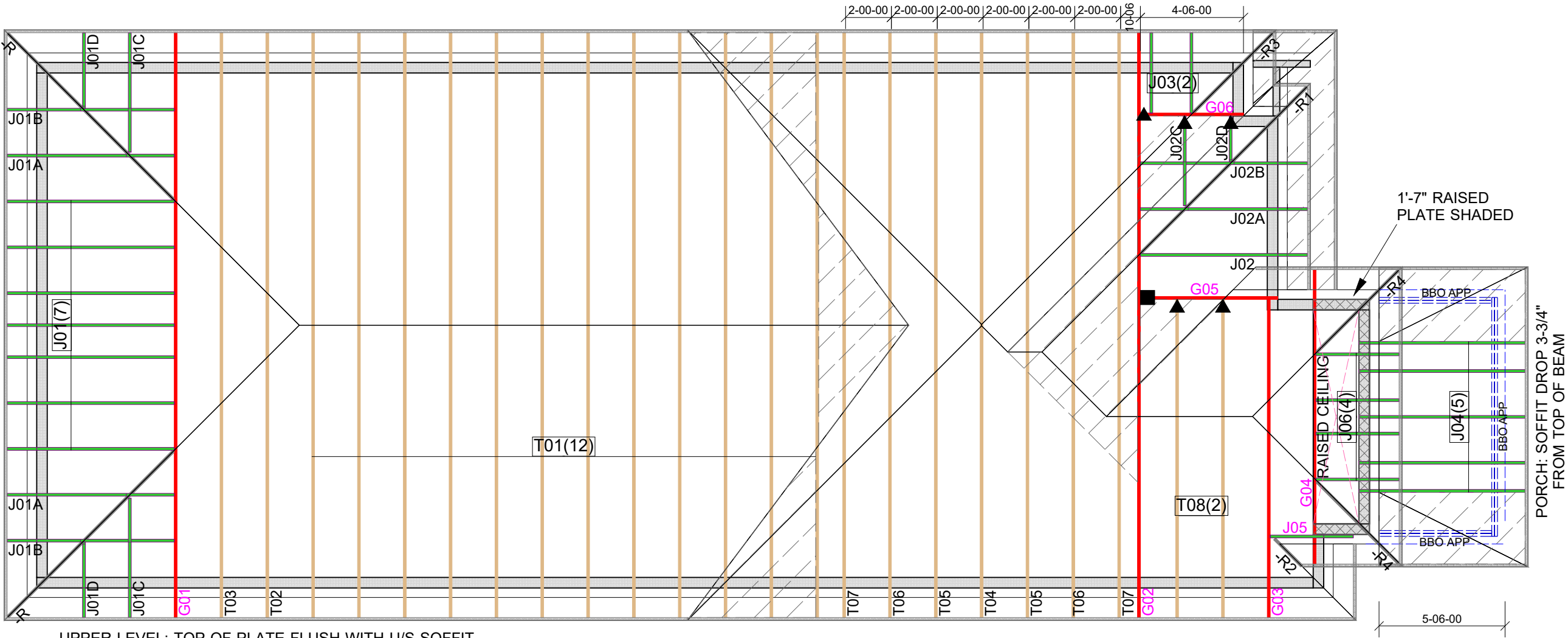




MHP 23024



Hanger Name	Symbol	QTY
LUS24	▲	5
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 #	23-00082R0
Address	ZADORRA ESTATES ZADORRA ESTATES INC OSHAWA,ON
Model	RIVER 5-2
Sales Rep	RALPH MIRIGELLO
Designer	LI
Date	2023-07-04
Path	C:\MITEK\CA\JOBS\GREENPARK GROUP\ZADORRA ESTATES\MODELS\RIVER 5\RIVER 5-2\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

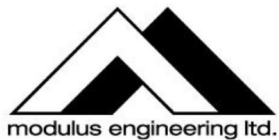
Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

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 other 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 end using 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

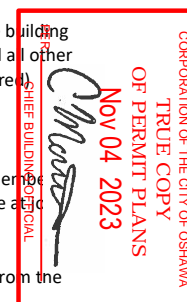
12. Install and load vertically unless otherwise noted

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

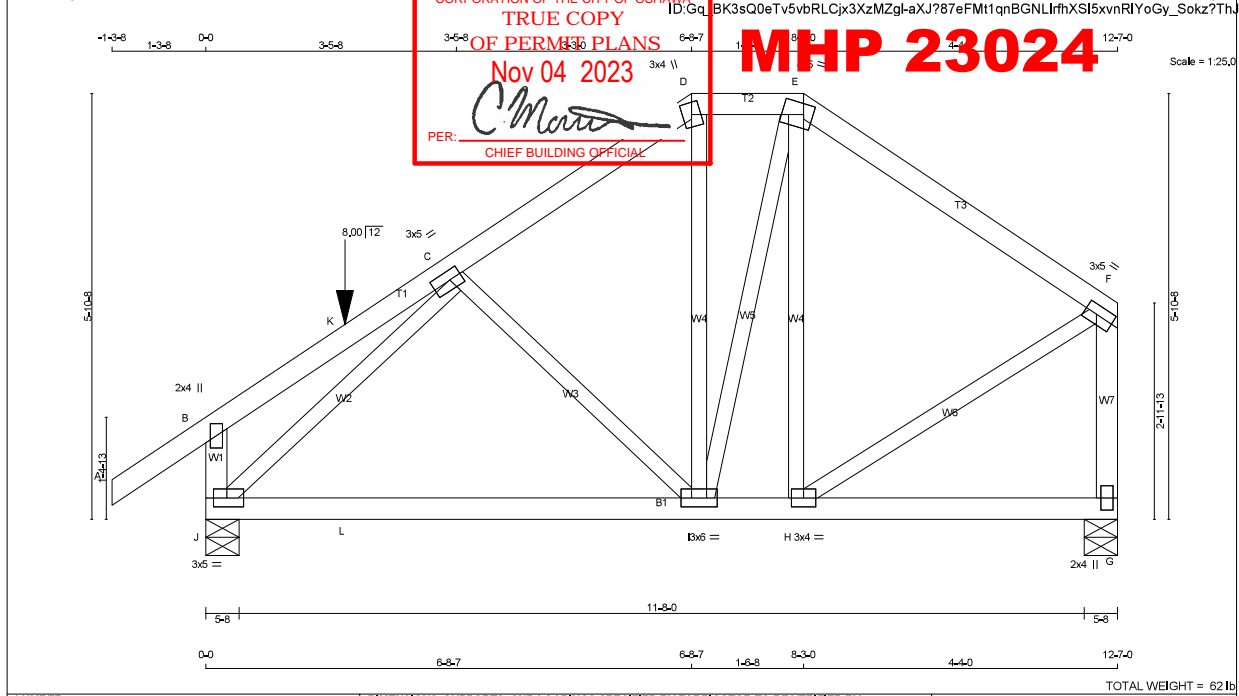
14. Design assumes manufactured in accordance with TPIC Quality criteria as outlined in Appendix G

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 23024



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 - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - H	2x4	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
J - K	2x4	DRY	No.2	SPF
K - L	2x3	DRY	No.2	SPF

ALL WEBS EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW+4	MT20	3.0	5.0	1.50	2.00
D	TMV+m	MT20	3.0	4.0		
E	TMVW+m	MT20	4.0	5.0	1.75	1.50
F	TMVW+4	MT20	3.0	5.0	1.50	2.00
G	BMV+1	MT20	2.0	4.0		
H	BMVW+4	MT20	3.0	4.0		
I	BMVW+4	MT20	3.0	6.0		
J	BMVW+4	MT20	3.0	5.0	1.50	2.25

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	UP	BRG	BRG	IN-SX	IN-SX
G	869	0	869	0	0	5-8	1-8		
J	1043	0	1043	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS
G	607	440 / 0	0 / 0
J	726	543 / 0	0 / 0

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

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. LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM TO			FR-TO				
A-B	0 / 45	-119.4	-119.4	0.18 (1)	10.00	C-I	-248 / 0	0.10 (1)	
B-K	0 / 28	-119.4	-119.4	0.24 (1)	6.25	I-D	0 / 89	0.02 (4)	
K-C	0 / 28	-119.4	-119.4	0.24 (1)	6.25	I-E	0 / 203	0.05 (1)	
C-D	-627 / 0	-119.4	-119.4	0.25 (1)	6.25	H-E	-243 / 0	0.13 (1)	
D-E	-500 / 0	-119.4	-119.4	0.06 (1)	6.25	J-C	-954 / 0	0.35 (1)	
E-F	-546 / 0	-119.4	-119.4	0.44 (1)	6.25	H-F	0 / 529	0.13 (1)	
F-G	-324 / 0	0.0	0.0	0.04 (1)	7.81				
G-F	-835 / 0	0.0	0.0	0.14 (1)	7.81				
J-L	0 / 678	-18.2	-18.2	0.25 (4)	10.00				
L-I	0 / 678	-18.2	-18.2	0.25 (4)	10.00				
I-H	0 / 449	-18.2	-18.2	0.24 (4)	10.00				
H-G	0 / 0	-18.2	-18.2	0.08 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	2-0-0	-20	-20		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. G/G

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 = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

+ADTL LOADS BASED ON 55 % OF GSL

LOADS APPLIED TO FIRST 2-0 OF SPAN MEASURED FROM THE LEFT.

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 088-14
- 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 (0.42")

CALCULATED VERT. DEFL.(LL) = L/999 (0.01")

ALLOWABLE DEFL.(TL)= L/360 (0.42")

CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.44/1.00 (E-F-1), BC=0.25/1.00 (I-J-4), WB=0.35/1.00 (C-J-1), SI=0.19/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

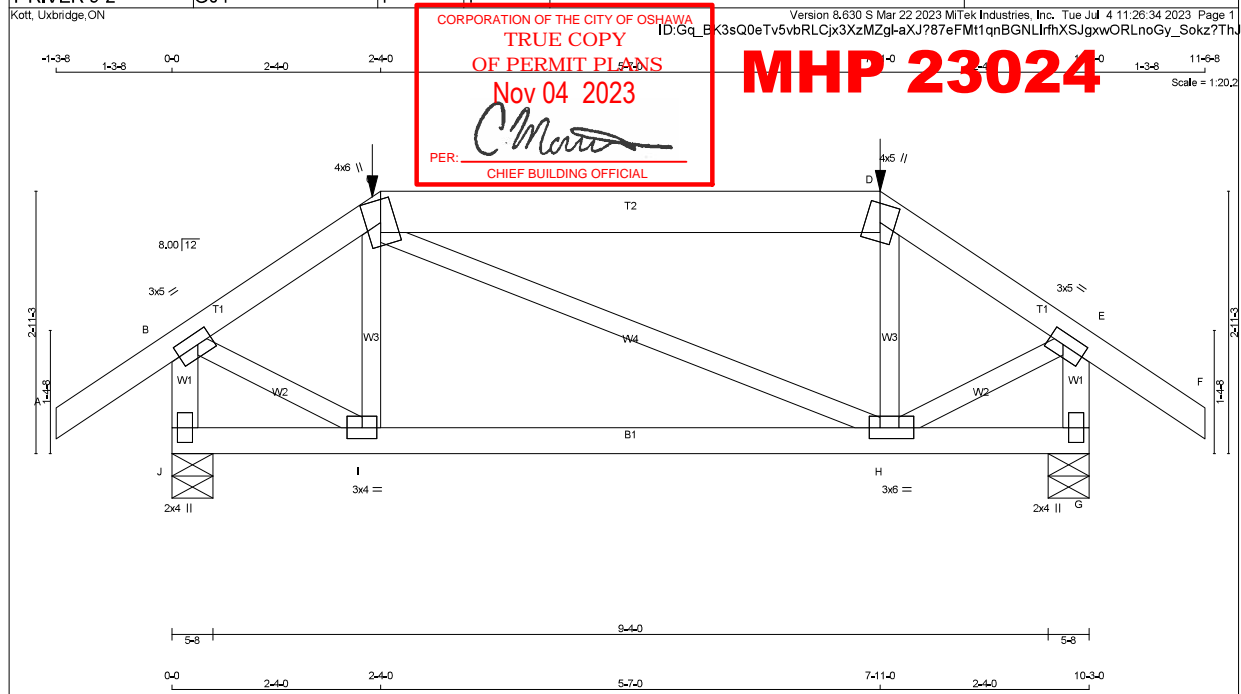
PLATE PLACEMENT TOL. = 0.250 inches


PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.25 (C) (INPUT = 1.00)





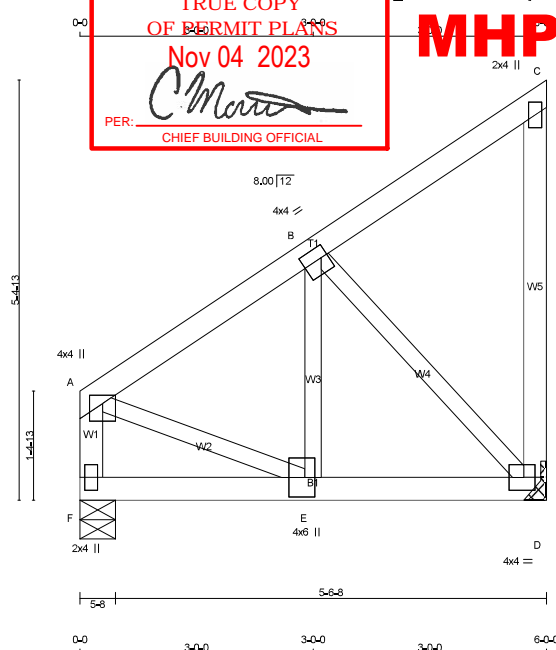
LUMBER		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER		TOTAL WEIGHT = 46 lbs	
N. L. G. A. RULES		BEARINGS		DESIGN CRITERIA	
CHORDS SIZE LUMBER DESCR.		FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQD BRG		SPECIFIED LOADS:	
A - C 2x4 DRY No.2 SPF		JT VERT 895 0 895 0 0 5-8 1-8		TOP CH. LL = 34.8 PSF	
C - D 2x6 DRY No.2 SPF		G 895 0 895 0 0 5-8 1-8		DL = 6.0 PSF	
D - F 2x4 DRY No.2 SPF				BOT CH. LL = 0.0 PSF	
J - B 2x4 DRY No.2 SPF				DL = 7.3 PSF	
G - E 2x4 DRY No.2 SPF				TOTAL LOAD = 48.1 PSF	
J - G 2x4 DRY No.2				SPACING = 24.0 IN. C/C	
ALL WEBS 2x3 DRY No.2		UNFACTORED REACTIONS		LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM	
EXCEPT		1ST CASE MAX./MIN. COMPONENT REACTIONS		GIRDER TYPE: CPrimeHip	
DRY: SEASONED LUMBER.		JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL		SIDE SETBACK = 2-4-0	
		J 622 469 / 0 0 / 0 0 / 0 0 / 0 153 / 0 0 / 0		END SETBACK = 2-4-0	
		G 622 469 / 0 0 / 0 0 / 0 0 / 0 153 / 0 0 / 0		END WALL WIDTH = 5-8	
		BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, G		CORNER FRAMING TYPE: CONVENTIONAL	
		BRACING		END JACK TYPE: CONVENTIONAL	
		TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.		APPLIED TO FRONT SIDE	
		MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.		- ADDTL LOADS BASED ON 55 % OF GSL.	
		ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015	
		LOADING		THIS DESIGN COMPLIES WITH:	
		TOTAL LOAD CASES: (4)		- PART 9 OF CBC 2018, NBC-2019AE	
		CHORDS		- PART 9 OF OBC 2012 (2019 AMENDMENT)	
		MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) CSI (LC) MAX. UNBRACED LENGTH FR-TO		- CSA 086-14	
		FR-TO		- TPIC 2014	
		A-B 0 / 45 -119.4 -119.4 0.18 (1) 10.00 I-C -160 / 28 0.03 (1)		(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	
		B-C -623 / 0 -119.4 -119.4 0.13 (1) 6.25 C-H 0 / 0 0.00 (1)		ALLOWABLE DEFL.(LL)= L/360 (0.34")	
		C-D -528 / 0 -115.7 -115.7 0.34 (1) 6.25 H-D -159 / 28 0.03 (1)		CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")	
		D-E -623 / 0 -119.4 -119.4 0.13 (1) 6.25 B-I 0 / 576 0.14 (1)		ALLOWABLE DEFL.(TL)= L/360 (0.34")	
		E-F 0 / 45 -119.4 -119.4 0.18 (1) 10.00 H-E 0 / 577 0.14 (1)		CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")	
		J-B -891 / 0 0.0 0.0 0.10 (1) 7.81		CSI TC=0.34/1.00 (C-D:1), BC=0.15/1.00 (H-I:1), WB=0.14/1.00 (E-H:1), SSI=0.21/1.00 (C-D:1)	
		G-E -891 / 0 0.0 0.0 0.10 (1) 7.81		DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00	
		J-I 0 / 0 -17.7 -17.7 0.10 (4) 10.00		COMPANION LIVE LOAD FACTOR = 1.00	
		I-H 0 / 528 -17.7 -17.7 0.15 (1) 10.00		TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.	
		H-G 0 / 0 -17.7 -17.7 0.10 (4) 10.00		NAIL VALUES	
		FACTORED CONCENTRATED LOADS (LBS)		PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)	
		JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE HEEL CONN.		MAX MIN MAX MIN MAX MIN	
		C 2-4-0 -39 -39 - FRONT VERT TOTAL - C1		MT20 650 371 1747 788 1987 1873	
		D 7-11-0 -39 -39 - FRONT VERT TOTAL - C1		PLATE PLACEMENT TOL. = 0.250 inches	
		CONNECTION REQUIREMENTS		PLATE ROTATION TOL. = 5.0 Deg.	
		1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.		JSI GRIP= 0.85 (E) (INPUT = 0.90)	
				JSI METAL= 0.23 (E) (INPUT = 1.00)	
MODULUS ENGINEERING LTD.					
					
REVIEW FOR TRUSS COMPONENT ONLY					
NOTE: ALTERING THIS DOCUMENT VOIDS THE ENGINEERS SEAL					



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



CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Nov 04 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL



Scale = 1/23,3

TOTAL WEIGHT = 291b

LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER		SPF	
F - A	2x4	DRY	No.2	SPF	
A - C	2x4	DRY	No.2	SPF	
D - C	2x4	DRY	No.2	SPF	
F - D	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TMVW+4	MT20	4.0	4.0	1.75	1.00
C	TMV+p	MT20	2.0	4.0		
D	BMVW+4	MT20	4.0	4.0	2.00	1.75
E	BMVW+4	MT20	4.0	6.0	3.00	1.50
F	BMV+4	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	GROSS REACTION	DOWN	UP	BRG	BRG
F	1459	0	1459	0	5-8
D	1459	0	1459	0	1-9

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D, MINIMUM BEARING LENGTH AT JOINT D = 1-9.

UNFACTORED REACTIONS

SNOW-ROOFED REACTION							
	1ST CASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1019	738 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0
D	1019	738 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.93 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		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO			
F-A	-1034 / 0	0.0 0.0 0.12 (1)	7.69 A-E 0 / 926 0.23 (1)
A-B	-1025 / 0	-119.4 -119.4 0.19 (1)	5.93 E-B 0 / 1038 0.26 (1)
B-C	-22 / 0	-119.4 -119.4 0.18 (1)	6.25 B-D -1248 / 0 0.38 (1)
D-C	-140 / 0	0.0 0.0 0.07 (1)	7.81
F-E	0 / 0	-366.7 -366.7 0.56 (1)	10.00
E-D	0 / 871	-366.7 -366.7 0.72 (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. G/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 12-7-0
END DISTANCE = 6-0-0
END SPAN CARRIED = 12-7-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- 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 CBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 085-14
- 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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.19/1.00 (A-B:1) , BC=0.72/1.00 (D-E:1) ,
WB=0.38/1.00 (B-D:1) , SSI=0.59/1.00 (E-F: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 (A) (INPUT = 0.90)
JSI METAL= 0.39 (E) (INPUT = 1.00)

MODULUS ENGINEERING LTD.

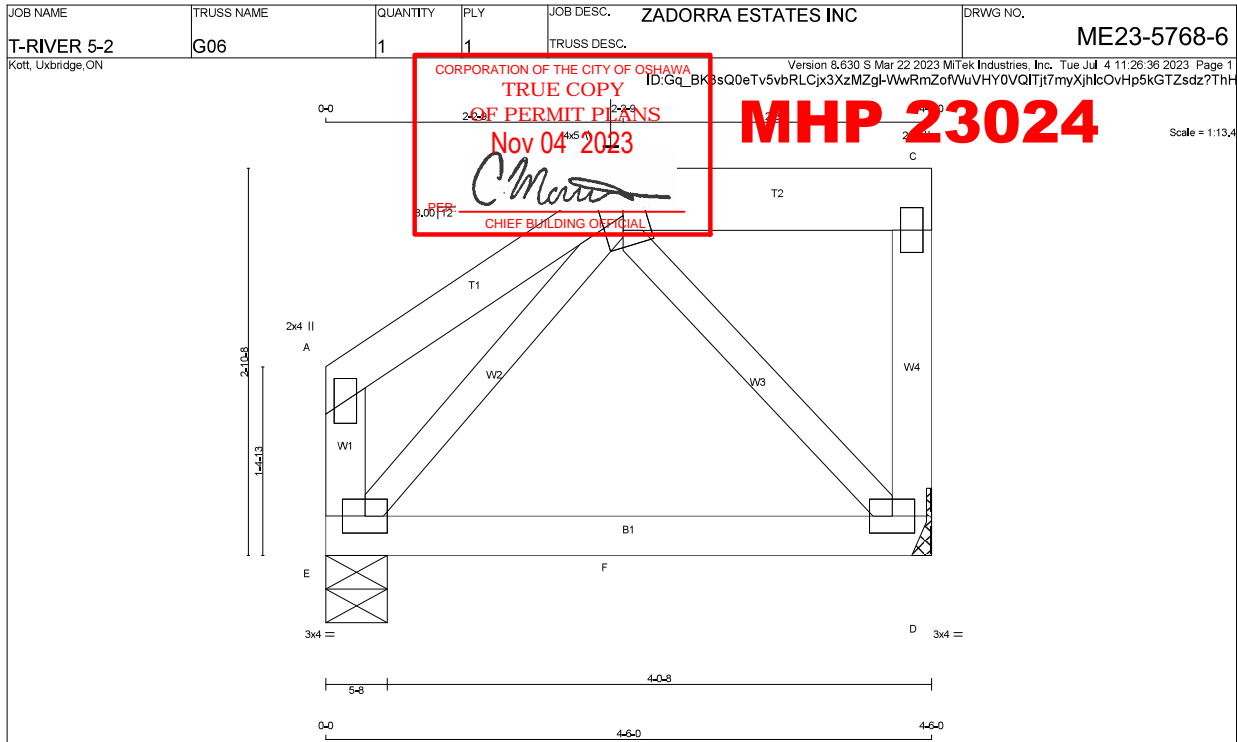


REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEER'S SEAL

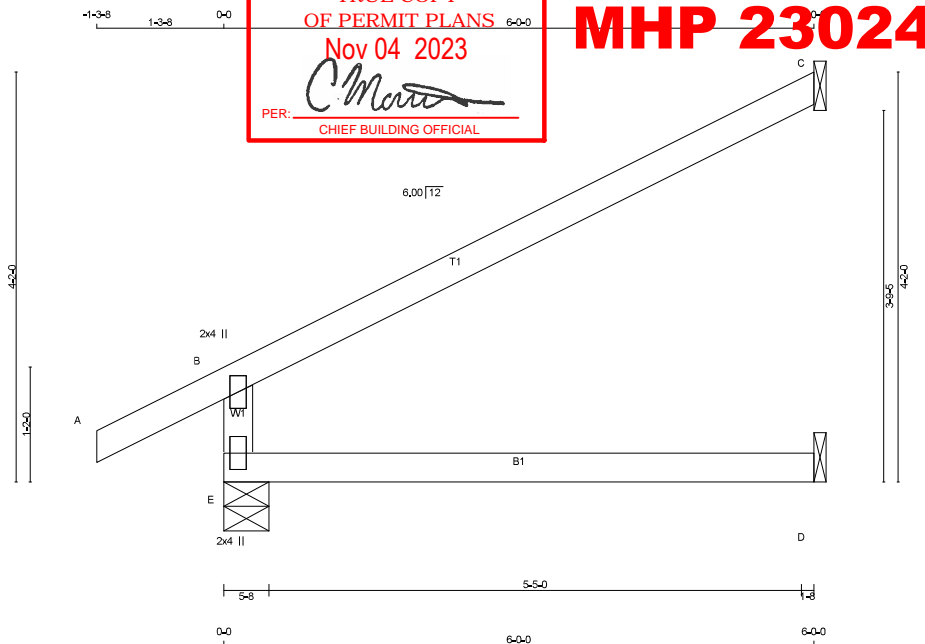
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER E - A 2x4 DRY No.2 A - B 2x4 DRY No.2 B - C 2x6 DRY No.2 D - C 2x4 DRY No.2 E - D 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 DRY, SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX E 319 0 319 0 0 5-8 1-8 D 310 0 310 0 0 MECHANICAL A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D, MINIMUM BEARING LENGTH AT JOINT D = 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 LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM GIRDER TYPE: CPrimeHip LEFT SETBACK = 2-2-9 RIGHT SETBACK = 0-0 END SETBACK = 2-2-9 END WALL WIDTH = 5-8 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 2-0-0 END DISTANCE = 4-6-0 END SPAN CARRIED = 2-0-0 END WALL WIDTH = 0-0 APPLIED TO BACK SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 / 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.(TL)= L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02") CSI: TC=0.11/1.00 (A-B:1) BC=0.12/1.00 (D-E:4) WB=0.04/1.00 (E-E:1) , SSI=0.09/1.00 (A-B: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) (PUJ) 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= 0.24 (E) (INPUT = 0.90) JSI METAL= 0.07 (A) (INPUT = 1.00)
PLATES (table is in inches) JT TYPE PLATES W LEN Y X A TMV+p MT20 2.0 4.0 B TTVW+m MT20 4.0 5.0 2.25 2.00 C TMV+p MT20 2.0 4.0 D BMVW1+ MT20 3.0 4.0 E BMVW1+ MT20 3.0 4.0		UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PER LIVE WIND DEAD SOIL E 222 163 / 0 0 / 0 0 / 0 59 / 0 0 / 0 D 217 158 / 0 0 / 0 0 / 0 58 / 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 = 10.00 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. UNBRACED LENGTH FR-TO E-A -132 / 0 0.0 0.0 0.01 (1) 7.81 E-B -197 / 0 0.04 (1) A-B 0 / 0 -119.4 -119.4 0.11 (1) 10.00 B-D -193 / 0 0.04 (1) B-C 0 / 0 -112.1 -112.1 0.05 (1) 10.00 D-C -128 / 0 0.0 0.0 0.02 (1) 7.81 WEBS MEMB. MAX. FACTORED FORCE (LBS) MAX. UNBRACED LENGTH FR-TO E-F 0 / 130 -17.1 -17.1 0.12 (4) 10.00 F-D 0 / 130 -17.1 -17.1 0.12 (4) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX+ MAX- FACE DIR. TYPE HEEL CONN. B 2-2-9 -31 -31 - FRONT VERT TOTAL - C1		CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Nov 04 2023
PER: *C. Morte*
CHIEF BUILDING OFFICIAL



Scale = 1:18.4

LUMBER

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

LUMBER
No.2
No.2
No.2

DESCR.
SPF
SPF
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	HORZ
E	674	0	674	0
C	269	0	269	0
D	45	0	51	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	468	355 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
C	184	157 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY 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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO			
E-B	-610 / 0	0.0	0.0 0.13 (4)	7.81			
A-B	0 / 36	-119.4	-119.4 0.16 (1)	10.00			
B-C	-40 / 0	-119.4	-119.4 0.73 (1)	6.25			
E-D	0 / 0	-18.2	-18.2 0.13 (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) = $L/999$ (0.03")

CSI: TC=0.73/1.00 (B-C:1) BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.31/1.00 (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) (PU)
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= 0.34 (B) (INPUT = 0.90)
JSI METAL= 0.25 (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-TC001 (VER 06/2017) BEFORE USE.
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SEE MTEK STANDARD DETAIL MSP2045 (FLOOR CONNECTION TO JOINT/S.L.C. D)

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C	<ul style="list-style-type: none"> - CSA U80-14 - TPIC 2014
BRACING	DESIGN ASSUMPTIONS

LOADING	ROOF LIVE LOAD
TOTAL LOAD CASES: (4)	ALLOWABLE DEF _L (LL)= L/360 (0.20") CALCULATED VERT. DEF _L = 0.1117 (0.009")

[illegible]| | | TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE |
[illegible]

		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)
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<p>MODULUS ENGINEERING LTD.</p>		
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 PROFESSIONAL ENGINEER

07/04/2023

07/04/2025
D. A. SHERMAN

100123373



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REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
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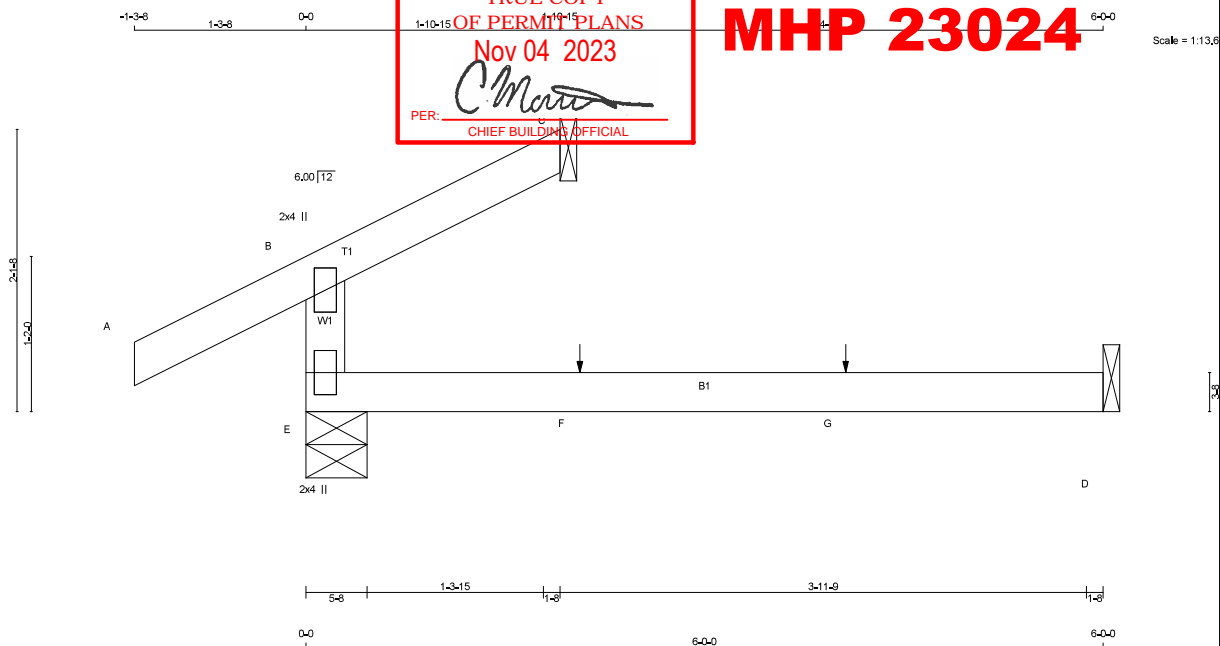
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Street, Suite 312, Alexandria, VA 22314 or www.sbcindustry.com

CORPORATION OF THE CITY OF OSHAWA
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OF PERMIT PLANS
Nov 04 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Tue Jul 4 11:26:41 2023 Page 1
ID: Gc_BK3sQ0eTv5vbRLCjx3XzMZgl-tEfCwjei1vq6GJJFTT0FZjmuHaXktYAKYqz7THC



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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
E	368	0	368	0	0	5-8	1-8	
C	86	0	86	0	0	1-8	1-8	
D	45	0	51	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
	SNOW	LIVE	PERM	LIVE	WIND	DEAD	SOIL	DEAD	SOIL	
E	259	177 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0	0 / 0	0 / 0	
C	59	50 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0	0 / 0	0 / 0	
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0	0 / 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		FACTORED		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
E-B	-304 / 0	0.0 0.0 0.13 (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-F	0 / 0	-18.2 -18.2 0.13 (4)	10.00		
F-G	0 / 0	-18.2 -18.2 0.13 (4)	10.00		
G-D	0 / 0	-18.2 -18.2 0.13 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	2-0-12	1	1	1	FRONT	VERT	TOTAL	—	C1
G	4-0-12	1	1	1	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

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

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 (0.03")

CSI TC=0.16/1.00 (A-B 1), BC=0.13/1.00 (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 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) (PU)
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= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

MODULUS ENGINEERING LTD.

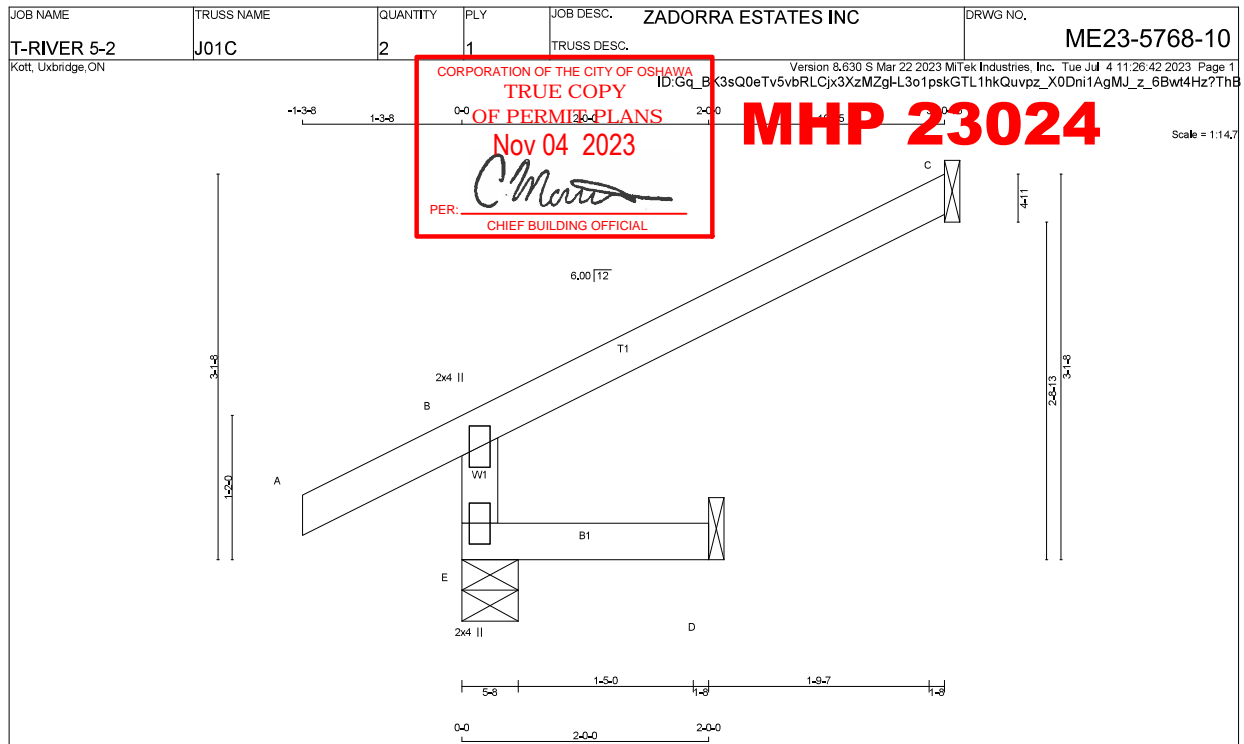


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Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design parameters and proper incorporation of component is responsibility of building designer - 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
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<div>LUMBER</div> <div>N. L. G. A. RULES</div> <div>CHORDS SIZE LUMBER</div> <div>E - B 2x4 DRY No.2</div> <div>A - C 2x4 DRY No.2</div> <div>E - D 2x4 DRY No.2</div> <div>DRY: SEASONED LUMBER.</div>		<div>DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER</div> <div>BEARINGS</div> <div><table><tr><td></td><td>FACTORED</td><td>MAXIMUM FACTORED</td><td>INPUT</td><td>REQRD</td></tr><tr><td></td><td>GROSS REACTION</td><td>GROSS REACTION</td><td>BRG</td><td>BRG</td></tr><tr><td>JT</td><td>VERT</td><td>DOWN</td><td>HORIZ</td><td>UPLIFT</td></tr><tr><td>E</td><td>474</td><td>0</td><td>474</td><td>0</td></tr><tr><td>C</td><td>175</td><td>0</td><td>175</td><td>0</td></tr><tr><td>D</td><td>16</td><td>0</td><td>18</td><td>0</td></tr></table></div> <div>SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D</div> <div>UNFACTORED REACTIONS</div> <div><table><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM.LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>E</td><td>326</td><td>265 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>62 / 0</td><td>0 / 0</td></tr><tr><td>C</td><td>120</td><td>102 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>18 / 0</td><td>0 / 0</td></tr><tr><td>D</td><td>13</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>13 / 0</td><td>0 / 0</td></tr></table></div> <div>BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E</div> <div>BRACING</div> <div>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.</div> <div>MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.</div> <div>ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.</div> <div>LOADING</div> <div>TOTAL LOAD CASES: (5)</div> <div><table><tr><td colspan="2">CHORDS</td><td colspan="2">FACTORED</td><td colspan="2">W E B S</td></tr><tr><td>MEMB.</td><td>FORCE (LBS)</td><td>VERT.</td><td>LOAD LC1</td><td>MAX. (PLF)</td><td>MEMB. FORCE (LBS)</td></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>CS1 (LC)</td><td>UNBRAC LENGTH FR-TO</td></tr><tr><td>E-B</td><td>-454 / 0</td><td>0.0</td><td>0.0</td><td>0.01 (4)</td><td>7.81</td></tr><tr><td>A-B</td><td>0 / 36</td><td>-119.4</td><td>-119.4</td><td>0.16 (1)</td><td>10.00</td></tr><tr><td>B-C</td><td>-26 / 0</td><td>-119.4</td><td>-119.4</td><td>0.31 (1)</td><td>6.25</td></tr><tr><td>E-D</td><td>0 / 0</td><td>-18.2</td><td>-18.2</td><td>0.02 (4)</td><td>10.00</td></tr></table></div> <div>CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN</div> <div>PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.</div>			FACTORED	MAXIMUM FACTORED	INPUT	REQRD		GROSS REACTION	GROSS REACTION	BRG	BRG	JT	VERT	DOWN	HORIZ	UPLIFT	E	474	0	474	0	C	175	0	175	0	D	16	0	18	0	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	CHORDS		FACTORED		W E B S		MEMB.	FORCE (LBS)	VERT.	LOAD LC1	MAX. (PLF)	MEMB. FORCE (LBS)	FR-TO		FROM	TO	CS1 (LC)	UNBRAC LENGTH 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	<div>DESIGN CRITERIA</div> <div>SPECIFIED LOADS:</div> <div>TOP CH. LL = 34.8 PSF</div> <div>DL = 6.0 PSF</div> <div>BOT CH. LL = 0.0 PSF</div> <div>DL = 7.3 PSF</div> <div>TOTAL LOAD = 48.1 PSF</div> <div>SPACING = 24.0 IN.CIC</div> <div>THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015</div> <div>THIS DESIGN COMPLIES WITH:</div> <div>- PART 9 OF BCBC 2018, NBC-2019AE</div> <div>- PART 9 OF OBC 2012 (2019 AMENDMENT)</div> <div>- CSA 086-14</div> <div>- TPIC 2014</div> <div>DESIGN ASSUMPTIONS</div> <div>-OVERHANG NOT TO BE ALTERED OR CUT OFF.</div> <div>(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</div> <div>ALLOWABLE DEFL.(LL)= L/360 (0.19")</div> <div>CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")</div> <div>ALLOWABLE DEFL.(TL)= L/360 (0.19")</div> <div>CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")</div> <div>CSI TC=0.31/1.00 (B-C:1) BC=0.02/1.00 (D-E:4) ,</div> <div>WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (B-C:1)</div> <div>DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10</div> <div>COMP=1.10 SHEAR=1.10 TENS=1.10</div> <div>COMPANION LIVE LOAD FACTOR = 1.00</div> <div>TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .</div> <div>NAIL VALUES</div> <div>PLATE GRIP(DRY) SHEAR SECTION</div> <div>(PSI) (PLI) (PLI)</div> <div>MAX MIN MAX MIN MAX MIN</div> <div>MT20 650 371 1747 788 1987 1873</div> <div>PLATE PLACEMENT TOL. = 0.250 inches</div> <div>PLATE ROTATION TOL. = 5.0 Deg.</div> <div>JSI GRIP= 0.25 (B) (INPUT = 0.90)</div> <div>JSI METAL= 0.19 (B) (INPUT = 1.00)</div>	
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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							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	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.

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

LOADING

LOADING
TOTAL LOAD CASES: (5)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)	VERT. LOAD (LBS)	MAX CSI (LC)	MAX. UNIF. LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO			FR-TO			
E-B	-304 / 0	0.0	0.0	0.01 (4)	7.81				
A-B	0 / 136	-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. 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), SSI=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

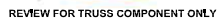
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)



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-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.bcsindustrv.com



