MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: P230110-P230110-02
Roof

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Pages or sheets covered by this seal: I58180285 thru I58180287

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193

May 5,2023

Sevier, Scott ,Engineer

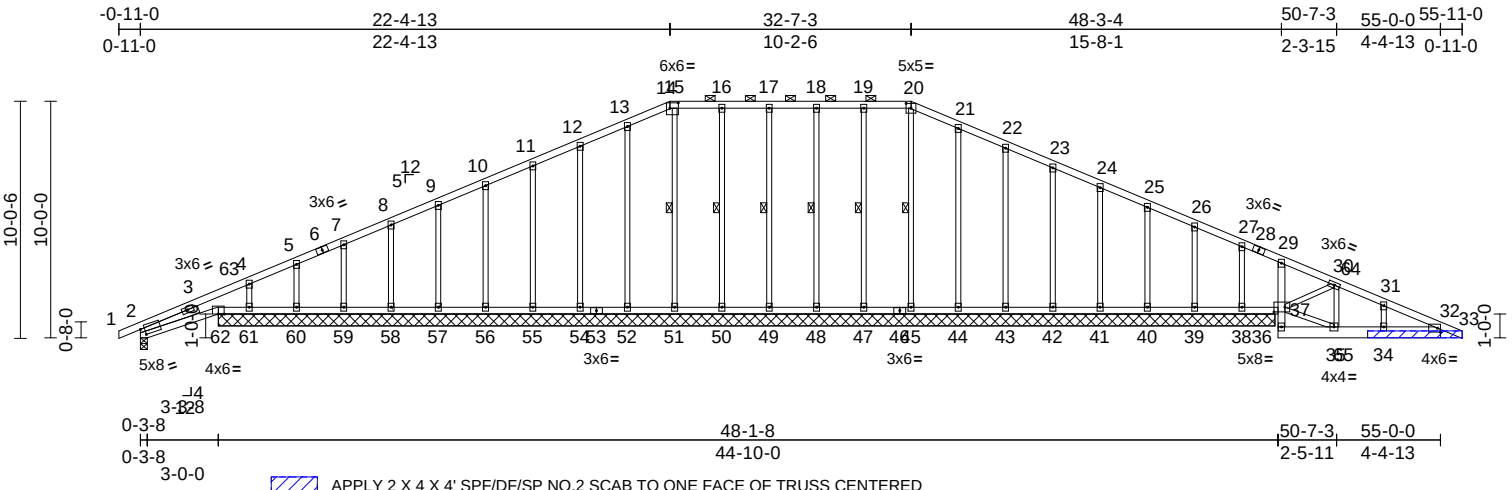
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO 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 per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Roof
P230110-P230110-02	A3	Piggyback Base Supported Gable	1	1	I58180285
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Fri May 05 08:18:44 Page: 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

REPAIR:
EXTEND BOTTOM CHORD TO OVERHANG AT RIGHT END.



APPLY 2 X 4 X 4' SPF/DF/SP NO.2 SCAB TO ONE FACE OF TRUSS CENTERED AS SHOWN. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 x 4'S AND LARGER - 2 ROWS: SPACED @ 2" O.C. USE 2" MEMBER END DISTANCE.

Scale = 1:97.5

Plate Offsets (X, Y): [2:0-2-1,0-3-6], [14:0-4-4,0-2-12], [20:0-2-8,0-2-7], [37:0-5-8,0-2-8]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	0.03	62	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.72	32	>140	90		
BCLL	0.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.11	38	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH		Wind(LL)	0.73	32	>139	120	Weight: 291 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-6,28-33:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 36-32:2x6 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-7-13

BRACING
TOP CHORD Sheathed or 4-4-6 oc purlins, except 2-0-0 oc purlins (5-9-12 max.): 14-20.
BOT CHORD Rigid ceiling directly applied or 4-7-7 oc bracing.
WEBS 1 Row at midpt 20-45, 19-47, 18-48, 17-49, 16-50, 15-51

REACTIONS (size) 2=0-3-8, 38=44-8-8, 39=44-8-8, 40=44-8-8, 41=44-8-8, 42=44-8-8, 43=44-8-8, 44=44-8-8, 45=44-8-8, 47=44-8-8, 48=44-8-8, 49=44-8-8, 50=44-8-8, 51=44-8-8, 52=44-8-8, 54=44-8-8, 55=44-8-8, 56=44-8-8, 57=44-8-8, 58=44-8-8, 59=44-8-8, 60=44-8-8, 61=44-8-8
Max Horiz 2=173 (LC 12)
Max Uplift 2=-190 (LC 26), 38=-168 (LC 9), 39=-155 (LC 1), 40=-66 (LC 13), 41=-46 (LC 13), 42=-50 (LC 13), 43=-49 (LC 13), 44=-53 (LC 13), 45=-79 (LC 9), 47=-43 (LC 9), 48=-36 (LC 8), 49=-36 (LC 8), 50=-37 (LC 8), 51=-81 (LC 9), 52=-43 (LC 12), 54=-52 (LC 12), 55=-49 (LC 12), 56=-50 (LC 12), 57=-50 (LC 12), 58=-49 (LC 12), 59=-55 (LC 12), 60=-59 (LC 13), 61=-117 (LC 12)
Max Grav 2=122 (LC 25), 38=683 (LC 1), 39=71 (LC 9), 40=255 (LC 1), 41=155 (LC 26), 42=181 (LC 1), 43=161 (LC 1), 44=207 (LC 26), 45=588 (LC 26), 47=213 (LC 26), 48=170 (LC 25), 49=172 (LC 25), 50=177 (LC 26), 51=600 (LC 1), 52=235 (LC 1), 54=166 (LC 25), 55=177 (LC 1), 56=175 (LC 1), 57=174 (LC 25), 58=179 (LC 1), 59=182 (LC 25), 60=201 (LC 1), 61=267 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3/0, 2-4=-1572/1300, 4-5=-1422/1193, 5-7=-1418/1236, 7-8=-1370/1226, 8-9=-1331/1228, 9-10=-1290/1228, 10-11=-1249/1228, 11-12=-1207/1227, 12-13=-1173/1234, 13-14=-1111/1205, 14-15=-1020/1110, 15-16=-1020/1110, 16-17=-1020/1110, 17-18=-1020/1110, 18-19=-1020/1110, 19-20=-1021/1111, 20-21=-1124/1216, 21-22=-1175/1233, 22-23=-1212/1228, 23-24=-1254/1229, 24-25=-1292/1227, 25-26=-1345/1239, 26-27=-1324/1183, 27-29=-1443/1259, 29-30=-1461/1228, 30-31=-561/528, 31-32=-635/532, 32-33=0/7
BOT CHORD 2-62=-1152/1515, 61-62=-1110/1475, 60-61=-1110/1475, 59-60=-1110/1475, 58-59=-1110/1475, 57-58=-1110/1475, 56-57=-1110/1475, 55-56=-1110/1475, 54-55=-1110/1475, 52-54=-1110/1475, 51-52=-1110/1475, 50-51=-1110/1475, 49-50=-1110/1475, 48-49=-1110/1475, 47-48=-1110/1475, 45-47=-1110/1475, 44-45=-1110/1475, 43-44=-1110/1475, 42-43=-1110/1475, 41-42=-1110/1475, 40-41=-1110/1475, 39-40=-1110/1475, 38-39=-1110/1475, 37-38=-1119/1483, 36-37=-50/41, 29-37=-45/44, 35-36=-103/156, 34-35=-451/615, 32-34=-451/615

May 5,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

WEBS 20-45=-549/460, 19-47=-174/99, 18-48=-131/60, 17-49=-133/64, 16-50=-138/65, 15-51=-562/460, 13-52=-196/137, 12-54=-127/76, 11-55=-139/86, 10-56=-135/82, 9-57=-137/84, 8-58=-132/78, 7-59=-161/107, 5-60=-57/34, 4-61=-414/361, 21-44=-168/110, 22-43=-123/74, 23-42=-139/86, 24-41=-130/77, 25-40=-167/118, 26-39=-81/53, 27-38=-335/293, 30-35=-645/401, 31-34=-145/137, 35-37=-380/501, 30-37=-724/986

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 22-4-13, Corner(3R) 22-4-13 to 27-4-13, Exterior(2N) 27-4-13 to 32-7-3, Corner(3R) 32-7-3 to 37-7-3, Exterior(2N) 37-7-3 to 55-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 3x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

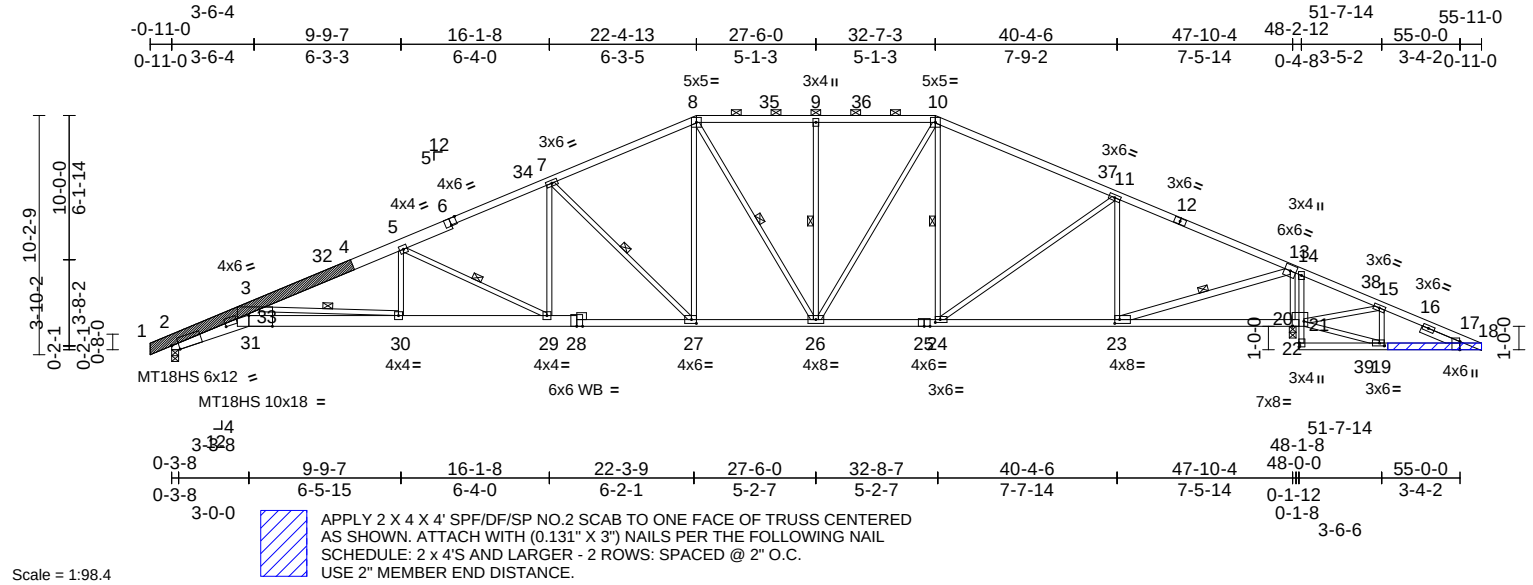
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof
P230110-P230110-02	A4	Piggyback Base	2	1	I58180286
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,
REPAIR:
EXTEND BOTTOM CHORD TO OVERHANG AT RIGHT END.

Run: 8.63 E Nov 21 2022 Print: 8.630 E Nov 21 2022 MiTek Industries, Inc. Fri May 05 13:08:07
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-x8edJJizVfFk??iUf?YqK3radbg2hdGcKbmZyMzJY1t

Page: 1



Scale = 1:98.4

Plate Offsets (X, Y): [2:0-3-9,Edge], [2:2-5-9,0-0-7], [6:0-3-0,Edge], [17:0-4-3,Edge], [19:0-2-8,0-1-8], [21:0-6-0,0-2-8], [23:0-2-8,0-2-0], [24:0-2-8,0-1-8], [27:0-2-8,0-2-0], [31:1-0-2,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.43	29-30	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.78	29-30	>733	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.35	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 320 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 8-10,12-18:2x4 SP No.2, 1-6:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 14-20:2x3 SPF No.2, 20-17,25-21:2x4 SP No.2, 28-25:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 31-3:2x6 SPF No.2, 23-13:2x4 SP No.2
OTHERS 2x4 SP No.2
LBR SCAB 1-4 SP 2400F 2.0E one side
SLIDER Right 2x4 SP No.2 -- 1-9-5

BRACING
TOP CHORD Sheathed, except 2-0-0 oc purlins (3-2-12 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 5-4-7 oc bracing.
WEBS 1 Row at midpt 8-26, 9-26, 10-24, 13-23, 7-27, 3-30, 5-29

REACTIONS (lb/size) 2=2164/0-3-8, 22=2912/0-3-8, (req. 0-4-9)
Max Horiz 2=181 (LC 16)
Max Uplift 2=-318 (LC 12), 22=-446 (LC 9)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8151/1223, 3-33=-5401/728, 32-33=-5386/731, 4-32=-5313/741, 4-5=-5288/754, 5-6=-4068/529, 6-34=-4005/551, 7-34=-3908/555, 7-8=-3128/455, 8-35=-2712/450, 9-35=-2712/450, 9-36=-2712/450, 10-36=-2712/450, 10-37=-2662/397, 11-37=-2681/361, 11-12=-2227/295, 12-13=-2409/276, 13-14=-1106/1149, 14-38=-1049/1196, 15-38=-1064/1113, 15-16=-342/457, 16-17=-352/408
BOT CHORD 2-31=-1244/7356, 30-31=-1092/6302, 29-30=-756/5026, 28-29=-424/3640, 27-28=-427/3643, 26-27=-198/2795, 25-26=-121/2366, 24-25=-121/2366, 23-24=-120/2137, 22-23=-1024/993, 21-22=-1018/992, 17-19=-366/342
WEBS 3-31=-293/2214, 8-27=-156/922, 8-26=-259/152, 9-26=-380/164, 10-26=-165/810, 11-24=-178/386, 11-23=-845/386, 13-23=-946/3309, 7-27=-1175/319, 5-30=0/468, 3-30=-1284/338, 5-29=-1555/370, 7-29=-83/799, 15-19=-310/213, 15-21=-700/748, 19-21=-336/327, 13-22=-2624/940

NOTES
1) Attached 9-5-7 scab 1 to 4, front face(s) 2x6 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 7-5-7 from end at joint 1, nail 2 row(s) at 4" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 22-4-13, Exterior(2R) 22-4-13 to 29-5-10, Interior (1) 29-5-10 to 32-7-3, Exterior(2R) 32-7-3 to 39-8-1, Interior (1) 39-8-1 to 55-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) WARNING: Required bearing size at joint(s) 22 greater than input bearing size.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 5,2023

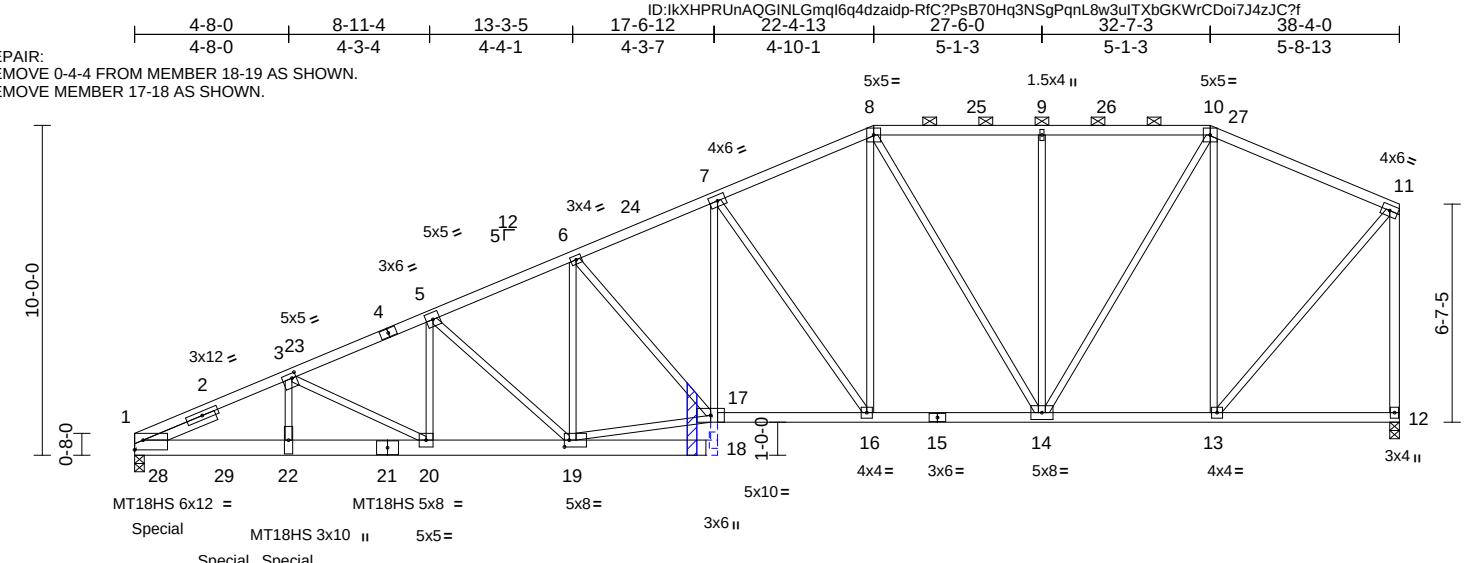
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P230110-P230110-02	BG1	Piggyback Base Girder	2	2	I58180287
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Fri May 05 08:18:47 Page: 1

ID:IkXHPRUnAQGINLGmqI6q4dzaidp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

REPAIR:
REMOVE 0-4-4 FROM MEMBER 18-19 AS SHOWN.
REMOVE MEMBER 17-18 AS SHOWN.



ATTACH 2X4 SPF/DF/SP NO.2 SCAB TO EACH FACE OF TRUSS WITH A CLUSTER OF (3) (0.131" X 3") NAILS INTO EACH INTERSECTING MEMBER.

LUMBER AND CONNECTOR PLATES (SHOWN DASHED) TO BE CUT CLEANLY AND ACCURATELY AND THE REMAINING PLATE(S) MUST BE FULLY EMBEDDED AND UNDISTURBED. CUT JUST BEYOND CONNECTOR PLATE AT JOINT 17.

Scale = 1:69.8

4-8-0	8-11-4	13-3-5	17-8-0	22-3-9	27-6-0	32-8-7	38-4-0	
4-8-0	4-3-4	4-4-1	4-4-11	4-7-9	5-2-7	5-2-7	5-7-9	

Plate Offsets (X, Y): [1:Edge,0-3-8], [3:0-1-8,0-1-12], [18:Edge,0-2-8], [19:0-1-12,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.21	19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.37	19	>999	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 453 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 18-7:2x3 SPF No.2, 17-15,15-12:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 12-11:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-4-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 12=0-3-8
Max Horiz 1=308 (LC 9)
Max Uplift 1=-1088 (LC 12), 12=-319 (LC 9)
Max Grav 1=6979 (LC 1), 12=2324 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-12954/2010, 3-5=-8060/1258, 5-6=-5646/896, 6-7=-4699/765, 7-8=-3285/589, 8-9=-2284/478, 9-10=-2284/478, 10-11=-1517/339, 11-12=-2274/418
BOT CHORD 1-22=-1987/11674, 20-22=-1987/11674, 19-20=-1299/7443, 18-19=-71/339, 17-18=0/118, 7-17=-339/2079, 16-17=-809/4296, 14-16=-561/2944, 13-14=-287/1349, 12-13=-91/102
WEBS 7-16=-2296/499, 8-16=-352/2039, 8-14=-1325/280, 9-14=-395/173, 10-14=-317/1887, 10-13=-1411/337, 11-13=-340/2017, 6-17=-1315/293, 3-22=-655/4524, 3-20=-4777/820, 5-20=-372/2585, 5-19=-3126/573, 6-19=-151/1103, 17-19=-877/4910

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc, 2x3 - 1 row at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc, Except member 3-22 2x3 - 1 row at 0-2-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 22-4-13, Exterior(2R) 22-4-13 to 29-5-10, Interior (1) 29-5-10 to 32-7-3, Exterior(2E) 32-7-3 to 38-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Bearings are assumed to be: Joint 1 SP 2400F 2.0E crushing capacity of 805 psi, Joint 12 SP No.2 crushing capacity of 565 psi.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 563 lb down and 90 lb up at 0-8-12, and 559 lb down and 93 lb up at 2-8-12, and 4757 lb down and 738 lb up at 4-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

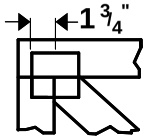
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-70, 8-10=-70, 10-11=-70, 1-18=-20, 12-17=-20
Concentrated Loads (lb)
Vert: 22=-4757 (F), 28=-563 (F), 29=-559 (F)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
May 5,2023

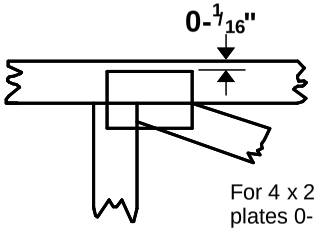
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. 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.

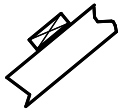
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

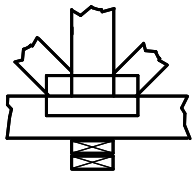
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

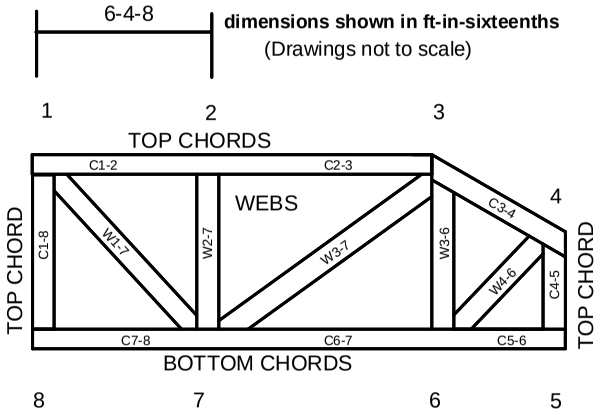


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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 BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I 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 ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
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 ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.