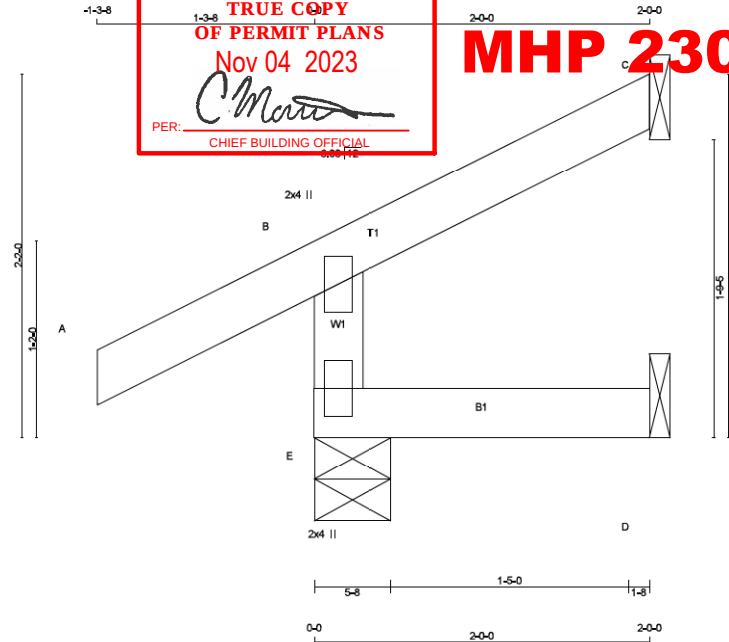
REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEER'S SEAL



MHP 23021

Scale = 1:10.8



TOTAL WEIGHT = 5 X 7 = 37 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		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
E	331	0	331	0	0	5-8	1-8	1-8	1-8
C	90	0	90	0	0	1-8	1-8	1-8	1-8
D	16	0	16	0	0	1-8	1-8	1-8	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	229	181 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	62	53 / 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 APPLIED,
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (5)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
E-B	-311 / 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	-13 / 0	-119.4	-119.4 (0.08) (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, 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), SSJ=0.11/1.00 (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 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.

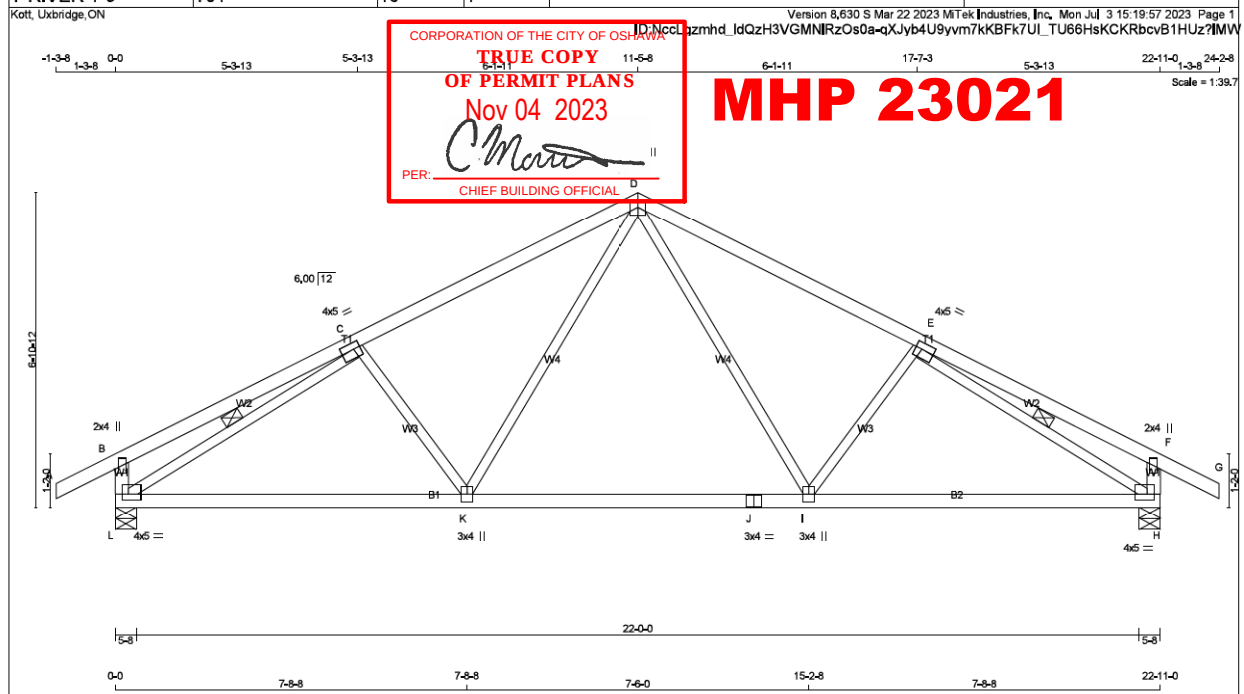


REVIEW FOR TRUSS COMPONENT ONLY

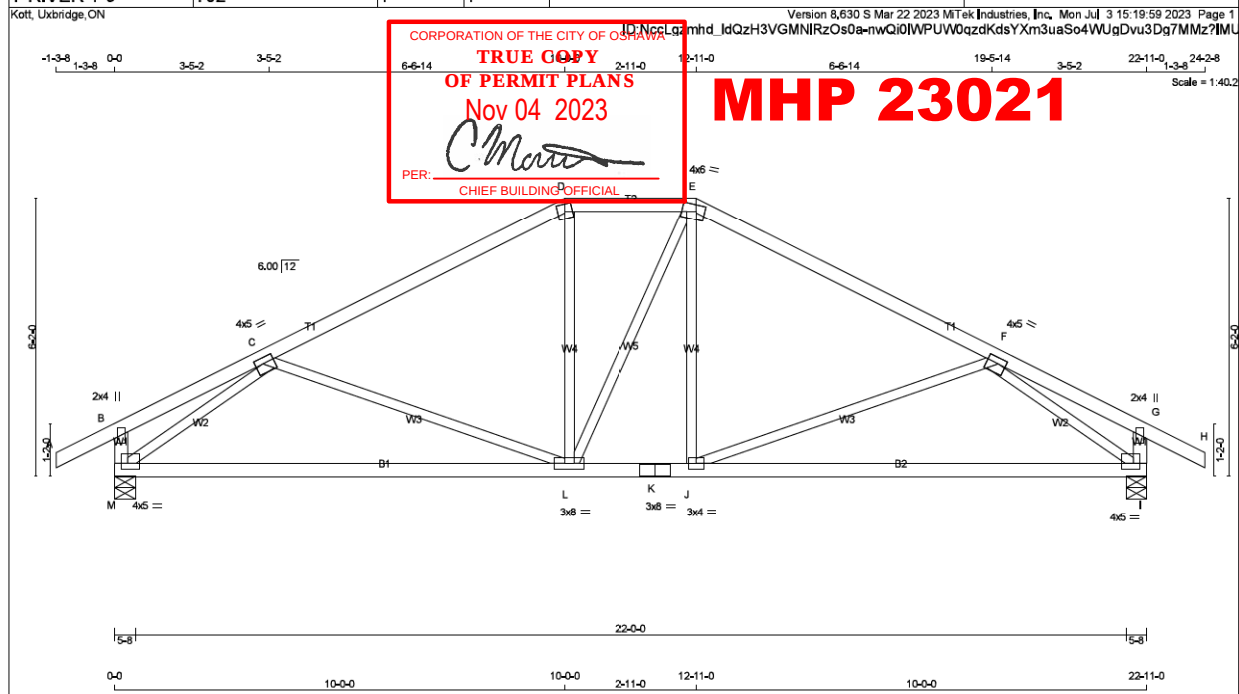
NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEER'S SEAL

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCD01 (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.tplic.ca and BCSC-CANADA (Building Component Safety Information) available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbciindustry.com

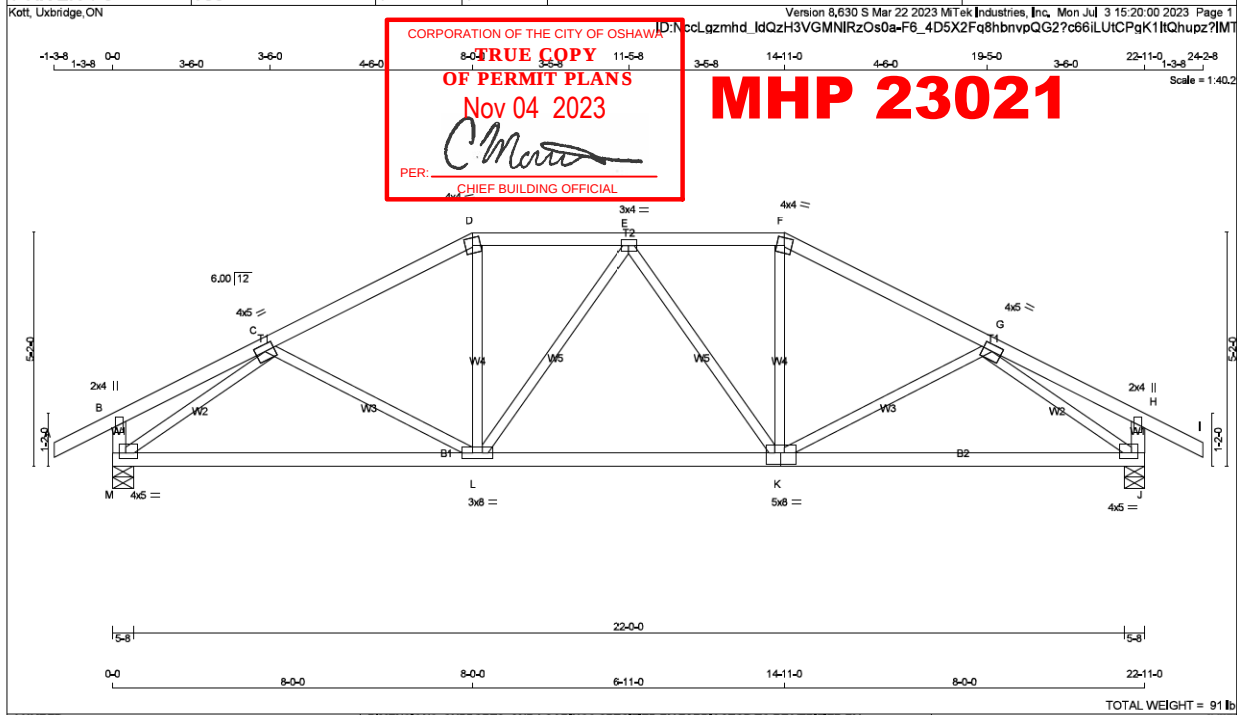




LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF A - D 2x4 DRY No.2 SPF D - G 2x4 DRY No.2 SPF L - B 2x4 DRY No.2 SPF H - F 2x4 DRY No.2 SPF L - J 2x4 DRY No.2 SPF J - H 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER,			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX L 1740 0 1740 0 0 5-8 1-14 H 1740 0 1740 0 0 5-8 1-14 UNFACTORED REACTIONS 1ST CASE MAX/MIN COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL L 1213 892 / 0 0 / 0 0 / 0 321 / 0 0 / 0 H 1213 892 / 0 0 / 0 0 / 0 321 / 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. FACTORED MAX. FORCE (LBS) VERT. LOAD LC1 MAX. CS1 (LC) UNBRAC LENGTH FR-TO MEMB. FACTORED MAX. FORCE (LBS) CS1 (LC) FR-TO FROM TO A-B 0 / 36 -119.4 -119.4 0.16 (1) 10.00 D-I 0 / 622 0.14 (1) B-C 0 / 41 -119.4 -119.4 0.65 (1) 10.00 I-E -480 / 0 0.15 (1) C-D -1906 / 0 -119.4 -119.4 0.62 (1) 4.13 K-D 0 / 622 0.14 (1) D-E -1906 / 0 -119.4 -119.4 0.62 (1) 4.13 C-K -480 / 0 0.15 (1) E-F 0 / 41 -119.4 -119.4 0.65 (1) 10.00 L-C -2346 / 0 0.64 (1) F-G 0 / 36 -119.4 -119.4 0.16 (1) 10.00 E-H -2346 / 0 0.64 (1) L-B -383 / 0 0.0 0.0 0.04 (1) 7.81 H-F -383 / 0 0.0 0.0 0.04 (1) 7.81 L-K 0 / 1954 -18.2 -18.2 0.44 (1) 10.00 K-J 0 / 1367 -18.2 -18.2 0.34 (1) 10.00 J-I 0 / 1367 -18.2 -18.2 0.34 (1) 10.00 I-H 0 / 1954 -18.2 -18.2 0.44 (1) 10.00						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. GIC 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") CS1: TC=0.65/1.00 (B-C-1), BC=0.44/1.00 (K-L-1), WB=0.64/1.00 (C-L-1), SS1=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 1873 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)		
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - D 2x4 DRY No.2 SPF D - E 2x4 DRY No.2 SPF E - H 2x4 DRY No.2 SPF M - B 2x4 DRY No.2 SPF I - G 2x4 DRY No.2 SPF M - K 2x4 DRY No.2 SPF K - I 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY, SEASONED LUMBER,		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED INPUT REQD DOWN HORZ DOWN HORZ UPLIFT BRG BRG M 1740 0 1740 0 0 5-8 1-14 I 1740 0 1740 0 0 5-8 1-14 UNFACTORED REACTIONS 1ST CASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL M 1213 892 / 0 0 / 0 0 / 0 321 / 0 0 / 0 I 1213 892 / 0 0 / 0 0 / 0 321 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, I BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10 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 VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO A-B 0 / 36 -119.4 -119.4 0.16 (1) 10.00 C-L -390 / 0 0.42 (1) B-C 0 / 62 -119.4 -119.4 0.64 (1) 10.00 L-D 0 / 269 0.06 (1) C-D -1752 / 0 -119.4 -119.4 0.70 (1) 4.10 L-E 0 / 1 0.00 (1) D-E -1543 / 0 -119.4 -119.4 0.16 (1) 5.16 J-E 0 / 268 0.06 (1) E-F -1752 / 0 -119.4 -119.4 0.70 (1) 4.10 J-F -390 / 0 0.42 (1) F-G 0 / 62 -119.4 -119.4 0.64 (1) 10.00 M-C -2386 / 0 0.70 (1) G-H 0 / 36 -119.4 -119.4 0.16 (1) 10.00 F-I -2386 / 0 0.70 (1) M-B -223 / 0 0 0 0.02 (1) 7.81 I-G -223 / 0 0 0 0.02 (1) 7.81 M-L 0 / 1903 -18.2 -18.2 0.52 (1) 10.00 L-K 0 / 1543 -18.2 -18.2 0.50 (4) 10.00 K-J 0 / 1543 -18.2 -18.2 0.50 (4) 10.00 J-I 0 / 1903 -18.2 -18.2 0.53 (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. GIC 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 CBC 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 (0.07") ALLOWABLE DEFL.(TL) = L/360 (0.76") CALCULATED VERT. DEFL.(TL) = L/813 (0.34") CSI: TC=0.70/1.00 (C-D-1), BC=0.53/1.00 (I-J-1), WB=0.70/1.00 (C-M-1), SS=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 TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (P.S.I) (P.L.I) (P.L.I) 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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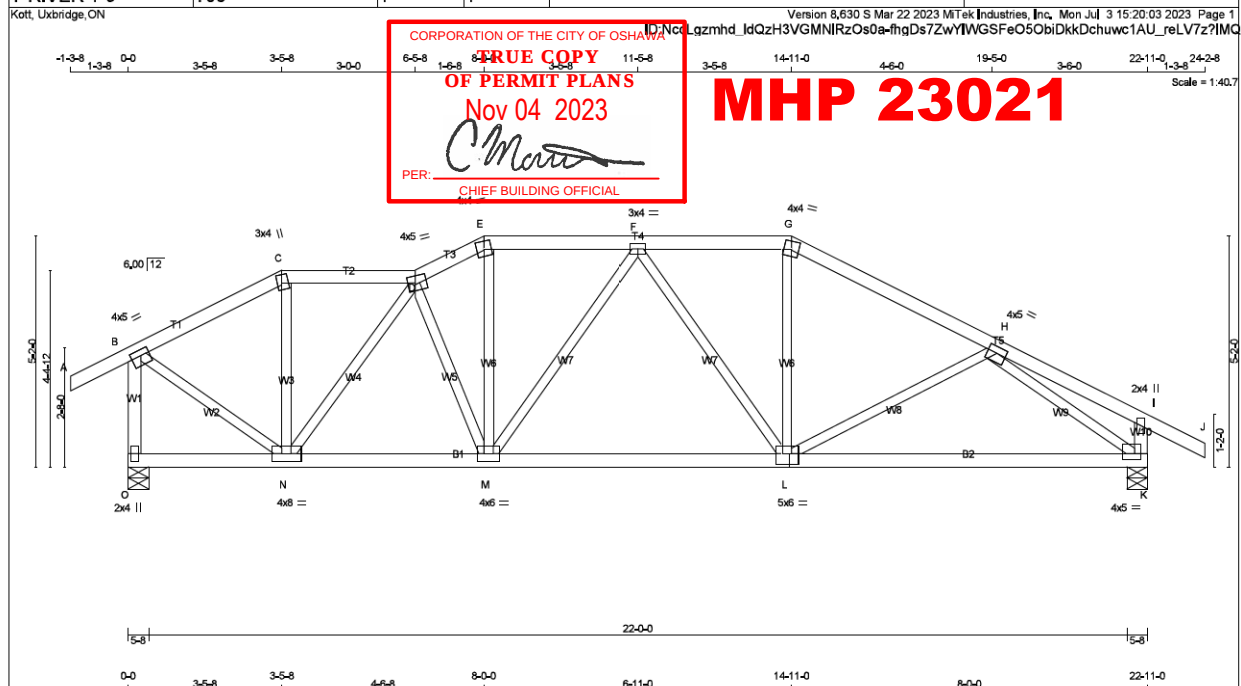


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - D 2x4 DRY No.2 SPF D - F 2x4 DRY No.2 SPF F - I 2x4 DRY No.2 SPF M - B 2x4 DRY No.2 SPF J - H 2x4 DRY No.2 SPF M - K 2x4 DRY No.2 SPF K - J 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY, SEASONED LUMBER,	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQD JT VERT DOWN HORZ UPLIFT IN-SX IN-SX M 1740 0 1740 0 0 5-8 1-14 J 1740 0 1740 0 0 5-8 1-14 UNFACTORED REACTIONS 1ST CASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL M 1213 892 / 0 0 / 0 0 / 0 321 / 0 0 / 0 J 1213 892 / 0 0 / 0 0 / 0 321 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, J BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 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 VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE MAX. FACTORED (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO A-B 0 / 36 -119.4 -119.4 0.16 (1) 10.00 C-L -144 / 35 0.07 (1) B-C 0 / 29 -119.4 -119.4 0.30 (1) 10.00 L-D 0 / 467 0.11 (1) C-D -1933 / 0 -119.4 -119.4 0.33 (1) 4.52 L-E -281 / 0 0.17 (1) D-E -1718 / 0 -119.4 -119.4 0.20 (1) 4.90 E-K -323 / 0 0.20 (1) E-F -1693 / 0 -119.4 -119.4 0.20 (1) 4.93 K-F 0 / 456 0.10 (1) F-G -1908 / 0 -119.4 -119.4 0.33 (1) 4.55 K-G -149 / 28 0.07 (1) G-H 0 / 29 -119.4 -119.4 0.30 (1) 10.00 M-C -2294 / 0 0.89 (1) H-I 0 / 36 -119.4 -119.4 0.16 (1) 10.00 G-J -2272 / 0 0.89 (1) M-B -302 / 0 0.0 0.0 0.03 (1) 7.81 J-H -302 / 0 0.0 0.0 0.03 (1) 7.81 M-L 0 / 1835 -18.2 -18.2 0.45 (1) 10.00 L-K 0 / 1877 -18.2 -18.2 0.46 (1) 10.00 K-J 0 / 1816 -18.2 -18.2 0.49 (1) 10.00	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. GIC 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 CBC 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 (0.08") ALLOWABLE DEFL.(TL) = L/360 (0.76") CALCULATED VERT. DEFL.(TL) = L/999 (0.25") CSI: TC=0.33/1.00 (C-D-1), BC=0.49/1.00 (J-K-1), WB=0.69/1.00 (C-M-1), SS=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 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= 0.88 (K) (INPUT = 0.90) JSI METAL= 0.59 (C) (INPUT = 1.00)
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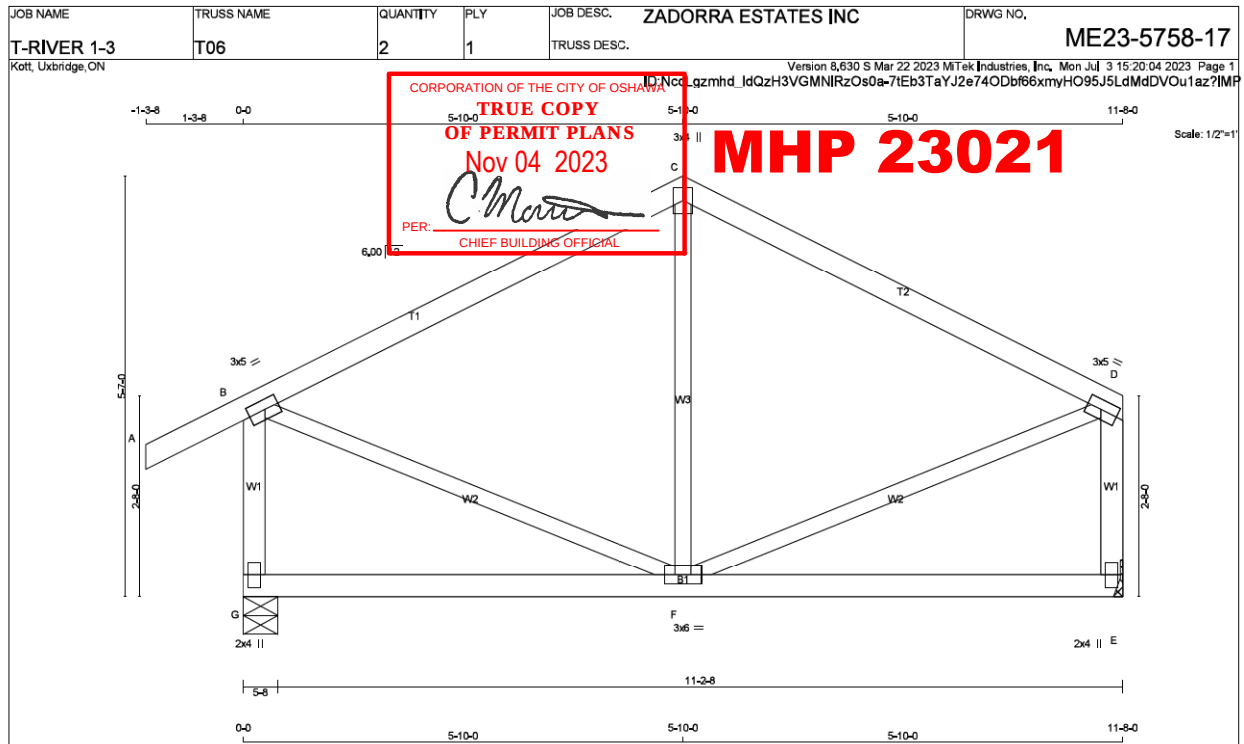


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TC0D1 (VER 06/2017) BEFORE USE.
Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design 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.tpic.ca and **BCSI-CANADA (Building Component Safety Information)** available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com

 **KOTT**



												TOTAL WEIGHT = 99 lb			
LUMBER															
N. L. G. A. RULES															
CHORDS SIZE				LUMBER				DESCR.							
A - C 2x4 DRY				No.2				SPF							
C - D 2x4 DRY				No.2				SPF							
D - E 2x4 DRY				No.2				SPF							
E - G 2x4 DRY				No.2				SPF							
G - J 2x4 DRY				No.2				SPF							
O - B 2x4 DRY				No.2				SPF							
K - I 2x4 DRY				No.2				SPF							
O - L 2x4 DRY				No.2				SPF							
L - K 2x4 DRY				No.2				SPF							
ALL WEBS 2x3 DRY				No.2				SPF							
EXCEPT															
DRY: SEASONED LUMBER.															



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

A - C	2x4	DRY	2100F 1.8E	SPF
C - D	2x4	DRY	2100F 1.8E	SPF
G - B	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - E	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	2.25
C	TTW+p	MT20	3.0	4.0		
D	TMVW4	MT20	3.0	5.0	1.50	2.25
E	BMV1+p	MT20	2.0	4.0		
F	BMVW4	MT20	3.0	6.0		
G	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	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
G	965	0	965	0
E	803	0	803	0

5-8 MECHANICAL

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
G	672	501 / 0	0 / 0
E	561	406 / 0	0 / 0

PERM. LIVE WIND DEAD SOIL
0 / 0 171 / 0 0 / 0
155 / 0 0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (L/C)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 36	-119.4 -119.4	0.10 (1)	10.00	F-C	-239 / 38	0.11 (1)
B-C	-512 / 0	-119.4 -119.4	0.34 (1)	6.25	B-F	0 / 494	0.11 (1)
C-D	-512 / 0	-119.4 -119.4	0.34 (1)	6.25	F-D	0 / 494	0.11 (1)
G-B	-924 / 0	0.0 0.0	0.13 (1)	7.81			
E-D	-762 / 0	0.0 0.0	0.11 (1)	7.81			
G-F	0 / 0	-18.2 -18.2	0.18 (4)	10.00			
F-E	0 / 0	-18.2 -18.2	0.18 (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

(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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.34/1.00 (C-D:1), BC=0.18/1.00 (F-G:4), WB=0.11/1.00 (B-F:1), SS=0.24/1.00 (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 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (F) (INPUT = 0.90)
JSI METAL= 0.21 (D) (INPUT = 1.00)

MODULUS ENGINEERING LTD.



REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEER'S SEAL

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCD01 (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.tplic.ca and BCSCI-CANADA (Building Component Safety Information) available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbciindustry.com



T-RIVER 1-3

T07

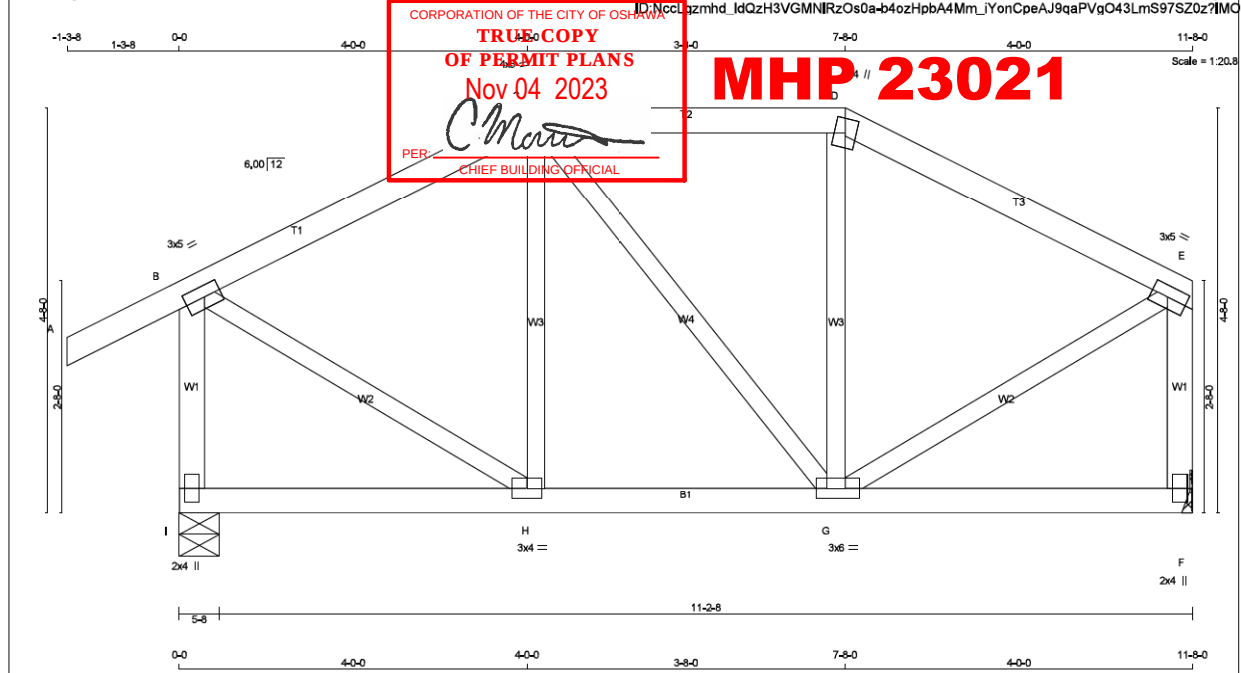
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TRUSS DESC.

Kott, Uxbridge, ON

Version 8,630 S Mar 22 2023 Mitek Industries, Inc. Mon Jul 3 15:20:05 2023 Page 1



LUMBER

N. L. G. A. RULES
CHORDS SIZE
A - C 2x4 DRY No.2
C - D 2x4 DRY No.2
D - E 2x4 DRY No.2
E - F 2x4 DRY No.2
F - G 2x4 DRY No.2
G - H 2x4 DRY No.2
H - I 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2
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	2.25
C	TTWV-m	MT20	4.0	5.0	1.75	1.25
D	TTWV-m	MT20	3.0	4.0		
E	TMVW4	MT20	3.0	5.0	1.50	2.25
F	BMV1+p	MT20	2.0	4.0		
G	BMVW4	MT20	3.0	6.0	1.50	1.50
H	BMVW4	MT20	3.0	4.0		
I	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
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT
I	965	0	965	0
F	803	0	803	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS
I	COMBINED	SNOW	LIVE
F	672	501 / 0	0 / 0
	561	406 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 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	MAX. FACTORED	FACTORED	W E B S	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	MAX. UNBRACED LENGTH (LBS)	FORCE (LBS)
FR-TO				
A-B	0 / 36	-119.4	-119.4	0.16 (1)
B-C	-553 / 0	-119.4	-119.4	0.25 (1)
C-D	-489 / 0	-119.4	-119.4	0.21 (1)
D-E	-553 / 0	-119.4	-119.4	0.25 (1)
E-F	-933 / 0	0.0	0.0	0.13 (1)
F-G	-771 / 0	0.0	0.0	0.11 (1)
I-H	0 / 0	-18.2	-18.2	0.06 (4)
H-G	0 / 490	-18.2	-18.2	0.11 (1)
G-F	0 / 0	-18.2	-18.2	0.06 (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

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 CBC 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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.25/1.00 (B-C-1), BC=0.11/1.00 (G-H-1), WB=0.13/1.00 (B-H-1), SS=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	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
650	371	1747	788

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (B) (INPUT = 0.90)
JSI METAL= 0.21 (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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