MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Re: 251334
REUNION AT BLACKWELL/ Bldg D

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Heartland Truss, LLC..

Pages or sheets covered by this seal: I78869129 thru I78869132

My license renewal date for the state of Missouri is December 31, 2026.

Missouri COA: Engineering 001193

January 7,2026

Lu, Jie ,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	REUNION AT BLACKWELL/ Bldg D
251334	A5A	Hip	1	1	I78869129
					Job Reference (optional)

Heartland Truss, LLC, Plattsburg, MO.

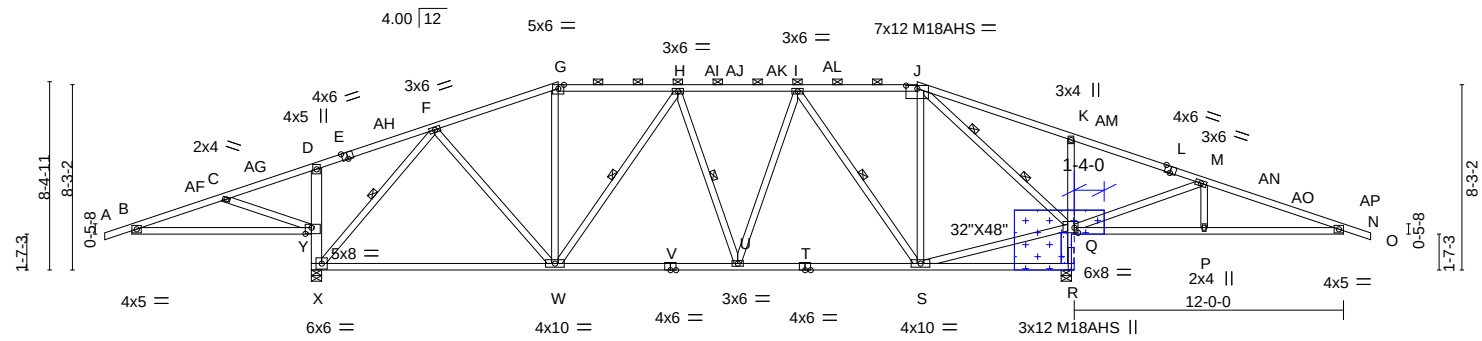
25.4.0 s Nov 25 2025 MiTek Industries, Inc. Wed Jan 7 09:07:32 2026 Page 1
ID:qUFu7WFUwLTPCLe5ksDb08y7L5N-ABBGEGbI8rdiOpgOVlpzrG6M1p4_2q7PpUlvl4zxo79

-1-2-8	13-6-0	19-0-0	24-4-0	29-8-0	35-0-0	42-0-0	47-9-7	54-0-0	55-2-8
1-2-8	13-6-0	5-6-0	5-4-0	5-4-0	5-4-0	7-0-0	5-9-7	6-2-9	1-2-8

REPAIR:
REMOVE 0-1-8 FROM Q-R

LUMBER AND CONNECTOR PLATES (SHOWN DASHED) TO BE CUT CLEANLY AND ACCURATELY AND THE REMAINING PLATE(S) MUST BE FULLY EMBEDDED AND UNDISTURBED.
6x8 PLATE AT JT. Q MUST REMAIN INTACT WITHOUT DISTURBANCE.

Scale = 1:102.7



ATTACH 7/16" OSB GUSSET (7/16" RATED SHEATHING 24/16 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

INSTALL 2 X 4 SPF/DF/SP NO.2; CUT TO FIT TIGHT. TRIM CORNER OF NEW MEMBER TO AVOID DAMAGE TO EXISTING CONNECTOR PLATES.

8-0-0	19-0-0	27-0-0	35-0-0	42-0-0	47-9-7	54-0-0
8-0-0	11-0-0	8-0-0	8-0-0	7-0-0	5-9-7	6-2-9

Plate Offsets (X,Y)-- [E:0-3-0,Edge], [J:0-6-0,0-1-11], [L:0-3-0,Edge], [Q:0-2-0,0-2-12], [Y:0-3-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.32	W-X	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.67	W-X	>603	240	M18AHS	186/179
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.04	R	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.06	W-X	>999	240	Weight: 325 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* J-L,L-O: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* D-X: 2x6 SP No.1, K-R: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-10 max.): G-J, D-X, K-R. Except:
2-2-0 oc bracing: X-Y
3-3-0 oc bracing: Q-R
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt F-X, H-W, H-U, I-S
2 Rows at 1/3 pts J-Q

REACTIONS. (lb/size) X=1972/0-5-8, R=2493/0-5-8
Max Horz X=227(LC 12)
Max Uplift X=-590(LC 8), R=-759(LC 9)
Max Grav X=2311(LC 39), R=2920(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-AF=-460/661, C-AF=-448/713, C-AG=-685/1247, D-AG=-674/1361, D-E=-367/742, E-AH=-362/812, F-AH=-349/886, F-G=-1155/208, G-H=-1078/221, H-AI=-1293/241, AI-AJ=-1293/241, AJ-AK=-1293/241, AK-AL=-1293/241, I-AL=-1293/241, I-J=-607/174, J-K=-809/2032, K-AM=-893/2075, L-AM=-894/2052, L-M=-913/1915, M-AN=-496/942, AN-AO=-496/923, AO-AP=-506/844, N-AP=-514/844, X-Y=-929/384, D-Y=-602/207, Q-R=-2825/936, K-Q=-697/223
BOT CHORD B-Y=-617/469, W-X=-136/613, V-W=-140/1346, U-V=-140/1346, T-U=-122/1190, S-T=-122/1190, P-Q=-800/542, N-P=-800/542
WEBS F-W=-71/784, F-X=-1718/469, H-W=-478/115, I-U=-81/470, I-S=-1034/253, J-S=-195/975, Q-S=-30/721, M-P=-128/291, M-Q=-1154/488, J-Q=-2572/862, C-Y=-686/301

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-2-8 to 3-11-12, Interior(1) 3-11-12 to 11-4-6, Exterior(2R) 11-4-6 to 26-7-10, Interior(1) 26-7-10 to 35-0-0, Exterior(2E) 35-0-0 to 42-7-10, Interior(1) 42-7-10 to 49-9-11, Exterior(2E) 49-9-11 to 55-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 590 lb uplift at joint X and 759 lb uplift at joint R.
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.

January 7,2026

Continued on page 2

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

NOTES-

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

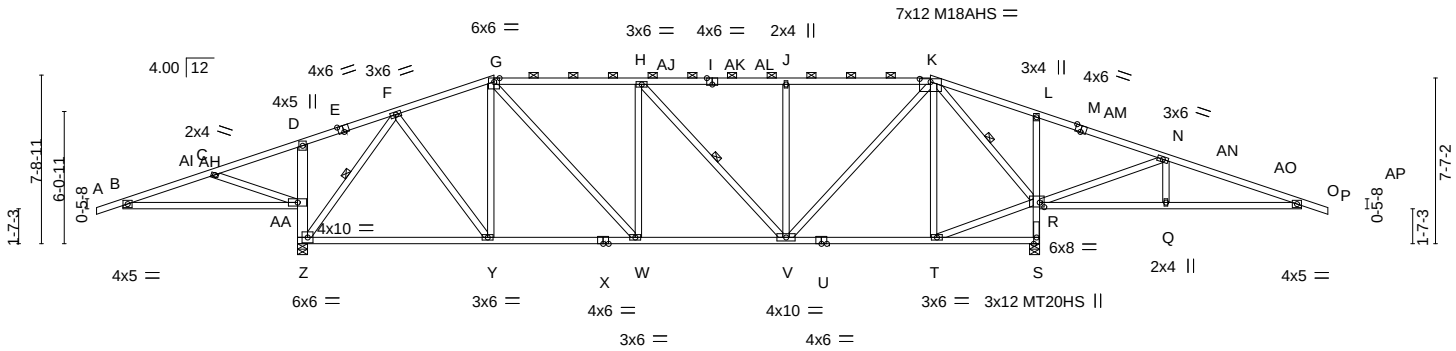
Job	Truss	Truss Type	Qty	Ply	REUNION AT BLACKWELL/ Bldg D
251334	A6A	Hip	1	1	I78869130
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 25.4.0 s Dec 15 2025 MiTek Industries, Inc. Tue Jan 6 12:46:18 2026 Page 1
ID:qUFu7WFUwLTPCLe5ksDb08y7L5N-xSZFtHbbFyJHjta3JY?g7VJNjdqaqHW7UV?az8zy403

-1-2-8	4-2-9	8-0-0	12-6-0	17-0-0	23-7-7	30-4-9	37-0-0	42-0-0	47-9-7	54-0-0	55-2-8
1-2-8	4-2-9	3-9-7	4-6-0	4-6-0	6-7-7	6-9-3	6-7-7	5-0-0	5-9-7	6-2-9	1-2-8

Scale = 1:105.6

REFER TO MITEK REFERENCE NUMBER I78869129 FOR REPAIR DETAIL



8-0-0	17-0-0	23-7-7	30-4-9	37-0-0	42-0-0	47-9-7	54-0-0
8-0-0	9-0-0	6-7-7	6-9-3	6-7-7	5-0-0	5-9-7	6-2-9

Plate Offsets (X,Y)-- [E:0-3-0,Edge], [I:0-3-0,Edge], [K:0-6-0,0-1-11], [M:0-3-0,Edge], [R:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.14	Y-Z	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.31	Y-Z	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.04	S	n/a	n/a	M18AHS	186/179
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.05	V-W	>999	240	Weight: 326 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E *Except*
G-I,I-K: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
D-Z: 2x6 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): G-K, D-Z, L-S. Except:
2-9-0 oc bracing: R-S
6-0-0 oc bracing: Z-AA
BOT CHORD Rigid ceiling directly applied or 4-10-5 oc bracing.
WEBS 1 Row at midpt F-Z, H-V, K-R

REACTIONS. (size) Z=0-5-8, S=0-5-8
Max Horz Z=216(LC 12)
Max Uplift Z=-596(LC 8), S=-768(LC 9)
Max Grav Z=2274(LC 39), S=2873(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-459/789, C-D=-687/1527, D-F=-367/986, F-G=-1160/195, G-H=-1630/267, H-J=-1406/257, J-K=-1409/259, K-L=-840/2233, L-N=-921/2274, N-O=-510/1063, Z-AA=-934/379, D-AA=-577/201, R-S=-2811/885, L-R=-572/184
BOT CHORD B-AA=-669/468, Y-Z=-103/547, W-Y=-122/1108, V-W=-156/1627, T-V=-492/586, Q-R=-907/538, O-Q=-907/538
WEBS C-AA=-773/305, F-Z=-1680/405, F-Y=-131/968, G-Y=-588/202, G-W=-145/776, H-W=-455/197, H-V=-400/128, J-V=-693/194, K-V=-269/1443, K-T=-86/326, R-T=-470/607, K-R=-2545/848, N-R=-1251/503, N-Q=-127/290

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-2-8 to 3-11-12, Interior(1) 3-11-12 to 17-0-0, Exterior(2E) 17-0-0 to 24-7-10, Interior(1) 24-7-10 to 37-0-0, Exterior(2E) 37-0-0 to 44-7-10, Interior(1) 44-7-10 to 49-9-11, Exterior(2E) 49-9-11 to 55-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) Z=596, S=768.
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.

January 7,2026

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

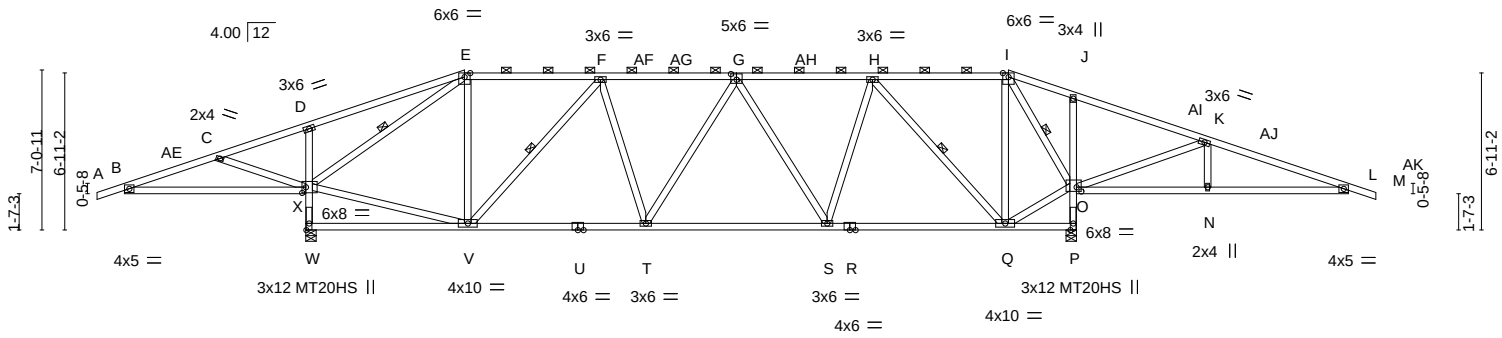
Job	Truss	Truss Type	Qty	Ply	REUNION AT BLACKWELL/ Bldg D
251334	A7A	Hip	1	1	I78869131
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 25.4.0 s Dec 15 2025 MiTek Industries, Inc. Tue Jan 6 12:46:19 2026 Page 1
ID:qUFu7WFUwLTPCLe5ksDb08y7L5N-Pf7e4dcD0GR8L19GsFWvgjsZA19YZkRGj9l7Vbzy402

-1-2-8	4-2-9	8-0-0	15-0-0	21-0-0	27-0-0	33-0-0	39-0-0	42-0-0	47-9-7	54-0-0	55-2-8
1-2-8	4-2-9	3-9-7	7-0-0	6-0-0	6-0-0	6-0-0	6-0-0	3-0-0	5-9-7	6-2-9	1-2-8

Scale = 1:101.6

REFER TO MITEK REFERENCE NUMBER I78869129 FOR REPAIR DETAIL



8-0-0	15-0-0	23-0-0	31-0-0	39-0-0	42-0-0	47-9-7	54-0-0
8-0-0	7-0-0	8-0-0	8-0-0	8-0-0	3-0-0	5-9-7	6-2-9

Plate Offsets (X,Y)-- [G:0-3-0,0-3-0], [O:0-2-8,0-2-4], [X:0-2-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.16	S-T	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.27	S-T	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.06	P	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.06	T	>999	240	Weight: 321 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except* E-G,G-I: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): E-I, D-W, J-P. Except: 2-8-0 oc bracing: W-X, O-P
BOT CHORD Rigid ceiling directly applied or 4-3-8 oc bracing.
WEBS 1 Row at midpt E-X, F-V, H-Q, I-O

REACTIONS. (size) W=0-5-8, P=0-5-8
Max Horz W=204(LC 12)
Max Uplift W=-598(LC 8), P=-776(LC 9)
Max Grav W=2246(LC 29), P=2837(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-475/1055, C-D=-670/1702, D-E=-583/1652, E-F=-1079/183, F-G=-1838/251, G-H=-1524/245, H-I=-342/1000, I-J=-856/2443, J-K=-928/2518, K-L=-509/1286, W-X=-2141/634, D-X=-634/210, O-P=-2834/867, J-O=-504/162
BOT CHORD B-X=-921/484, T-V=-183/1786, S-T=-200/1846, Q-S=-339/1313, N-O=-1117/536, L-N=-1117/536
WEBS C-X=-664/264, V-X=0/1113, E-X=-2192/569, E-V=-61/772, F-V=-1073/199, F-T=-49/272, G-T=-29/273, G-S=-625/207, H-S=-83/818, H-Q=-1766/338, I-Q=-451/1506, O-Q=-1098/660, I-O=-2672/917, K-O=-1278/515, K-N=-125/288

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-2-8 to 3-11-12, Interior(1) 3-11-12 to 15-0-0, Exterior(2E) 15-0-0 to 22-7-10, Interior(1) 22-7-10 to 39-0-0, Exterior(2E) 39-0-0 to 46-7-10, Interior(1) 46-7-10 to 49-9-11, Exterior(2E) 49-9-11 to 55-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) W=598, P=776.
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.

January 7,2026

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Job	Truss	Truss Type	Qty	Ply	REUNION AT BLACKWELL/ Bldg D
251334	FL1	Flat Girder	2	2	I78869132

Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 25.4.0 s Dec 15 2025 MiTek Industries, Inc. Tue Jan 6 12:46:20 2026 Page 1

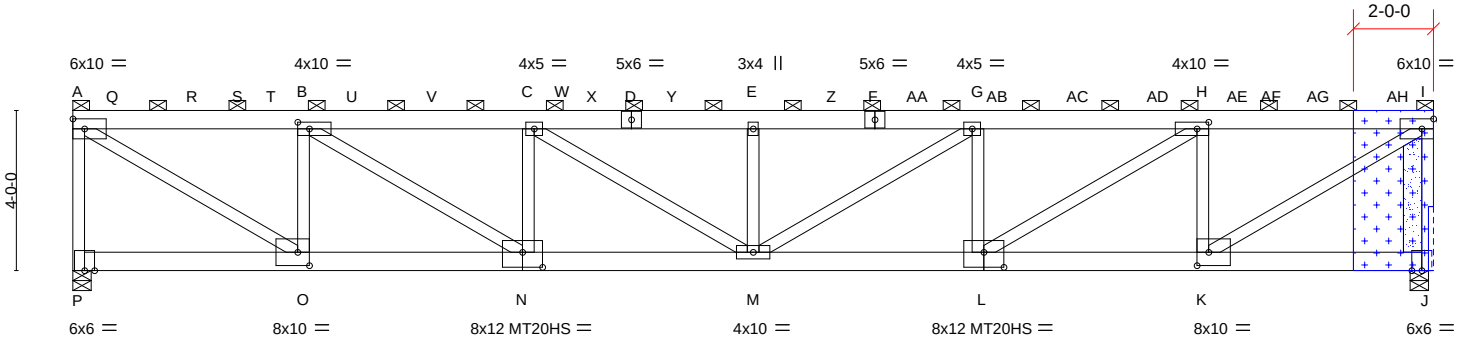
ID:qUFu7WFUwLTPCLe5ksDb08y7L5N-trh0HzdrnaZ?yAjSQz28DwPjPRV0IF?PxpUh11zy401

5-9-3	11-4-9	17-0-0	22-7-7	28-2-13	34-0-0
5-9-3	5-7-7	5-7-7	5-7-7	5-7-7	5-9-3

REPAIR:
REMOVE 0-1-8 BY 1-7-3 SECTION OF RIGHT END VERTICAL STARTING AT JOINT J (ONE-PLY)

LUMBER AND CONNECTOR PLATES (SHOWN DASHED) TO BE CUT CLEANLY AND ACCURATELY AND THE REMAINING PLATE(S) MUST BE FULLY EMBEDDED AND UNDISTURBED.
6x10 PLATE AT JT. " I " MUST REMAIN INTACT WITHOUT DISTURBANCE.

Scale = 1:57.6



ATTACH < 2 LAYERS > 3/4" PLYWOOD OR OSB GUSSET (23/32" RATED SHEATHING 48/24 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 3.0") NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 2" O.C. USE 2" MEMBER END DISTANCE. GLUE PLYWOOD LAYERS TOGETHER PRIOR TO ATTACHING TO TRUSS.

INSTALL (2 PLY) 2 X 6 SPF/DF/SP NO.2 CUT TO FIT TIGHT. ATTACH PLIES WITH TWO ROWS OF (0.131 X 3") NAILS SPACED 9" O.C. TRIM CORNER OF NEW MEMBER TO AVOID DAMAGE TO EXISTING CONNECTOR PLATES.

5-9-3	11-4-9	17-0-0	22-7-7	28-2-13	34-0-0
5-9-3	5-7-7	5-7-7	5-7-7	5-7-7	5-9-3

Plate Offsets (X,Y)-- [B:0-3-8,0-2-0], [H:0-3-8,0-2-0], [K:0-3-8,0-4-0], [L:0-6-0,0-4-8], [N:0-6-0,0-4-8], [O:0-3-8,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.38	M	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.65	M	>625	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.10	J	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.26	M	>999	240	Weight: 492 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
L-N: 2x6 SP 2400F 2.0E
WEBS 2x4 SP 2400F 2.0E *Except*
A-P,I-J: 2x4 SP No.2, B-O,C-N,E-M,G-L,H-K: 2x4 SP No.3

BRACING-

TOP CHORD 2-0-0 oc purlins (2-11-1 max.): A-I, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) J=0-5-8, P=0-5-8
Max Horz P=-129(LC 30)
Max Uplift J=-1035(LC 9), P=-1062(LC 8)
Max Grav J=6689(LC 2), P=6787(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-P=-6651/1151, A-B=-9083/1486, B-C=-14048/2334, C-E=-15852/2655, E-G=-15852/2655, G-H=-14004/2369, H-I=-8978/1552, I-J=-6555/1130
BOT CHORD N-O=-1481/9083, M-N=-2236/14172, L-M=-2252/14129, K-L=-1410/8978
WEBS A-O=-1789/10614, B-O=-5504/1042, B-N=-1011/5915, C-N=-2996/607, C-M=-350/1986, E-M=-2024/433, G-M=-321/2036, G-L=-3041/590, H-L=-973/5987, H-K=-5438/1001, I-K=-1731/10495

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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 4-1-12, Exterior(2) 4-1-12 to 29-10-4, Corner(3) 29-10-4 to 33-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
4) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Bearing at joint(s) J, P considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) J=1035, P=1062.
11) 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.

January 7,2026

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

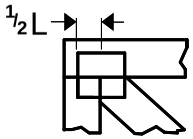
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 762 lb down and 222 lb up at 1-0-0, 759 lb down and 226 lb up at 3-0-0, 759 lb down and 226 lb up at 5-0-0, 640 lb down and 147 lb up at 7-0-0, 640 lb down and 147 lb up at 9-0-0, 640 lb down and 147 lb up at 11-0-0, 640 lb down and 147 lb up at 13-0-0, 640 lb down and 147 lb up at 15-0-0, 640 lb down and 147 lb up at 17-0-0, 640 lb down and 147 lb up at 19-0-0, 640 lb down and 147 lb up at 21-0-0, 640 lb down and 147 lb up at 23-0-0, 640 lb down and 147 lb up at 25-0-0, 640 lb down and 147 lb up at 27-0-0, 640 lb down and 147 lb up at 29-0-0, and 640 lb down and 147 lb up at 31-0-0, and 762 lb down and 221 lb up at 33-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

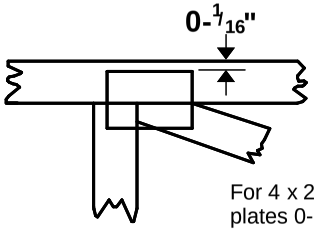
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-I=-60, J-P=-20
   Concentrated Loads (lb)
   Vert: E=-600 Q=-688 R=-679 T=-679 U=-600 V=-600 W=-600 X=-600 Y=-600 Z=-600 AA=-600 AB=-600 AC=-600 AD=-600 AE=-600 AG=-600 AH=-688

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.

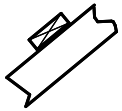
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

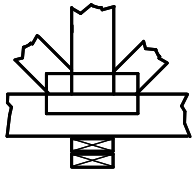
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

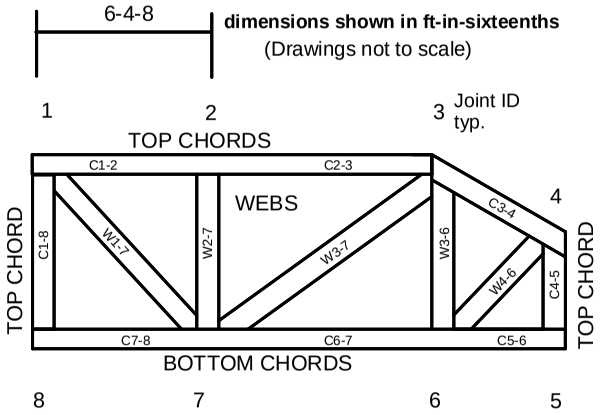


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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®

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.