MiTek Canada, Inc.
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Bradford, ON.Canada L3Z 4L5
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July 20,2022

Re: J22-1371-A
Larry Cox

The truss drawing(s) referenced below have been prepared by or for MiTek Canada, Inc. under my direct supervision based on the parameters provided by Structural Truss Systems Div (CA).

Pages or sheets covered by this seal: P7327635 thru P7327636

The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with TPIC. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek's customer's file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design. Engineering Services provided by MiTek Canada, Inc

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. Larry Cox	DRWG NO.
J22-1371-A	T01	2	1	TRUSS DESC.	P7327635

Structural Truss Systems Div (CA), Fort Macleod, AB - T0L 0Z0, Version 8.610 S May 25 2022 MiTek Industries, Inc. Wed Jul 20 08:36:35 2022 Page 1

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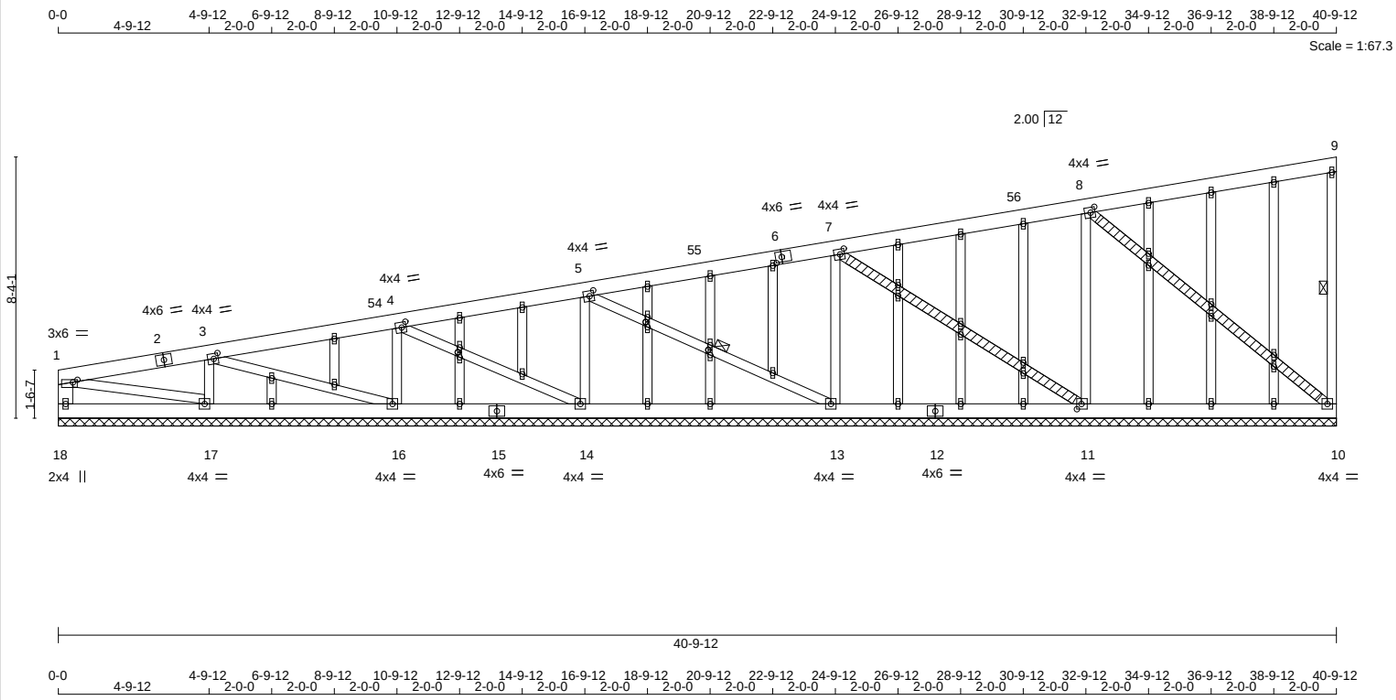

TOTAL WEIGHT = 2 X 289 = 578 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
1 - 2	2x6	DRY	No.2	SPF
2 - 6	2x6	DRY	No.2	SPF
6 - 9	2x6	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
18 - 1	2x6	DRY	No.2	SPF
18 - 15	2x6	DRY	No.2	SPF
15 - 12	2x6	DRY	No.2	SPF
12 - 10	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
ALL GABLE WEBS	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	3.0	6.0	1.00	1.75
2	TS-t	MT20	4.0	6.0		
3, 4, 5, 7, 8						
3	TMWW-t	MT20	4.0	4.0	2.00	1.75
6	TS-t	MT20	4.0	6.0	2.00	2.25
9	TMV+p	MT20	1.5	4.0		
10	BMVW1-t	MT20	4.0	4.0		
11	BMWW1-t	MT20	4.0	4.0	2.00	1.75
12	BS-t	MT20	4.0	6.0		
13, 14, 16, 17						
13	BMWW1-t	MT20	4.0	4.0		
15	BS-t	MT20	4.0	6.0		
18	BMV1+p	MT20	2.0	4.0		
19, 20, 21, 21, 22, 23, 24, 24, 25, 26, 27, 27, 28, 29, 30, 30, 31, 32, 33, 33, 34, 35, 36, 36, 37, 38, 39, 40, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53						
19	NP+w	MT20	1.5	4.0		
41, 41, 42, 42, 47, 47						
41	NP+w	MT20	1.5	4.0	1.75	0.75

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
10	860	0	896	0	-146	40-9-12 (14-0-0)	40-9-12
18	449	0	449	355	-47	40-9-12 (14-0-0)	40-9-12
17	1400	0	1419	0	-207	40-9-12 (14-0-0)	40-9-12
16	1310	0	1317	0	-188	40-9-12 (14-0-0)	40-9-12
14	1661	0	1673	0	-243	40-9-12 (14-0-0)	40-9-12
13	1780	0	1790	0	-252	40-9-12 (14-0-0)	40-9-12
11	1946	0	1951	0	-273	40-9-12 (14-0-0)	40-9-12

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT 10 FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 18 FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 17 FOR 207 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 16 FOR 188 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 14 FOR 243 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 13 FOR 252 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 11 FOR 273 LBS FACTORED UPLIFT

PROVIDE FOR 355 LBS FACTORED HORIZONTAL REACTION AT JOINT 18

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	619	428 / 0	61 / 0	0 / 0	0 / -148	154 / 0	0 / 0
18	324	208 / 0	34 / 0	0 / 0	31 / -57	82 / 0	0 / 0
17	1016	651 / 0	118 / 0	0 / 0	0 / -224	259 / 0	0 / 0
16	950	604 / 0	109 / 0	0 / 0	0 / -205	242 / 0	0 / 0
14	1205	766 / 0	140 / 0	0 / 0	0 / -263	307 / 0	0 / 0
13	1293	816 / 0	153 / 0	0 / 0	0 / -277	331 / 0	0 / 0
11	1416	880 / 0	175 / 0	0 / 0	0 / -303	365 / 0	0 / 0
HORIZONTAL REACTIONS							
18	---	0 / 0	0 / 0	0 / 0	254 / 0	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 18, 17, 16, 14, 13, 11

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x4 DRY SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 9-10, 5-13. DBS = 20-0-0 . CBF = 79 LBS.
2x4 DRY SPF No.2 SCAB BRACE AT 7-11, 8-10

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

FASTEN SCAB BRACE TO ONE FACE OF WEBS AS PER MITEK STANDARD DETAIL MSD2015-P. BRACE MUST COVER AT LEAST 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (32)

CHORDS						WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
1- 2	-122 / 22		-194.1	-194.1	0.41 (31)	6.25	17- 3	-1217 / 252	0.13 (31)
2- 3	-122 / 22		-194.1	-194.1	0.41 (31)	6.25	3-16	-7 / 60	0.01 (32)
3-54	-185 / 41		-194.1	-194.1	0.42 (31)	6.25	16- 4	-1119 / 228	0.14 (29)
54- 4	-185 / 41		-194.1	-194.1	0.42 (31)	6.25	4-14	-2 / 64	0.01 (30)
4- 5	-213 / 58		-194.1	-194.1	0.60 (32)	6.25	14- 5	-1434 / 294	0.25 (32)
5-55	-245 / 77		-194.1	-194.1	0.72 (25)	6.25	5-13	-40 / 88	0.02 (20)
55- 6	-245 / 77		-194.1	-194.1	0.72 (25)	6.25	13- 7	-1506 / 307	0.46 (25)
6- 7	-245 / 77		-194.1	-194.1	0.72 (25)	6.25	7-11	-123 / 52	0.09 (22)
7-56	-203 / 92		-194.1	-194.1	0.88 (30)	6.25	11- 8	-1593 / 323	0.85 (1)
56- 8	-203 / 92		-194.1	-194.1	0.88 (30)	6.25	8-10	-238 / 88	0.21 (26)
8- 9	-75 / 99		-194.1	-194.1	0.88 (30)	6.25	1-17	0 / 144	0.02 (8)
10- 9	-632 / 118		0.0	0.0	0.29 (11)	6.25			
18- 1	-397 / 63		0.0	0.0	0.02 (1)	7.81			
18-17	-340 / 2		-36.3	-36.3	0.11 (6)	6.25			
17-16	-211 / 103		-36.3	-36.3	0.12 (6)	6.25			
16-15	-166 / 140		-36.3	-36.3	0.17 (6)	6.25			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	54.3	PSF
	DL =	15.0	PSF
BOT CH.	LL =	10.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	86.3	PSF

SPACING = 23.3 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED

(80 % OF 62.7 P.S.F. G.S.L. PLUS 4.2 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 54.3 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.88/1.00 (7-8:30) , BC=0.25/1.00 (11-13:6) , WB=0.85/1.00 (8-11:1) , SSI=0.56/1.00 (8-9:30)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (8) (INPUT = 0.90)
JSI METAL= 0.29 (6) (INPUT = 1.00)

APEGBC Permit #1000688

July 20,2022

CONTINUED ON PAGE 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473C rev. 6/30/2020 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage.
For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see TPIC Appendix G - Manufacturing and material variances available from www.tpic.ca and BCSI CANADA Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

LOADING
TOTAL LOAD CASES: (32)

CHORDS						WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
15-14	-166 / 140		-36.3	-36.3	0.17 (6)	6.25			
14-13	-137 / 187		-36.3	-36.3	0.20 (6)	6.25			
13-12	-120 / 227		-36.3	-36.3	0.25 (6)	6.25			
12-11	-120 / 227		-36.3	-36.3	0.25 (6)	6.25			
11-10	-93 / 184		-36.3	-36.3	0.25 (6)	6.25			

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 6.9} PSF AT {40-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

FULL AND PARTIAL LOADING CHECK APPLIED TO THIS TRUSS.

APEGBC Permit #1000688

July 20,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473C rev. 6/30/2020 BEFORE USE.
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For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see TPIC Appendix G - Manufacturing and material variances available from www.tpic.ca and BCSI CANADA Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
J22-1371-A	T02	17	1	Larry Cox TRUSS DESC.	P7327636

Structural Truss Systems Div (CA), Fort Macleod, AB - T0L 0Z0, Version 8.610 S May 20 2022 MiTek Industries, Inc. Wed Jul 20 08:23:19 2022 Page 1

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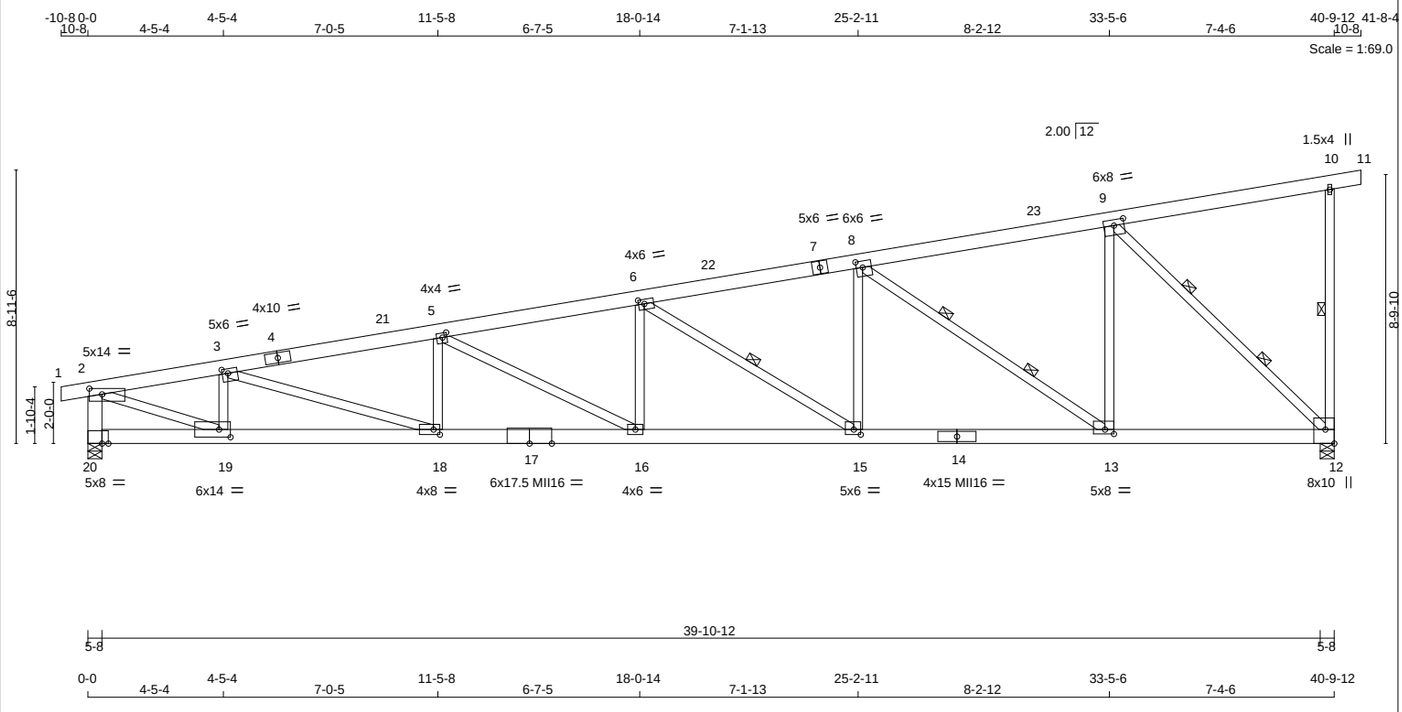

TOTAL WEIGHT = 17 X 237 = 4029 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x6	DRY	2100F 1.8E	SPF
4 - 7	2x6	DRY	2100F 1.8E	SPF
7 - 11	2x6	DRY	2100F 1.8E	SPF
12 - 10	2x4	DRY	No.2	SPF
20 - 2	2x6	DRY	No.2	SPF
20 - 17	2x6	DRY	2100F 1.8E	SPF
17 - 14	2x6	DRY	2100F 1.8E	SPF
14 - 12	2x6	DRY	2100F 1.8E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
5 - 16	2x4	DRY	2100F 1.8E	SPF
6 - 15	2x4	DRY	2100F 1.8E	SPF
8 - 13	2x4	DRY	2100F 1.8E	SPF
9 - 12	2x4	DRY	2100F 1.8E	SPF
2 - 19	2x4	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	5.0	14.0	2.25	5.00
3	TMWW-t	MT20	5.0	6.0	1.75	2.25
4	TS-t	MT20	4.0	10.0		
5	TMWW-t	MT20	4.0	4.0	1.75	1.75
6	TMWW-t	MT20	4.0	6.0	1.75	2.25
7	TS-t	MT20	5.0	6.0		
8	TMWW-t	MT20	6.0	6.0	2.50	2.50
9	TMWW-t	MT20	6.0	8.0	2.25	4.00
10	TMV+p	MT20	1.5	4.0		
12	BMVW1+t	MT20	8.0	10.0	5.50	Edge
13	BMWW-t	MT20	5.0	8.0	1.75	3.50
14	BS-t	MII16	4.0	15.0		
15	BMWW-t	MT20	5.0	6.0	2.00	2.75
16	BMWW-t	MT20	4.0	6.0		
17	BS-t	MII16	6.0	17.5		
18	BMWW-t	MT20	4.0	8.0	2.00	2.50
19	BMWW-t	MT20	6.0	14.0	3.00	4.50
20	BVM1-l	MT20	5.0	8.0		2.50

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

APEGBC Permit #1000688

July 20,2022

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
12	5038	0	5038	0	-746	5-8	5-8
20	5038	0	5038	394	-708	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT 12 FOR 746 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 20 FOR 708 LBS FACTORED UPLIFT

PROVIDE FOR 394 LBS FACTORED HORIZONTAL REACTION AT JOINT 20

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	3649	2315 / 0	408 / 0	0 / 0	0 / -801	925 / 0	0 / 0
20	3649	2315 / 0	408 / 0	0 / 0	0 / -774	925 / 0	0 / 0
HORIZONTAL REACTIONS							
20	---	0 / 0	0 / 0	0 / 0	281 / 0	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 20
BEARING SIZE FACTOR = 1.15 AT JNT(S) 12, 20 (BASED ON SUPPORT DEPTH = 1-8)

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x4 DRY SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 10-12. DBS = 20-0-0 . CBF = 96 LBS.
1 - 2x4 DRY SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-15. DBS = 12-0-0 . CBF = 234 LBS.
2 - 2x4 DRY SPF No.2 LATERAL BRACE(S) AT 1/ 3 LENGTH OF 8-13, 9-12. DBS = 6-0-0 . CBF = 225 LBS.

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

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

LOADING

TOTAL LOAD CASES: (32)

CHORDS				WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
1- 2	0 / 15	-200.4	-200.4	0.03 (1)	10.00	19- 3	-2791 / 481	0.31 (1)
2- 3	-8731 / 1248	-200.4	-200.4	0.31 (1)	3.59	3-18	-428 / 3566	0.57 (32)
3- 4	-11932 / 1707	-200.4	-200.4	0.59 (1)	2.91	18- 5	-862 / 196	0.13 (32)
4-21	-11932 / 1707	-200.4	-200.4	0.59 (1)	2.91	5-16	-1333 / 189	0.63 (21)
21- 5	-11932 / 1707	-200.4	-200.4	0.59 (1)	2.91	16- 6	-29 / 874	0.14 (21)
5- 6	-11043 / 1597	-200.4	-200.4	0.48 (1)	3.12	6-15	-3117 / 484	0.65 (21)
6-22	-8431 / 1243	-200.4	-200.4	0.44 (1)	3.53	15- 8	-190 / 1963	0.32 (21)
22- 7	-8431 / 1243	-200.4	-200.4	0.44 (1)	3.53	8-13	-4939 / 751	0.71 (25)
7- 8	-8431 / 1243	-200.4	-200.4	0.44 (1)	3.53	13- 9	-350 / 3158	0.51 (25)
8-23	-4376 / 686	-200.4	-200.4	0.41 (1)	4.61	9-12	-6012 / 915	0.87 (1)
23- 9	-4376 / 686	-200.4	-200.4	0.41 (1)	4.61	2-19	-1272 / 9136	0.68 (1)
9-10	-82 / 108	-200.4	-200.4	0.36 (32)	6.25			
10-11	-15 / 0	-200.4	-200.4	0.02 (1)	6.25			
12-10	-771 / 134	0.0	0.0	0.33 (11)	6.25			
20- 2	-4944 / 715	0.0	0.0	0.36 (1)	4.88			
20-19	-370 / 3	-37.5	-37.5	0.04 (6)	6.25			
19-18	-1327 / 8631	-37.5	-37.5	0.51 (1)	6.25			
18-17	-1725 / 11772	-37.5	-37.5	0.64 (1)	6.25			
17-16	-1725 / 11772	-37.5	-37.5	0.64 (1)	6.25			
16-15	-1557 / 10894	-37.5	-37.5	0.58 (1)	6.25			
15-14	-1149 / 8322	-37.5	-37.5	0.47 (1)	6.25			
14-13	-1149 / 8322	-37.5	-37.5	0.47 (1)	6.25			
13-12	-533 / 4324	-37.5	-37.5	0.28 (1)	6.25			

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	54.3	PSF
	DL =	15.0	PSF
BOT CH.	LL =	10.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	86.3	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED

(80 % OF 62.7 P.S.F. G.S.L. PLUS 4.2 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 54.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.47")
ALLOWABLE DEFL.(TL)= L/180 (2.72")
CALCULATED VERT. DEFL.(TL) = L/ 731 (0.67")

CSI: TC=0.59/1.00 (3-5:1) , BC=0.64/1.00 (16-18:1) , WB=0.87/1.00 (9-12:1) , SSI=0.54/1.00 (9-10:32)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.95 (12) (INPUT = 1.00)

CONTINUED ON PAGE 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473C rev. 6/30/2020 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage.
For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see TPIC Appendix G - Manufacturing and material variances available from www.tpic.ca and BCSI CANADA Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. Larry Cox	DRWG NO.
J22-1371-A	T02	17	1	TRUSS DESC.	P7327636

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 6.9} PSF AT {40-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

FULL AND PARTIAL LOADING CHECK APPLIED TO THIS TRUSS.

APEGBC Permit #1000688

July 20,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473C rev. 6/30/2020 BEFORE USE.
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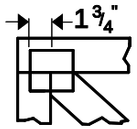
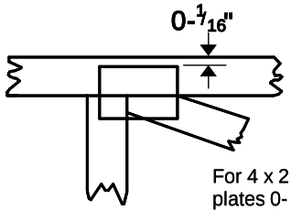
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

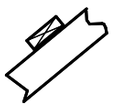
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

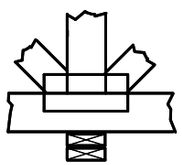
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min. size shown is for crushing only.

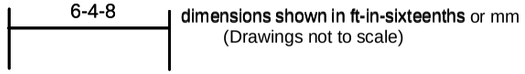
Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses

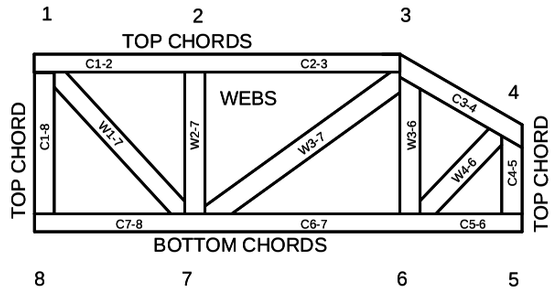
DSB-89: Design Standard for Bracing.

BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



dimensions shown in ft-in-sixteenths or mm
(Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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MiTek Engineering Reference Sheet: MII-7473C rev. 06/30/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI1.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.