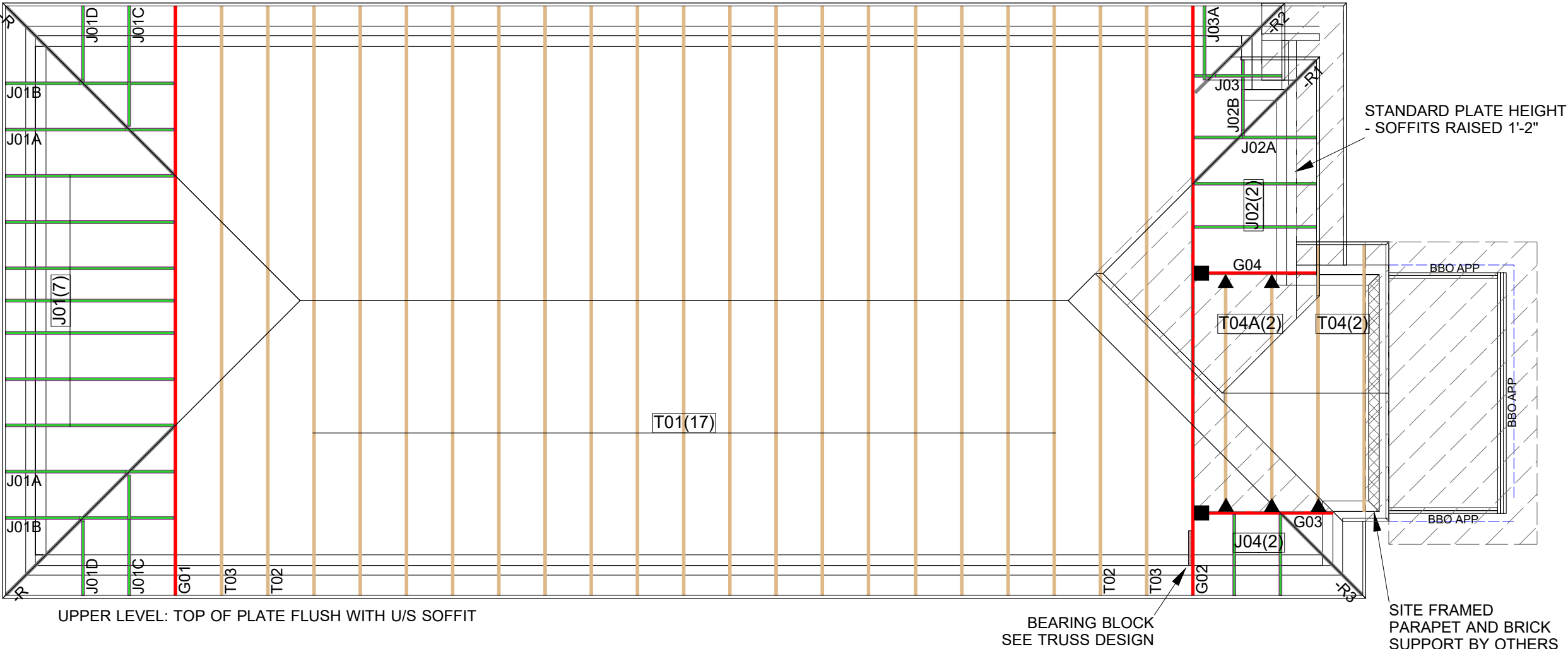


CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Nov 04 2023
PER: 
CHIEF BUILDING OFFICIAL

MHP 23024



Hanger Name	Symbol	QTY
LUS24	▲	5
LJS26DS	■	2



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 #	23-00083R0
Address	ZADORRA ESTATES ZADORRA ESTATES INC OSHAWA, ON
Model	RIVER 5-3
Sales Rep	RALPH MIRIGELLO
Designer	LI
Date	2023-04-27
Path	C:\MITEK\CA\JOBS\GREENPARK GROUP\ZADORRA ESTATES\MODELS\RIVER 5\RIVER 5-3\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

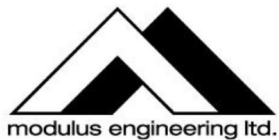
Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

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 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

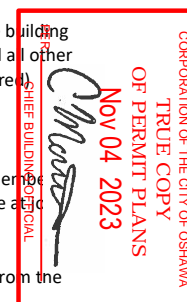
12. Install and load vertically unless otherwise noted

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

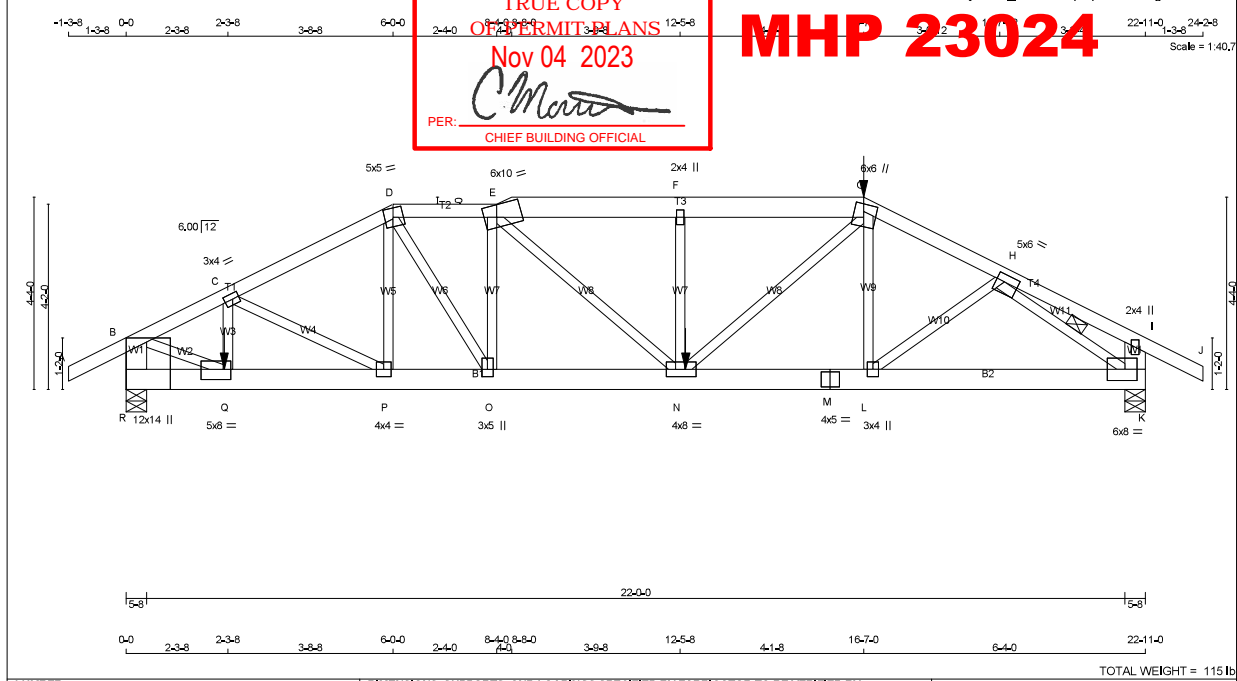
14. Design assumes manufactured in accordance with TPIC Quality criteria as outlined in Appendix G

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
D - E	2x4	DRY	No.2
E - G	2x6	DRY	No.2
G - J	2x4	DRY	No.2
R - B	2x6	DRY	No.2
K - I	2x6	DRY	No.2
R - M	2x6	DRY	No.2
M - K	2x6	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				
C	TMWW4	MT20	3.0	4.0 1.50 1.75
D	TTWW-m	MT20	5.0	5.0 2.50 2.25
E	TSWW-m	MT20	6.0	10.0 3.25 3.25
F	TMW+w	MT20	2.0	4.0
G	TTWW+m	MT20	6.0	6.0 2.00 2.50
H	TMWW4	MT20	5.0	6.0 2.00 2.25
I	TMV+p	MT20	2.0	4.0
K	BMWW1-t	MT20	6.0	8.0 3.00 3.25
L	BMWW1-t	MT20	3.0	4.0
M	BS-t	MT20	4.0	5.0
N	BMWWW4	MT20	4.0	8.0 2.00 2.50
O	BMWW1-t	MT20	3.0	5.0 2.00 1.50
P	BMWW4	MT20	4.0	4.0
Q	BMWW4	MT20	5.0	8.0 2.75 2.00
R				
R	TMBMWW1*t	MT20	12.0	14.0 12.75 Edge

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

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	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
R	3428	0	3428	0	0	5-8	5-8		
K	2734	0	2734	0	0	5-8	2-15		

UNFACTORED REACTIONS						
JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS			
R	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
R	2393	1750 / 0	0 / 0	0 / 0	0 / 0	643 / 0
K	1908	1393 / 0	0 / 0	0 / 0	0 / 0	515 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, K
BEARING SIZE FACTOR = 1.15 AT JNT(S) R (BASED ON SUPPORT DEPTH = 1-8)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3,17 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 HW.
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									
MEMB.	MAX. FACTORED	FORCE	VERT. LOAD	LC1	MAX	MAX	MEMB.	MAX. FACTORED	FORCE
	(LBS)	(PLF)	CSI (LC)	UNBRAC				(LBS)	MAX
FR-TO		FROM	TO	LENGTH	FR-TO				CSI (LC)
A-B	0 / 36	-119.4	-119.4	0.17 (1)	10.00	Q-C	-122 / 25	0.02 (1)	
B-C	-4031 / 0	-119.4	-119.4	0.36 (1)	3.17	C-P	-342 / 0	0.10 (1)	
C-D	-3727 / 0	-119.4	-119.4	0.47 (1)	3.20	P-D	0 / 332	0.08 (1)	
D-E	-3853 / 0	-119.4	-119.4	0.31 (1)	3.30	D-O	0 / 1065	0.26 (1)	
E-F	-4473 / 0	-119.4	-119.4	0.24 (1)	3.89	E-N	0 / 817	0.20 (1)	
F-G	-4474 / 0	-165.5	-165.5	0.32 (1)	3.80	N-F	-657 / 0	0.17 (1)	
G-H	-3831 / 0	-119.4	-119.4	0.37 (1)	3.26	N-G	0 / 1437	0.36 (1)	
H-I	0 / 14	-119.4	-119.4	0.16 (1)	10.00	L-G	-55 / 92	0.04 (4)	
I-J	0 / 36	-119.4	-119.4	0.17 (1)	10.00	L-H	0 / 360	0.09 (1)	
R-B	-3292 / 0	0.0	0.0	0.23 (1)	5.80	B-Q	0 / 3824	0.95 (1)	
K-I	-321 / 0	0.0	0.0	0.02 (1)	7.81	H-K	-3918 / 0	0.70 (1)	
						O-E	-865 / 0	0.22 (1)	
R-Q	0 / 0	-18.2	-18.2	0.19 (1)	10.00				
Q-P	0 / 3622	-18.2	-18.2	0.86 (1)	10.00				
P-O	0 / 3311	-18.2	-18.2	0.47 (1)	10.00				
O-N	0 / 3875	-18.2	-18.2	0.58 (1)	10.00				
N-M	0 / 3430	-25.3	-25.3	0.52 (1)	10.00				
M-L	0 / 3430	-25.3	-25.3	0.52 (1)	10.00				
L-K	0 / 3144	-25.3	-25.3	0.49 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	16-7-0	-321	-321	---	FRONT	VERT	TOTAL	---	C1
N	12-7-0	-844	-844	---	FRONT	VERT	TOTAL	---	C1
Q	2-2-8	-1253	-1253	---	FRONT	VERT	TOTAL	---	C1

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

DESIGN CRITERIA									
*** SPECIAL LOADS ANALYSIS ***									
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.									
LOADS WERE DERIVED FROM USER INPUT									
NO FURTHER MODIFICATIONS WERE MADE									
SPECIFIED LOADS:									
TOP CH.	LL	=	34.8	PSF					
BOT CH.	LL	=	6.0	PSF					
	DL	=	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 = 6-0-0
RIGHT SETBACK = 6-5-8
END SETBACK = 4-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF G.S.L.
LOADS APPLIED TO FIRST 10-4-0 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC2018, 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/960 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/960 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI TC=0.47/1.00 (C-D 1) BC=0.66/1.00 (P-Q 1) WB=0.95/1.00 (B-Q 1) SSI=0.25/1.00 (F-G 1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.91 (H) (INPUT = 1.00)





DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 240 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE
OF 2.0/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2'-2-8
RIGHT SETBACK = 0'-0
END SETBACK = 2'-2-8
END WALL WIDTH = 5'-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADTTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 0'-0
START SPAN CARRIED = 10'-3-0
END DISTANCE = 6'-0-0
END SPAN CARRIED = 10'-3-0
END WALL WIDTH = 0'-0
APPLIED TO BACK SIDE OF BOTTOM CHORD.
- ADTTL 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 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) = 1/360 (0,20")
CALCULATED VERT. DEFL.(LL) = 1/999 (0,07")
ALLOWABLE DEFL.(TL) = 1/360 (0,20")
CALCULATED VERT. DEFL.(TL) = 1/600 (0,12")

CSI TC=0,15/1,00 (B-C-1), BC=0,78/1,00 (D-E-1),
WB=0,37/1,00 (B-D-1), SSI=0,59/1,00 (D-E-1)

DOL LUMBER=1,00 NAIL=1,00 LS BEND=1,00
COMP=1,00 SHEAR=1,00 TENS=1,00

COMPANION LINE LOAD FACTOR = 1,00

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

NAIL VALUES

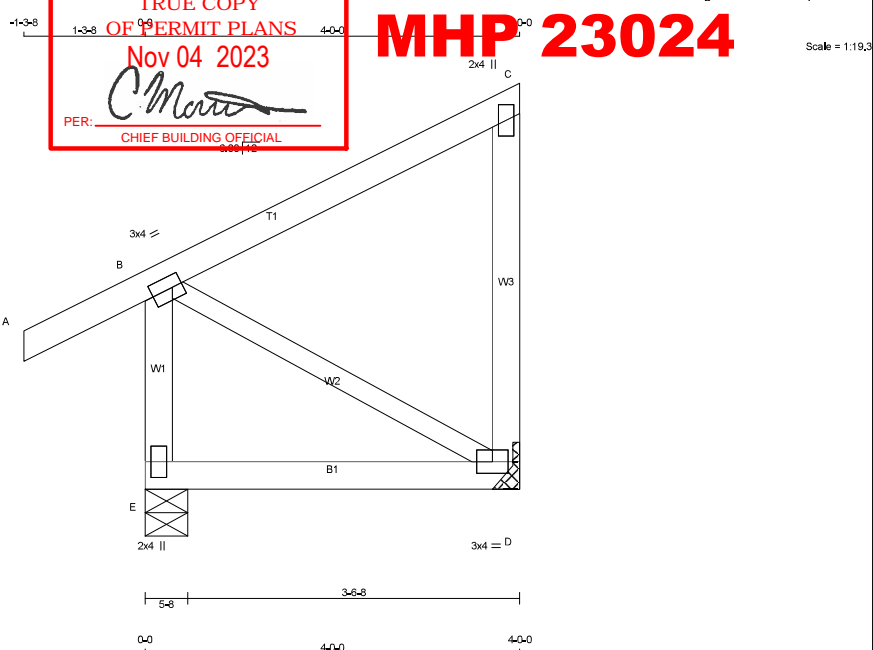
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873

PLATE PLACEMENT TOL = 0,250 inches

PLATE ROTATION TOL = 5,0 Deg.

JSI GRIP= 0,90 (B) (INPUT = 0,90)
JSI METAL= 0,37 (B) (INPUT = 1,00)





LUMBER				DESCR.	
N, L, G, A, RULES	CHORDS	SIZE	LUMBER	SPF	
E - B	2x4	DRY	No.2	SPF	
A - C	2x4	DRY	No.2	SPF	
D - C	2x4	DRY	No.2	SPF	
E - D	2x4	DRY	2100F 1.8E	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW4	MT20	3.0	4.0	1.50	1.25
C	TMV+p	MT20	2.0	4.0		
D	BMVW1+1	MT20	3.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	DOWN	UP	BRG	BRG
E	1005	0	1005	0	1-8
D	843	0	843	0	MECHANICAL

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	700	521 / 0	0 / 0	0 / 0	0 / 0	179 / 0	0 / 0
D	589	426 / 0	0 / 0	0 / 0	0 / 0	163 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E (BASED ON SUPPORT DEPTH = 1-8)

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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
E-B	-401 / 0	B-D	0 / 0
A-B	0 / 36		
B-C	0 / 0		
D-C	-239 / 0		
E-D	0 / 0		

DESIGN CRITERIA

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

SPACING = 24.0 IN. G/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 10-3-0
END DISTANCE = 4-0-0
END SPAN CARRIED = 10-3-0
END WALL WIDTH = 0-0
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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/559 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/360 (0.16")

CSI TC=0.36/1.00 (B-C.1) , BC=0.60/1.00 (D-E.1) , WB=0.00/1.00 (B-D.1) , SSI=0.52/1.00 (D-E.1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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= 0.35 (B) (INPUT = 0.90)
JSI METAL= 0.10 (C) (INPUT = 1.00)

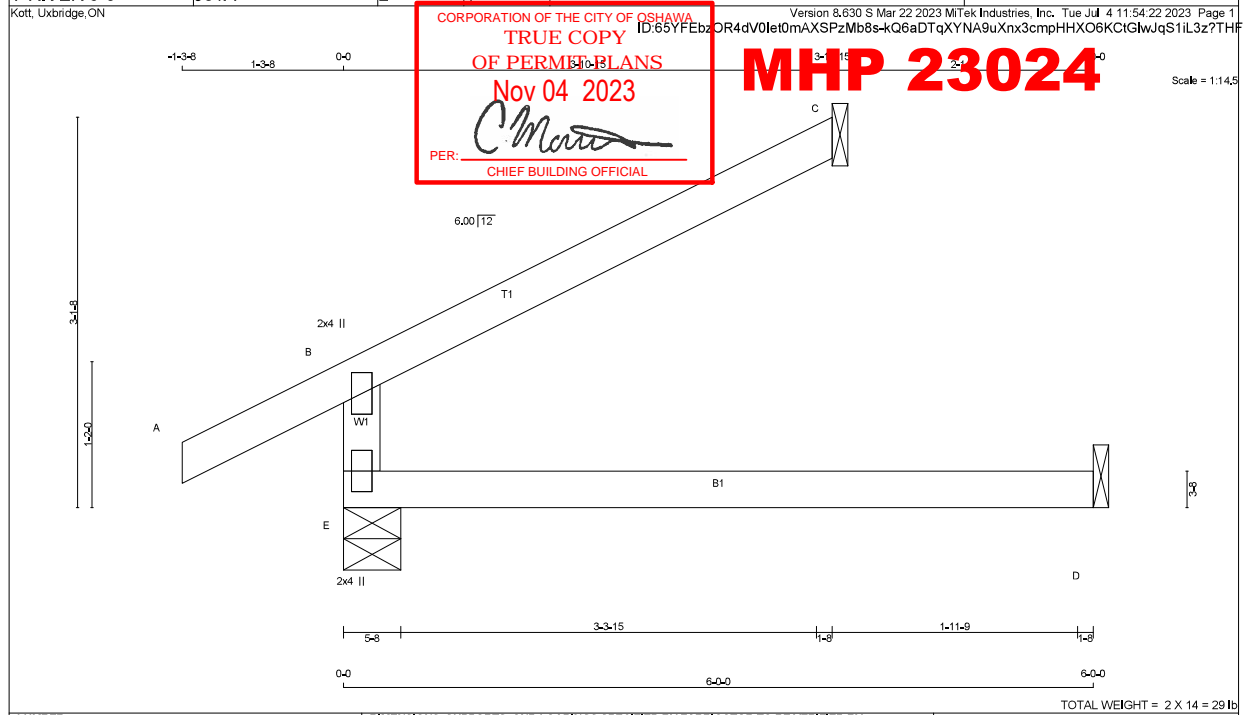




TOTAL WEIGHT = $7 \times 17 = 120 \text{ lb}$

DRY: SEASONED LUMBER.





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.

DESCR.

SPF

SPF

SPF

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	DOWN	HORZ	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

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	362	265 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
C	120	102 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		W E B S	
MEMB.	FACTORED FORCE (LBS)	VERT. (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB. FACTORED FORCE (LBS)
FR-TO		FROM	TO		FR-TO
E-B	-454 / 0	0.0	0.0	0.13 (4)	7.81
A-B	0 / 36	-119.4	-119.4	0.16 (1)	10.00
B-C	-26 / 0	-119.4	-119.4	0.31 (1)	6.25
E-D	0 / 0	-18.2	-18.2	0.13 (4)	10.00

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 = 240 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=0.31/1.00 (B-C:1) . BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=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 = 0.90)

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

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



SEE MTEK 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	- CSA 088-14 - TPIC 2014
--	-----------------------------

LOADING
TOTAL LOAD CASES: (4)

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

SPACING = 24.0 IN. C/C

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

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

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")
--

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

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

PLATE PLACEMENT TOL. = 0.250 inches

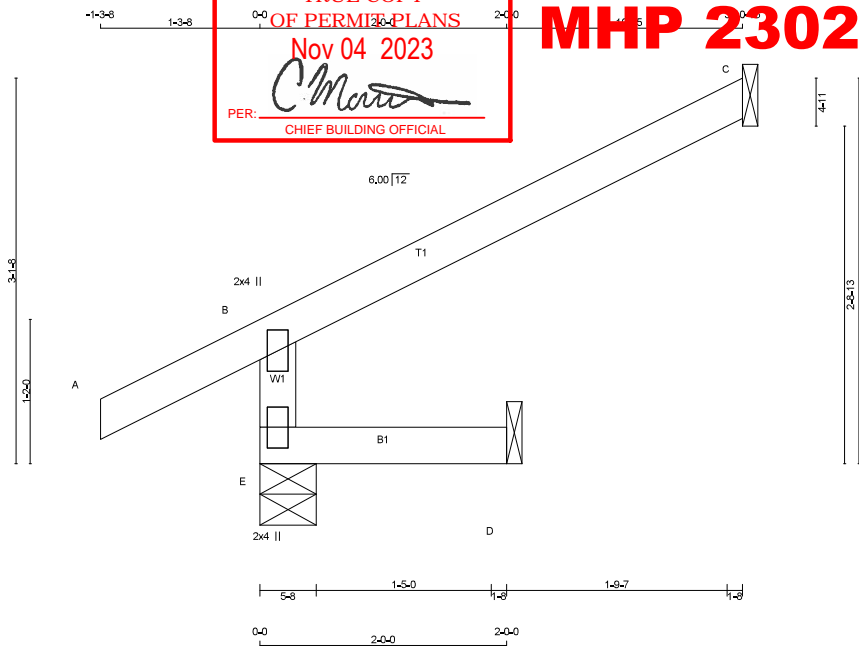
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CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Nov 04 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Tue Jul 4 11:54:24 2023 Page 1
ID: 65YFEBzOR4dV0let0mAXSPzMb8s-gpDKe9m4_Qt7qxKA1oHNidjc7wBkfQcHmWpPz?THD

MHP 23024

Scale = 1:14.7



TOTAL WEIGHT = 2 X 10 = 20 lb

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	474	0	474	0	5-8	1-8
C	175	0	175	0	1-8	1-8
D	16	0	18	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	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)

MEMB.	CHORDS		W E B S	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
E-B	-454 / 0	0.0	0.0	0.01 (4)
A-B	0 / 36	-119.4	-119.4	0.16 (1)
B-C	-26 / 0	-119.4	-119.4	0.31 (1)
E-D	0 / 0	-18.2	-18.2	0.02 (4)

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 CBC 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) , SSI=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 (PSI)	SECTION (PLI)
MT20	650	371	1747

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.



REVIEW FOR TRUSS COMPONENT ONLY

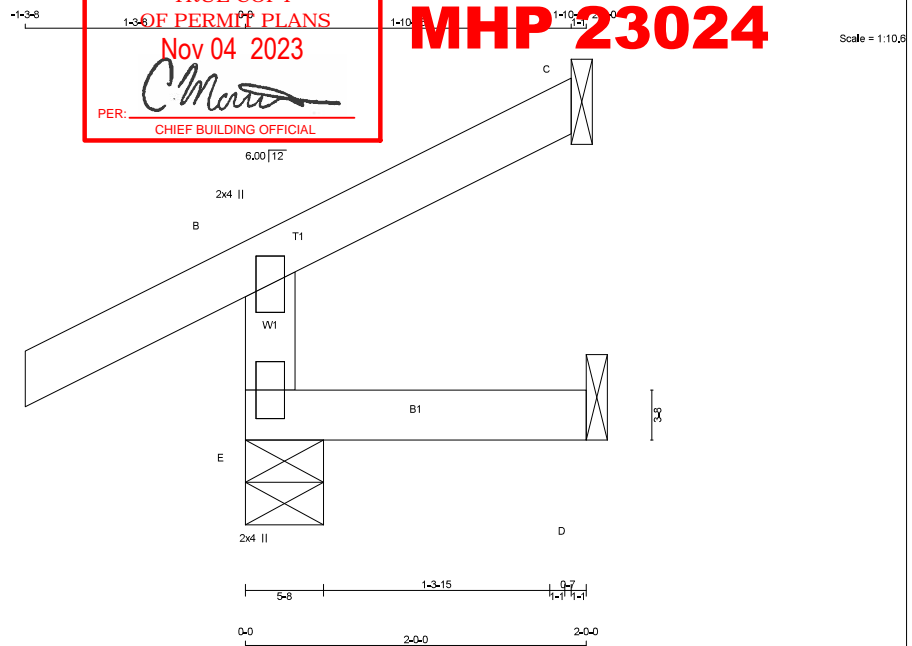
NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEER'S SEAL

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 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
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.sbindustry.com



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Nov 04 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Tue Jul 4 11:54:26 2023 Page 1
ID: 657FEbzOR4dV0le0mAXSPzMB8s-dBL53qt2bcgbN85jSrdS75XbfbZww4?wUqz7THB



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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	324	0	324	0	5-8	1-8
C	86	0	86	0	1-8	1-8
D	16	0	18	0	1-8	1-8

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

UNFACTORED REACTIONS							
	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	224	177 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	59	50 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		W E B S	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)
FR-TO						
E-B	-304 / 0	0.0	0.0	0.01 (4)	7.81	
A-B	0 / 36	-119.4	-119.4	0.16 (1)	10.00	
B-C	-12 / 0	-119.4	-119.4	0.07 (1)	6.25	
E-D	0 / 0	-18.2	-18.2	0.02 (4)	10.00	

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

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

SPACING = 24.0 IN. G/C

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

MODULUS ENGINEERING LTD.



REVIEW FOR TRUSS COMPONENT ONLY

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