MiTek®

Joe Frogge Digitally signed by Joe Frogge DN: CN=Joe Frogge, OU=Development, OU=LS Users, DC=CDLS, DC=LOC Date: 2025.11.12 16:07:35-06'00'

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
11/12/2025

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

Re: 251348
REUNION / TYPE BLDG A

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: I76722052 thru I76722107

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

Missouri COA: Engineering 001193

STAND STRUCTURAL ENGINEERING
8234 Robinson St
Overland Park, KS 66204
(913) 214-2169

☒ Reviewed ☐ Revise and Resubmit
☐ Reviewed as Noted ☐ Rejected
☐ Not required by the Contract Documents
☐ For Record Only

Review is only for general conformance with the design concept and the intent of the Contract Documents. Contractor is solely responsible for verifying dimensions, for establishing fabrication processes, means, techniques, sequences and procedures of construction and for coordination of work of all trades. Review action taken and noted to information shown does not authorize deviations from the intent of the contract documents, unless so stated in a separate letter or Change Order. The Structural Engineer and/or Architect-of-Record retained by the Contractor or his Supplier, for the Design / Build portion of the project represented by this submittal, is solely responsible for the correctness, appropriateness and adequacy of the Design / Build system.

By: JFunk
Date: 11/11/2025

October 1,2025

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.

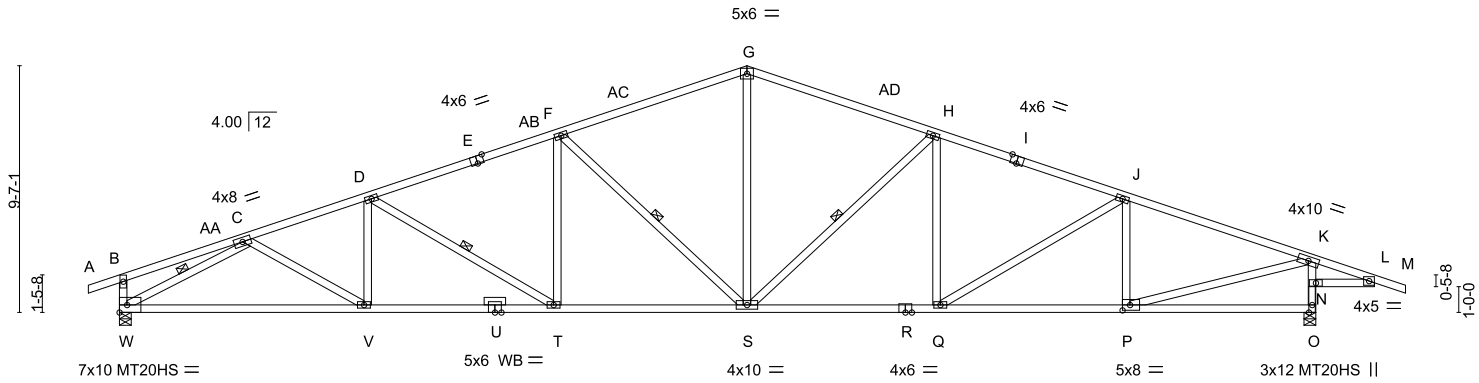
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	A1	Roof Special	12	1	Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477,

8.830 s Feb 18 2025 MiTek Industries, Inc. Wed Oct 1 15:13:10 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-VwFj9rlqOkgZb?jHxMHevmqPqQEnam4P6KUaoDyXvbd

1-2-8	4-11-11	9-7-13	17-0-5	24-4-12	31-9-4	39-1-11	46-6-3	48-9-8	50-0-0
1-2-8	4-11-11	4-8-3	7-4-8	7-4-8	7-4-7	7-4-7	7-4-7	2-3-6	1-2-8

Scale = 1:89.6



9-7-13	17-0-5	24-4-12	31-9-4	39-1-11	46-6-3	48-9-8
9-7-13	7-4-8	7-4-8	7-4-7	7-4-7	7-4-7	2-3-6

Plate Offsets (X,Y)-- [E:0-3-0,Edge], [I:0-3-0,Edge], [P:0-3-8,0-2-8]

LOADING (psf)
TCLL 25.0
(Roof Snow=25.0)
TCDL 10.0
BCLL 0.0
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2018/TPI2014

CSI.
TC 0.88
BC 0.96
WB 0.83
Matrix-MS

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.29	T	>999	240
Vert(CT)	-0.56	S-T	>987	180
Horz(CT)	0.20	O	n/a	n/a

PLATES	GRIP
MT20	244/190
MT20HS	187/143

Weight: 283 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
G-I,E-G: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
U-W: 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3 *Except*
K-P: 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
Except:
2-11-0 oc bracing: N-O
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt D-T, F-S, H-S, C-W

REACTIONS. (size) O=0-5-8, W=0-5-8
Max Horz W=155(LC 12)
Max Uplift O=-389(LC 9), W=-323(LC 8)
Max Grav O=2393(LC 1), W=2170(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-AA=-267/33, C-D=-3874/671, D-E=-3571/679, E-AB=-3452/691, F-AB=-3422/695, F-AC=-2806/606, G-AC=-2716/631, G-AD=-2716/630, H-AD=-2806/605, H-I=-3145/643, I-J=-3292/628, J-K=-3113/521, K-L=-252/505, N-O=-2324/554, K-N=-2300/524, B-W=-356/153
BOT CHORD V-W=-526/3127, U-V=-497/3633, T-U=-497/3633, S-T=-410/3323, R-S=-360/3049, Q-R=-360/3049, P-Q=-330/2874, L-N=-468/267
WEBS C-V=-14/597, D-T=-392/129, F-T=0/425, F-S=-1194/264, G-S=-166/1255, H-S=-722/222, J-Q=-40/319, J-P=-652/227, K-P=-509/3049, C-W=-3404/621

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 3-8-1, Interior(1) 3-8-1 to 19-6-3, Exterior(2R) 19-6-3 to 29-3-5, Interior(1) 29-3-5 to 50-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 3x6 MT20 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 389 lb uplift at joint O and 323 lb uplift at joint W.
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.

October 1,2025

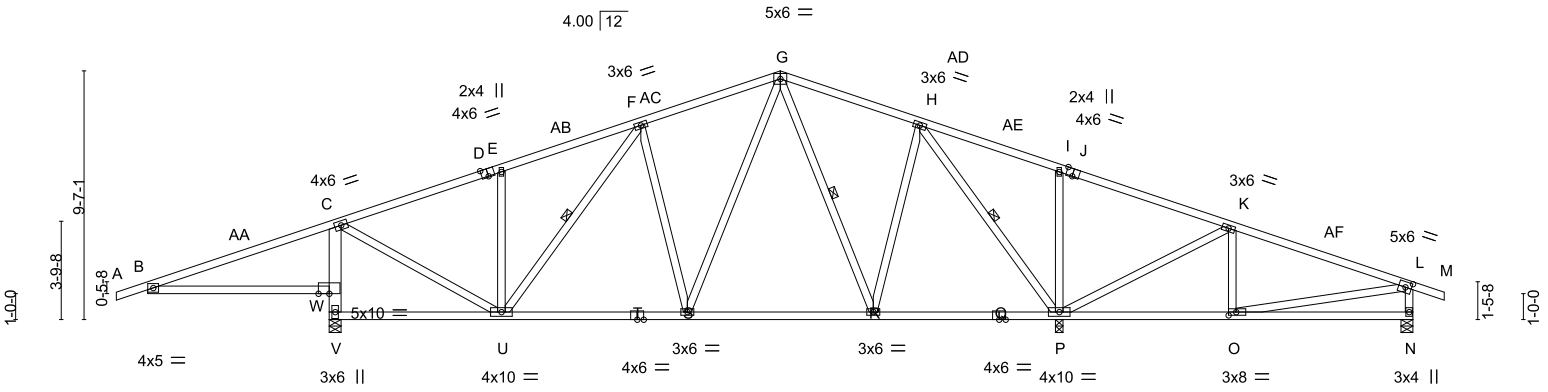
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	A2	Roof Special	6	1	I76722053
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:25 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-dcn9AhPtsjSRBD9M2p6H5ZfNSjnWKZo3gp0BoyyYTzC

1-2-8	7-0-0	13-7-11	19-0-4	24-4-12	29-9-5	35-1-14	41-9-15	48-9-8	50-0-0
1-2-8	7-0-0	6-7-11	5-4-9	5-4-9	5-4-9	5-4-9	6-8-1	6-11-9	1-2-8

Scale = 1:88.9



7-0-0	13-7-11	20-9-12	27-11-13	35-1-14	41-9-15	48-9-8
7-0-0	6-7-11	7-2-1	7-2-1	7-2-1	6-8-1	6-11-9

Plate Offsets (X,Y)-- [D:0-3-0,Edge], [J:0-3-0,Edge], [L:0-2-14,0-2-8], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.05	N-O	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.11	S-U	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	N	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 291 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
A-D,J-M: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
C-V: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-6 oc purlins, except end verticals. Except:
4-6-0 oc bracing: V-W
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
4-7-10 oc bracing: B-W
6-0-0 oc bracing: U-V.
WEBS 1 Row at midpt F-U, G-R, H-P

REACTIONS. (size) V=0-5-8, N=0-5-8, P=0-3-8
Max Horz V=165(LC 12)
Max Uplift V=-489(LC 8), N=-115(LC 9), P=-281(LC 9)
Max Grav V=2125(LC 19), N=519(LC 20), P=2136(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-580/1091, C-E=-875/123, E-F=-857/198, F-G=-1026/253, G-H=-667/244, H-I=0/497, I-K=-40/505, K-L=-404/69, V-W=-2073/676, C-W=-1955/590, L-N=-455/167
BOT CHORD B-W=-945/606, U-V=-744/539, S-U=-60/963, R-S=0/676, P-R=0/468, O-P=-12/315
WEBS C-U=-397/1715, E-U=-393/174, F-U=-359/155, F-S=-383/186, G-S=-101/551, G-R=-434/79, H-R=0/563, H-P=-1468/185, I-P=-435/184, K-P=-799/188, K-O=0/266

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 3-8-1, Interior(1) 3-8-1 to 19-6-3, Exterior(2R) 19-6-3 to 29-3-5, Interior(1) 29-3-5 to 45-1-8, Exterior(2E) 45-1-8 to 50-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) V=489, N=115, P=281.
7) 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.

October 1,2025

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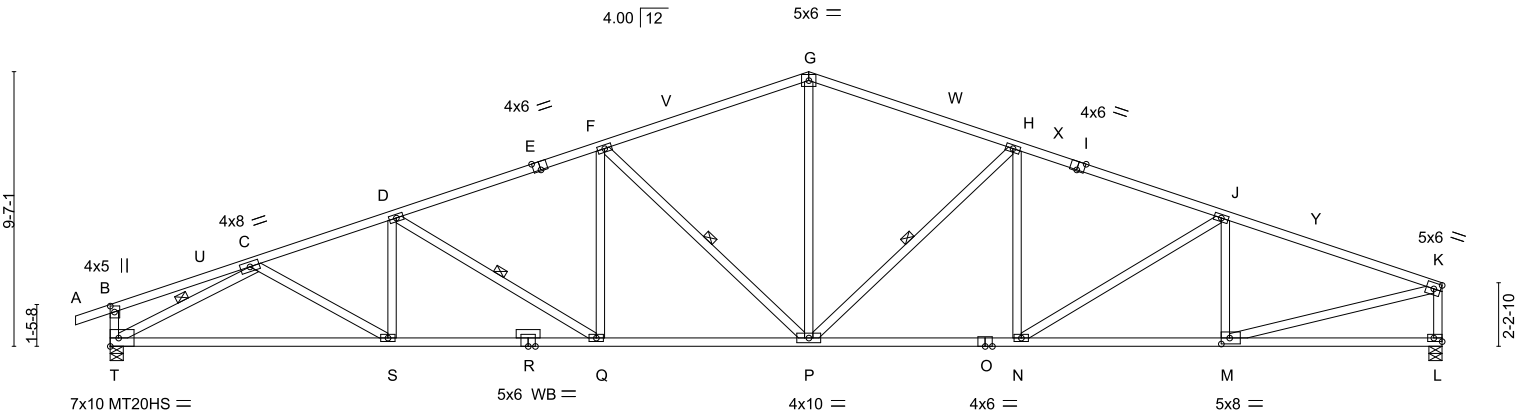
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	A3	Common	2	1	I76722054
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:25 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-dcn9AhPtsjSRBD9M2p6H5ZfLQjiyKZ13gp0BoyyYTzC

1-2-8	5-0-13	9-10-2	17-1-7	24-4-12	31-8-1	38-11-6	46-6-3
1-2-8	5-0-13	4-9-5	7-3-5	7-3-5	7-3-5	7-3-5	7-6-13

Scale = 1:80.5



9-10-2	17-1-7	24-4-12	31-8-1	38-11-6	46-6-3
9-10-2	7-3-5	7-3-5	7-3-5	7-3-5	7-6-13

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [E:0-3-0,Edge], [I:0-3-0,Edge], [L:Edge,0-1-8], [M:0-3-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.30	Q	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.57	P-Q	>976	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.20	L	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 275 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 2400F 2.0E *Except*
	A-E: 2x4 SP No.2, I-K: 2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2 *Except*
	R-T: 2x4 SP 1650F 1.5E
WEBS	2x4 SP No.3 *Except*
	K-M: 2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt D-Q, F-P, H-P, C-T

REACTIONS. (size) L=0-5-8, T=0-5-8
Max Horz T=114(LC 12)
Max Uplift L=-257(LC 9), T=-324(LC 8)
Max Grav L=2079(LC 1), T=2176(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-275/41, C-D=-3896/684, D-F=-3564/708, F-G=-2836/646, G-H=-2834/646, H-J=-3340/675, J-K=-3244/590, B-T=-361/153, K-L=-2005/390
BOT CHORD	S-T=-495/3156, Q-S=-499/3655, P-Q=-444/3311, N-P=-409/3093, M-N=-423/3006
WEBS	C-S=-11/577, D-Q=-403/129, F-Q=0/426, F-P=-1137/263, G-P=-178/1277, H-P=-896/223, J-M=-618/213, C-T=-3418/636, K-M=-451/2990

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 3-5-5, Interior(1) 3-5-5 to 19-8-15, Exterior(2R) 19-8-15 to 29-0-9, Interior(1) 29-0-9 to 41-8-10, Exterior(2E) 41-8-10 to 46-4-7 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 3x6 MT20 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) L=257, T=324.
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.

October 1,2025

MiTek®
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Chesterfield, MO 63017
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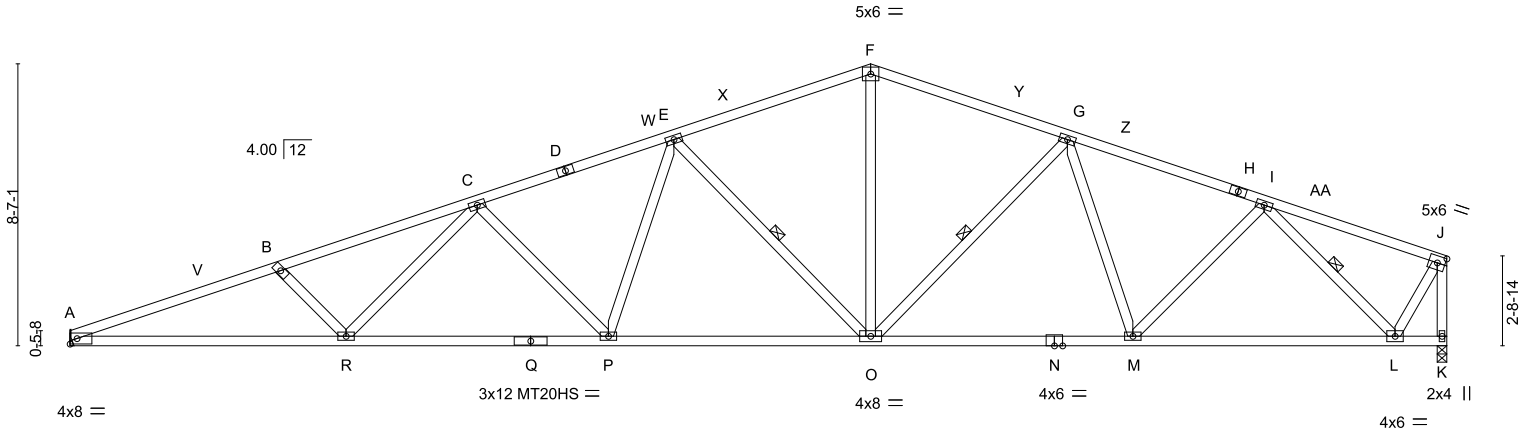
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B1	Roof Special	3	1	I76722055
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:26 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-5oLXO1PVd1aIpMkYcXdWenCWg71X33oCuTmkKOyYTzB

6-5-0	12-4-14	18-4-13	24-4-12	30-4-11	36-4-10	41-11-7
6-5-0	5-11-14	5-11-15	5-11-15	5-11-15	5-11-15	5-6-13

Scale = 1:70.2



8-4-15	16-4-14	24-4-12	32-4-10	40-4-8	41-11-7
8-4-15	7-11-15	7-11-14	7-11-14	7-11-14	1-6-15

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	0.84	Vert(LL)	-0.37	P-R	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.71	P-R	>705	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.19	K	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.27	P-R	>999	240	Weight: 229 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP 1650F 1.5E *Except*
	K-N: 2x4 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-1-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt E-O, G-O, I-L

REACTIONS. (size) A=Mechanical, K=0-3-8
Max Horz A=143(LC 16)
Max Uplift A=-257(LC 8), K=-218(LC 9)
Max Grav A=1777(LC 2), K=1777(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4491/831, B-C=-4289/782, C-E=-3392/697, E-F=-2380/580, F-G=-2380/580, G-I=-2501/544, I-J=-938/212, J-K=-1838/293
BOT CHORD A-R=-717/4206, P-R=-579/3617, O-P=-429/2929, M-O=-332/2364, L-M=-298/1958
WEBS B-R=-326/188, C-R=-50/608, C-P=-658/224, F-O=-172/1195, E-P=-73/805, E-O=-1135/276, G-O=-416/174, I-M=-3/573, I-L=-1621/351, J-L=-186/1655

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) 0-0-0 to 4-2-5, Interior(1) 4-2-5 to 20-2-7, Exterior(2R) 20-2-7 to 28-7-2, Interior(1) 28-7-2 to 37-7-6, Exterior(2E) 37-7-6 to 41-9-11 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 3x6 MT20 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=257, K=218.
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.

October 1,2025

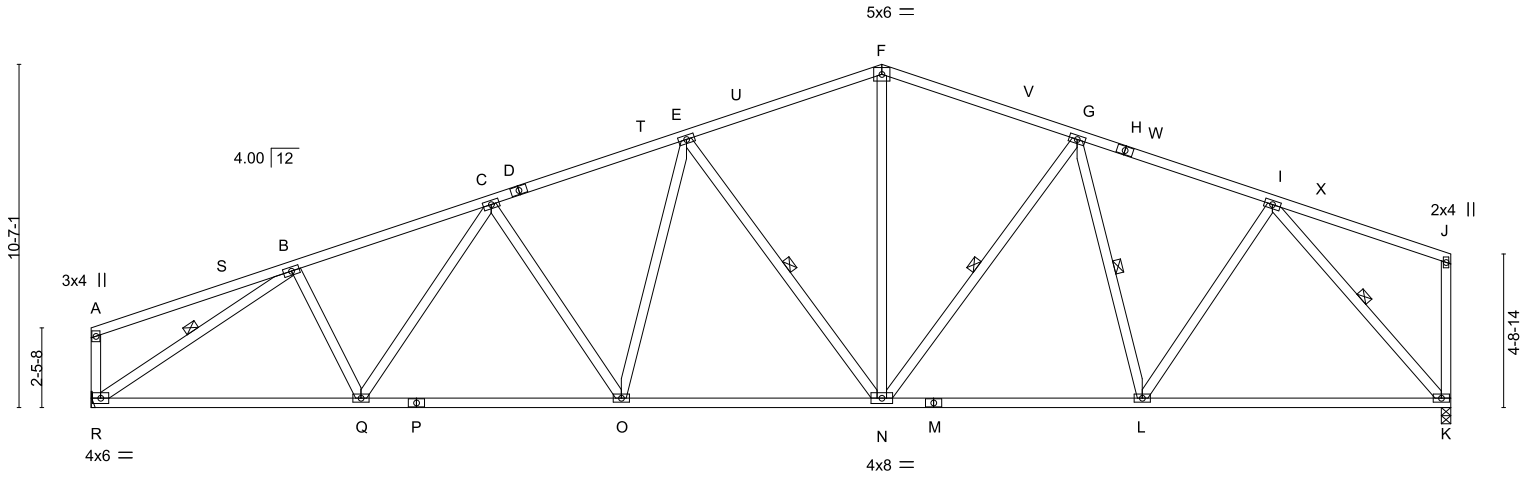
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B1-A	Common	3	1	I76722056
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:27 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-Z?vvbMQ7NKi9QWJIAE8lA_khMXPfoSfL77VIsqyYTzA

6-3-13	12-4-2	18-4-7	24-4-12	30-5-1	36-5-6	41-11-7
6-3-13	6-0-5	6-0-5	6-0-5	6-0-5	6-0-5	5-6-1

Scale = 1:71.1



8-3-15	16-4-5	24-4-12	32-5-3	41-11-7
8-3-15	8-0-7	8-0-7	8-0-7	9-6-4

LOADING (psf)
TCLL 25.0
(Roof Snow=25.0)
TCDL 10.0
BCLL 0.0
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2018/TPI2014

CSI.
TC 0.84
BC 0.88
WB 0.90
Matrix-MS

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.22	K-L	>999	240
Vert(CT)	-0.46	K-L	>999	180
Horz(CT)	0.14	K	n/a	n/a

PLATES **GRIP**
MT20 244/190

Weight: 267 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-5-3 oc bracing.
WEBS 1 Row at midpt E-N, G-N, G-L, B-R, I-K

REACTIONS. (size) R=Mechanical, K=0-3-8
Max Horz R=106(LC 9)
Max Uplift R=-252(LC 8), K=-221(LC 9)
Max Grav R=1875(LC 1), K=1875(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2708/514, C-E=-2641/566, E-F=-2041/528, F-G=-2041/527, G-I=-1963/461
BOT CHORD Q-R=-370/2349, O-Q=-342/2600, N-O=-247/2346, L-N=-216/1902, K-L=-216/1411
WEBS B-Q=0/390, C-O=-289/166, E-O=-46/427, E-N=-968/245, F-N=-139/859, G-N=-289/183, G-L=-435/129, I-L=-15/728, B-R=-2761/488, I-K=-2129/346

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) 0-1-12 to 4-4-1, Interior(1) 4-4-1 to 20-2-7, Exterior(2R) 20-2-7 to 28-7-2, Interior(1) 28-7-2 to 37-7-6, Exterior(2E) 37-7-6 to 41-9-11 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=25.0 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) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) R=252, K=221.
8) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B2	Hip	1	1	I76722057
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:27 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-Z?vvbMQ7NKi9QWJlAE8lA_khGXOPoVqL77VIsqyYTzA

5-11-0	11-4-15	16-10-14	22-4-12	26-4-12	31-10-11	37-4-10	41-11-7
5-11-0	5-5-15	5-5-15	5-5-15	4-0-0	5-5-15	5-5-15	4-6-13

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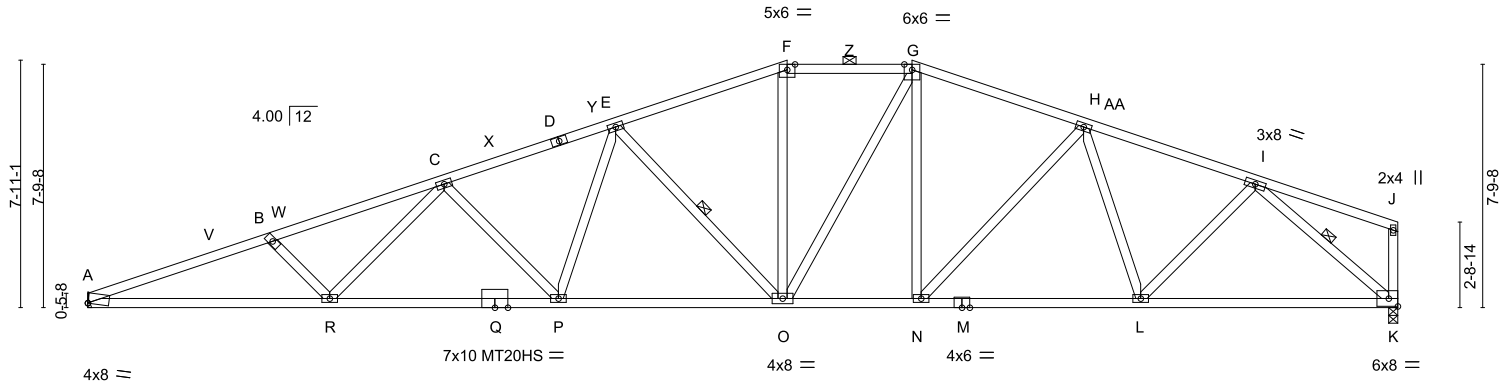


7-9-0	15-0-14	22-4-12	26-4-12	33-8-10	41-11-7
7-9-0	7-3-14	7-3-14	4-0-0	7-3-14	8-2-13

Plate Offsets (X,Y)-- [A:Edge,0-0-2]

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	0.85	Vert(LL)	-0.45	P-R	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.73	P-R	>687	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.21	K	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.25	P-R	>999	240	Weight: 241 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	A-D: 2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP 1650F 1.5E *Except*
	A-Q: 2x4 SP 2400F 2.0E
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-9 max.): F-G.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt E-O, I-K

REACTIONS. (size) A=Mechanical, K=0-3-8
Max Horz A=130(LC 16)
Max Uplift A=-268(LC 8), K=-234(LC 9)
Max Grav A=2101(LC 32), K=2251(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-5528/915, B-C=-5289/872, C-E=-4409/805, E-F=-3244/697, F-G=-2990/691, G-H=-3025/665, H-I=-3017/585
BOT CHORD	A-R=-800/5179, P-R=-682/4660, O-P=-550/3859, N-O=-353/2788, L-N=-402/2918, K-L=-317/2254
WEBS	B-R=-330/171, C-R=-41/524, C-P=-820/203, E-P=-65/879, E-O=-1262/245, F-O=-57/712, G-O=-135/505, G-N=-36/342, H-N=-286/130, H-L=-432/154, I-L=-58/849, I-K=-2955/493

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) 0-0-0 to 4-2-5, Interior(1) 4-2-5 to 16-5-9, Exterior(2R) 16-5-9 to 32-3-15, Interior(1) 32-3-15 to 37-4-10, Exterior(2E) 37-4-10 to 41-9-11 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) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 3x6 MT20 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=268, K=234.
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.

October 1,2025

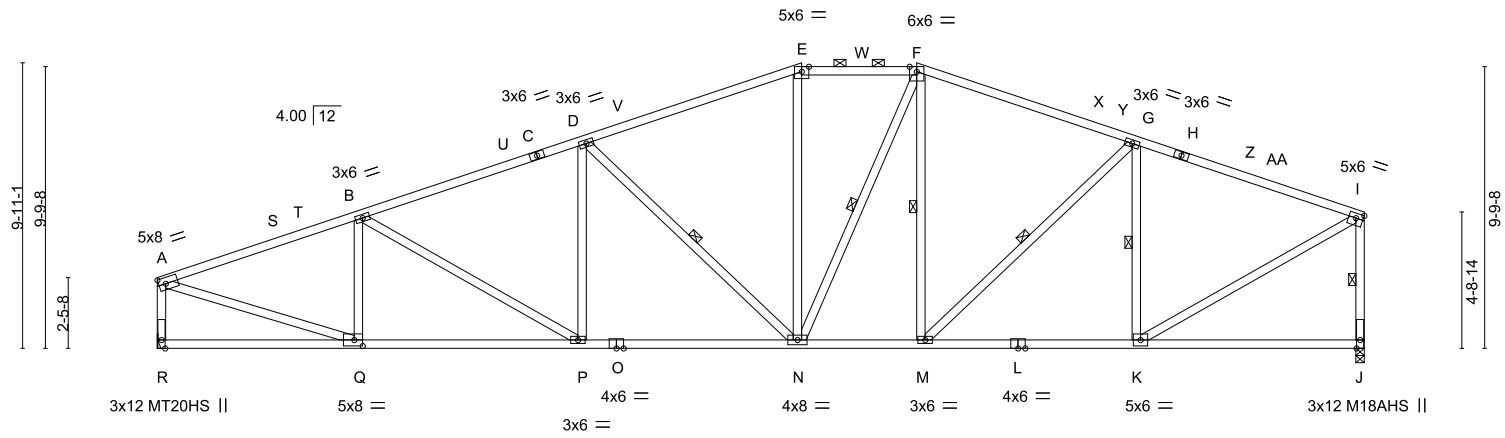
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B2-A	Hip	1	1	I76722058
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:28 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-1BTIoiRI8eq02guxkyf_jCHqrxiDXx7VMnFrPHyYTz9

6-10-2	14-9-3	22-4-12	26-4-12	34-0-6	41-11-7
6-10-2	7-11-1	7-7-9	4-0-0	7-7-9	7-11-1

Scale = 1:80.1



6-10-2	14-9-3	22-4-12	26-4-12	34-0-6	41-11-7
6-10-2	7-11-1	7-7-9	4-0-0	7-7-9	7-11-1

Plate Offsets (X,Y)-- [I:Edge,0-2-0], [Q:0-3-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.25	P	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.42	N-P	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.13	J	n/a	n/a	M18AHS	186/179
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 272 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except*
E-F: 2x4 SP No.2, F-H,C-E: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
B-P,A-Q,I-J,I-K: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-10 max.): E-F.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt D-N, F-N, F-M, G-M, G-K, I-J

REACTIONS. (size) R=Mechanical, J=0-3-8
Max Horz R=115(LC 9)
Max Uplift R=-264(LC 8), J=-237(LC 9)
Max Grav R=2393(LC 32), J=2523(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-3518/505, B-D=-3745/624, D-E=-2944/603, E-F=-2650/611, F-G=-2752/580, G-I=-2575/474, A-R=-2326/379, I-J=-2450/403
BOT CHORD Q-R=-96/252, P-Q=-372/3276, N-P=-350/3434, M-N=-201/2471, K-M=-246/2337
WEBS B-Q=-887/237, D-P=0/279, D-N=-1071/217, E-N=-7/436, F-N=-138/569, G-M=-57/430, G-K=-1153/272, A-Q=-458/3360, I-K=-341/2637

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) 0-1-12 to 4-4-1, Interior(1) 4-4-1 to 16-5-9, Exterior(2R) 16-5-9 to 32-3-15, Interior(1) 32-3-15 to 37-7-6, Exterior(2E) 37-7-6 to 41-9-11 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=25.0 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) 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) R=264, J=237.
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.

October 1,2025

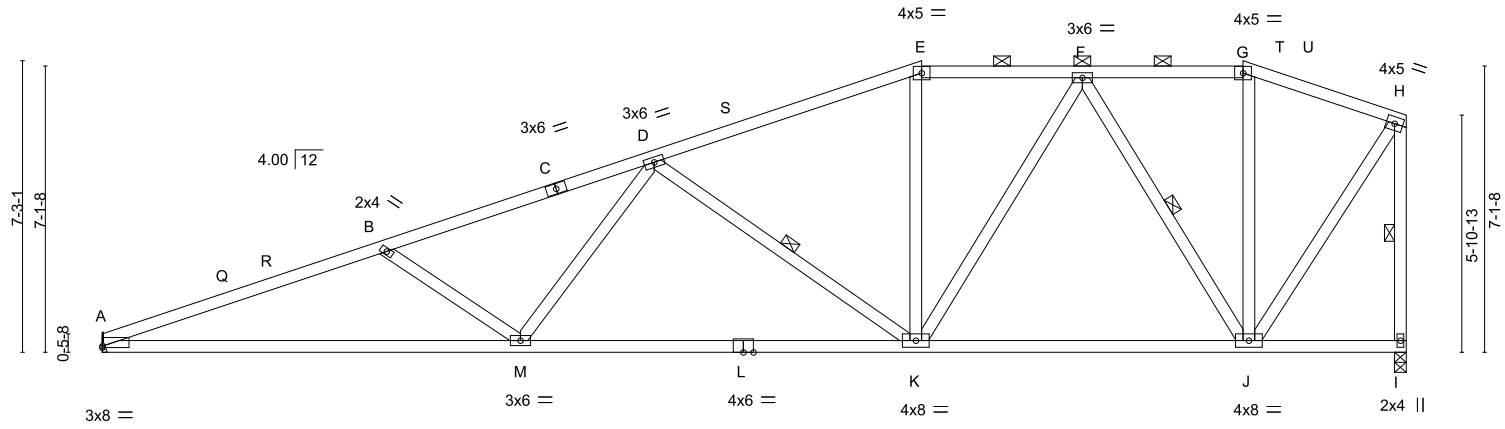
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B3	Hip	1	1	I76722059
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:29 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-VN1g02SNvyztgqS7HfADGPp?RK3rGSkeaR_PxjyYTz8

7-0-15	13-8-14	20-4-12	24-4-12	28-4-12	32-5-8
7-0-15	6-7-14	6-7-14	4-0-0	4-0-0	4-0-12

Scale = 1:57.4



10-4-15	20-4-12	28-4-12	32-5-8
10-4-15	9-11-14	8-0-0	4-0-12

Plate Offsets (X,Y)-- [A:0-0-0,0-0-6]

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	0.93	Vert(LL)	-0.32	K-M	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.58	K-M	>672	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.11	I	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.16	K-M	>999	240	Weight: 185 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-3-0 max.): E-G.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: A-M.
WEBS 1 Row at midpt D-K, F-J, H-I

REACTIONS. (size) A=Mechanical, I=0-3-8
Max Horz A=222(LC 11)
Max Uplift A=-226(LC 8), I=-208(LC 8)
Max Grav A=1603(LC 38), I=1509(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4000/669, B-D=-3472/573, D-E=-1929/450, E-F=-1745/461, F-G=-738/284, G-H=-818/281, H-I=-1473/326
BOT CHORD A-M=-614/3730, K-M=-421/2785, J-K=-199/1278
WEBS B-M=-664/231, D-M=-12/813, D-K=-1330/274, E-K=0/294, F-K=-111/899, F-J=-1052/258, H-J=-216/1315

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) 0-0-0 to 3-2-15, Interior(1) 3-2-15 to 15-9-11, Exterior(2R) 15-9-11 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=226, I=208.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B3-A	Hip	1	1	I76722060
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:30 2025 Page 1
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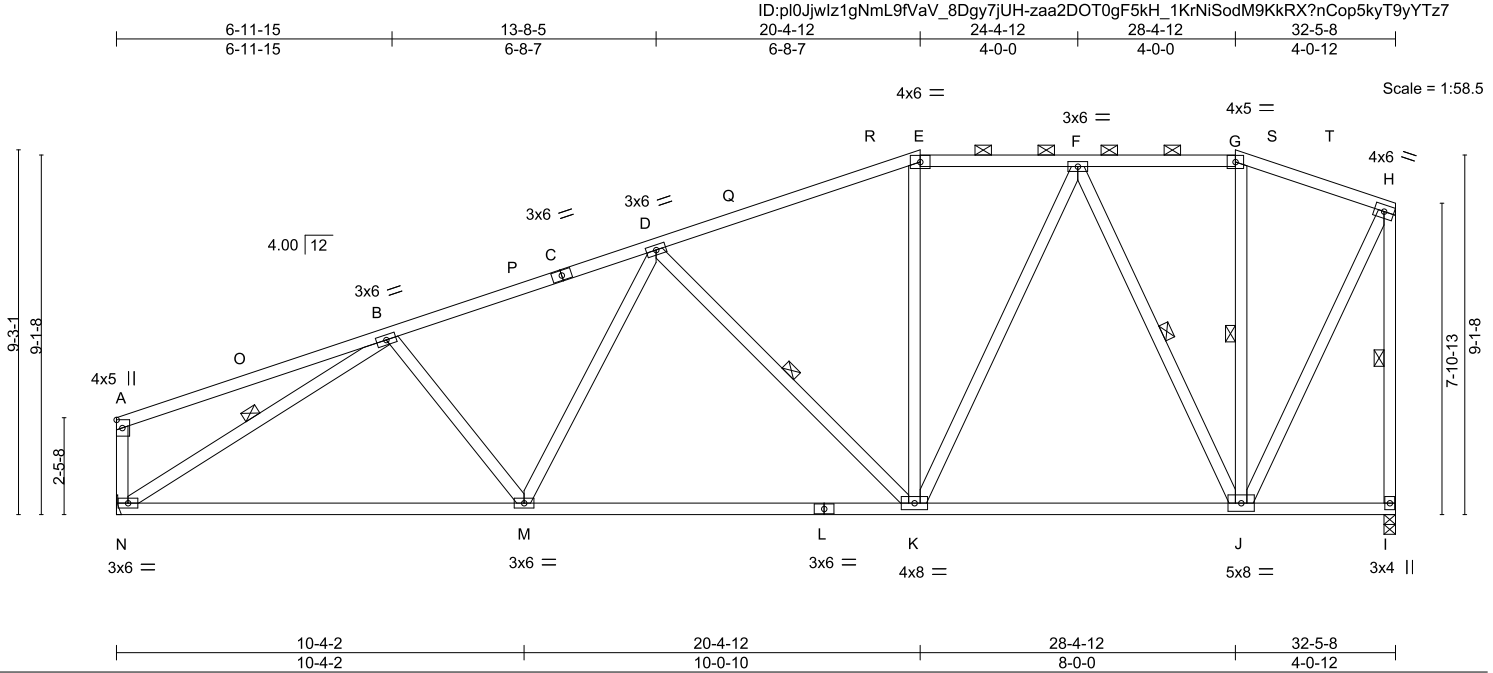


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.24	M-N	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.50	M-N	>766	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.08	I	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 223 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* C-E: 2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2 *Except* L-N: 2x4 SP 1650F 1.5E
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-3 max.): E-G.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt D-K, F-J, G-J, B-N, H-I

REACTIONS. (size) N=Mechanical, I=0-3-8
Max Horz N=296(LC 9)
Max Uplift N=-221(LC 8), I=-211(LC 8)
Max Grav N=1821(LC 32), I=1633(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-D=-2542/415, D-E=-1670/403, E-F=-1465/417, F-G=-607/284, G-H=-696/285, A-N=-272/89, H-I=-1610/334
BOT CHORD	M-N=-337/2315, K-M=-269/2188, J-K=-196/1069
WEBS	D-M=0/306, D-K=-1034/215, F-K=-111/943, F-J=-1125/240, B-N=-2640/404, H-J=-196/1350

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) 0-1-12 to 3-4-11, Interior(1) 3-4-11 to 15-9-11, Exterior(2R) 15-9-11 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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=25.0 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=221, I=211.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

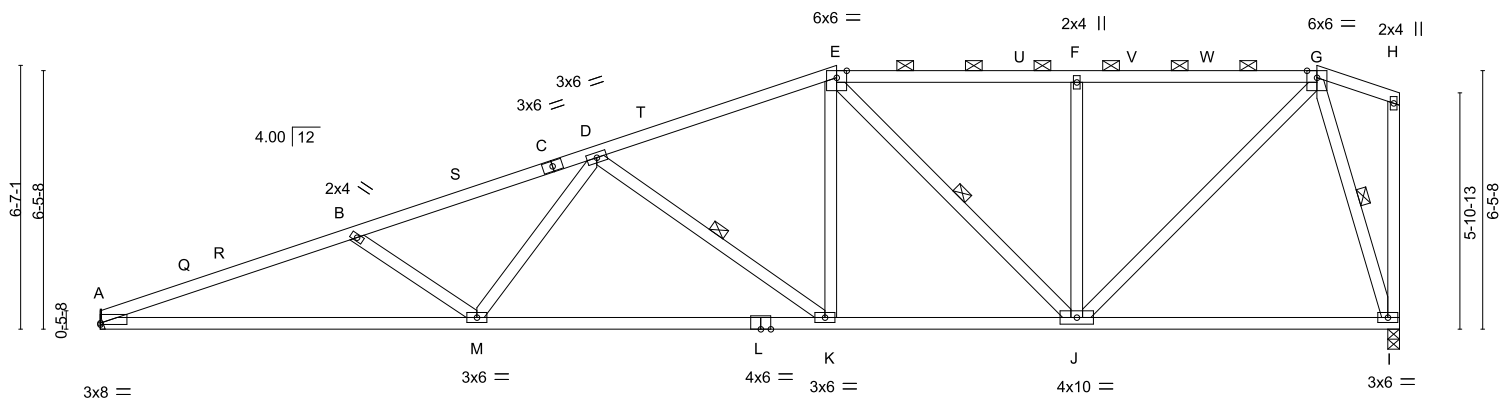
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B4	Hip	1	1	I76722061
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:30 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-zaa2DOT0gF5kH_1KrNiSodMBjkQL?taop5kyT9yYTz7

6-4-15	12-4-14	18-4-12	24-4-12	30-4-12	32-5-8
6-4-15	5-11-14	5-11-14	6-0-0	6-0-0	2-0-12

Scale = 1:57.6



9-4-15	18-4-12	24-4-12	32-5-8
9-4-15	8-11-14	6-0-0	8-0-12

Plate Offsets (X,Y)-- [A:0-0-0,0-0-6]

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	0.83	Vert(LL)	-0.31	K-M	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.56	K-M	>690	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.11	I	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.17	K-M	>999	240		
BCDL	10.0										Weight: 181 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-12 max.): E-G.
BOT CHORD Rigid ceiling directly applied or 9-0-0 oc bracing.
WEBS 1 Row at midpt D-K, E-J, G-I

REACTIONS. (size) A=Mechanical, I=0-3-8
Max Horz A=230(LC 11)
Max Uplift A=-230(LC 8), I=-229(LC 8)
Max Grav A=1604(LC 38), I=1466(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-3976/680, B-D=-3503/596, D-E=-2114/494, E-F=-1494/421, F-G=-1494/421
BOT CHORD A-M=-623/3701, K-M=-456/2834, J-K=-263/1914, I-J=-117/428
WEBS B-M=-615/206, D-M=-4/740, D-K=-1197/237, E-K=-56/916, E-J=-813/141, F-J=-691/214, G-J=-293/1533, G-I=-1420/285

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) 0-0-0 to 3-2-15, Interior(1) 3-2-15 to 13-9-11, Exterior(2R) 13-9-11 to 22-11-14, Interior(1) 22-11-14 to 25-9-11, Exterior(2R) 25-9-11 to 30-4-12, Exterior(2E) 30-4-12 to 32-3-12 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=230, I=229.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

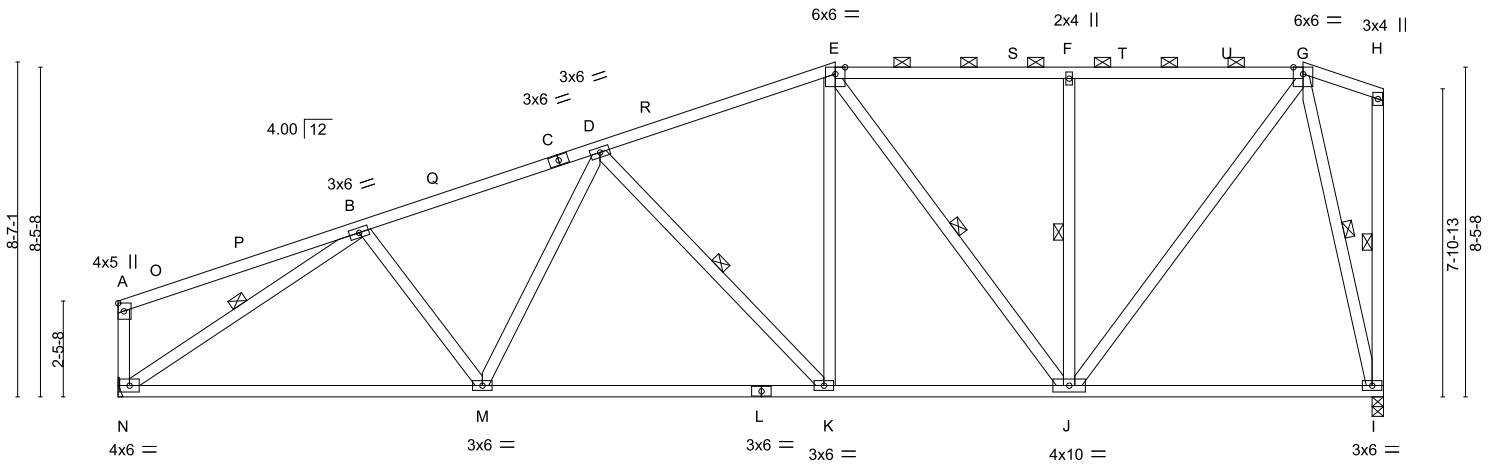
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B4-A	Hip	1	1	I76722062
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:31 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-Rm8QRkTeRZDbv8cWP4DhLqvLg8lwkHox2lTV?cyYTz6

6-3-15	12-4-5	18-4-12	24-4-12	30-4-12	32-5-8
6-3-15	6-0-7	6-0-7	6-0-0	6-0-0	2-0-12

Scale = 1:59.1



9-4-2	18-4-12	24-4-12	32-5-8
9-4-2	9-0-10	6-0-0	8-0-12

LOADING (psf)
TCLL 25.0
(Roof Snow=25.0)
TCDL 10.0
BCLL 0.0
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2018/TPI2014

CSI.
TC 0.95
BC 0.92
WB 0.83
Matrix-MS

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.17	M-N	>999	240
Vert(CT)	-0.36	M-N	>999	180
Horz(CT)	0.08	I	n/a	n/a

PLATES MT20 **GRIP** 244/190

Weight: 218 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-1 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): E-G.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: M-N.
WEBS 1 Row at midpt D-K, E-J, F-J, B-N, H-I, G-I

REACTIONS. (size) N=Mechanical, I=0-3-8
Max Horz N=305(LC 9)
Max Uplift N=-225(LC 8), I=-231(LC 8)
Max Grav N=1828(LC 32), I=1564(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-2441/413, D-E=-1747/425, E-F=-1207/380, F-G=-1207/380, A-N=-297/79
BOT CHORD M-N=-330/2183, K-M=-296/2143, J-K=-247/1539, I-J=-122/359
WEBS B-M=0/251, D-K=-863/175, E-K=-43/771, E-J=-811/130, F-J=-788/214, G-J=-261/1433, B-N=-2532/402, G-I=-1551/291

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) 0-1-12 to 3-4-11, Interior(1) 3-4-11 to 13-9-11, Exterior(2R) 13-9-11 to 22-11-14, Interior(1) 22-11-14 to 25-9-11, Exterior(2R) 25-9-11 to 30-4-12, Exterior(2E) 30-4-12 to 32-3-12 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=25.0 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=225, I=231.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

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16023 Swingley Ridge Rd.
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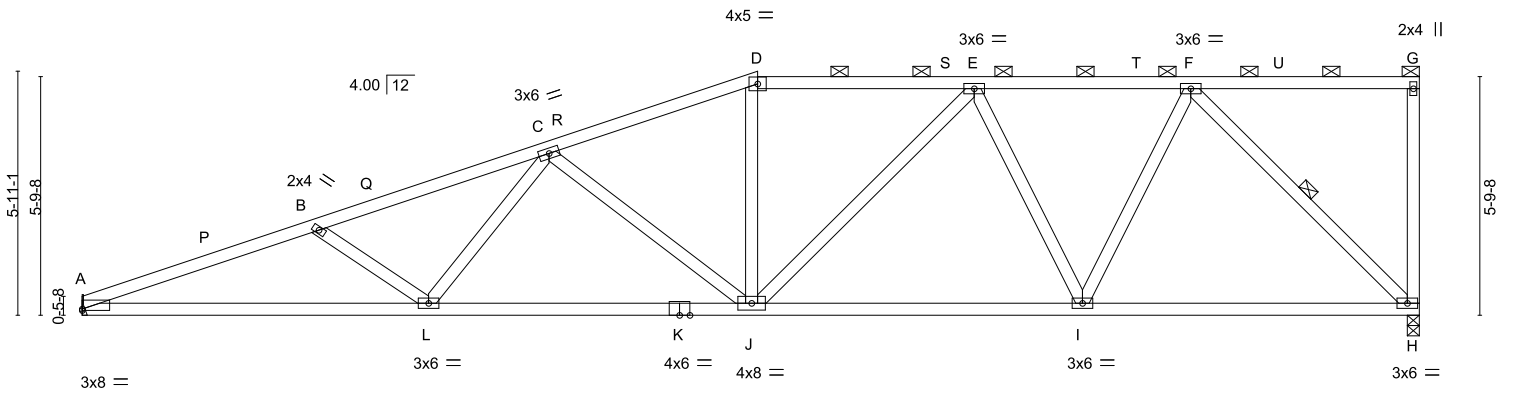
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B5	Half Hip	1	1	I76722063
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:32 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-vyioe4UGCtLSXHBiznkwt2RdLY7cTkd5HPD3Y2yYTz5

5-8-15	11-4-0	16-4-12	21-7-14	26-10-15	32-5-8
5-8-15	5-7-1	5-0-12	5-3-1	5-3-1	5-6-9

Scale = 1:55.9



8-4-15	16-4-12	24-3-6	32-5-8
8-4-15	7-11-14	7-10-10	8-2-2

Plate Offsets (X,Y)-- [A:0-0-0,0-0-6]

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	0.50	Vert(LL)	-0.25	J-L	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.45	J-L	>859	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.11	H	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.17	J-L	>999	240	Weight: 174 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-15 max.): D-G.
BOT CHORD Rigid ceiling directly applied or 9-0-0 oc bracing.
WEBS 1 Row at midpt F-H

REACTIONS. (size) A=Mechanical, H=0-3-8
Max Horz A=230(LC 11)
Max Uplift A=-233(LC 8), H=-250(LC 8)
Max Grav A=1606(LC 31), H=1606(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-3909/683, B-C=-3496/609, C-D=-2307/520, D-E=-2120/520, E-F=-1716/386
BOT CHORD A-L=-629/3627, J-L=-477/2865, I-J=-309/1984, H-I=-229/1305
WEBS B-L=-560/189, C-L=-14/656, C-J=-1020/217, D-J=-11/468, E-J=-81/582, E-I=-666/222, F-I=-111/969, F-H=-1833/325

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) 0-0-0 to 3-2-15, Interior(1) 3-2-15 to 11-9-11, Exterior(2R) 11-9-11 to 20-11-14, Interior(1) 20-11-14 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=233, H=250.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

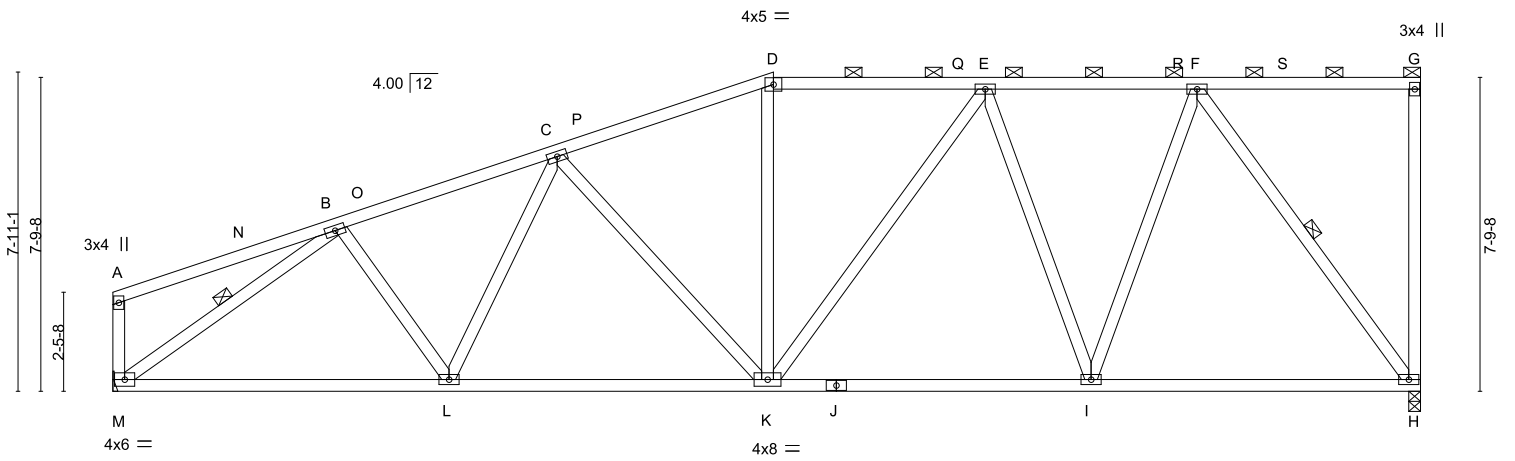
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B5-A	Half Hip	1	1	I76722064
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:32 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-vyioe4UGCtLSXHBiznkwt2RXaY80TjV5HPD3Y2yYTz5

5-7-15	11-0-5	16-4-12	21-7-14	26-10-15	32-5-8
5-7-15	5-4-7	5-4-7	5-3-1	5-3-1	5-6-9

Scale = 1:57.2



8-4-2	16-4-12	24-3-6	32-5-8
8-4-2	8-0-10	7-10-10	8-2-2

LOADING (psf)
TCLL 25.0
(Roof Snow=25.0)
TCDL 10.0
BCLL 0.0
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2018/TPI2014

CSI.
TC 0.87
BC 0.74
WB 0.86
Matrix-MS

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.12	L-M	>999	240
Vert(CT)	-0.26	L-M	>999	180
Horz(CT)	0.08	H	n/a	n/a

PLATES MT20 **GRIP** 244/190

Weight: 209 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): D-G.
BOT CHORD Rigid ceiling directly applied or 9-9-11 oc bracing.
WEBS 1 Row at midpt F-H, B-M

REACTIONS. (size) H=0-3-8, M=Mechanical
Max Horz M=304(LC 9)
Max Uplift H=-252(LC 8), M=-228(LC 8)
Max Grav H=1784(LC 28), M=1797(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2301/403, C-D=-1810/429, D-E=-1624/437, E-F=-1355/343, G-H=-254/83, A-M=-299/70
BOT CHORD L-M=-343/2006, K-L=-321/2075, I-K=-277/1582, H-I=-209/1066
WEBS B-L=0/347, C-K=-673/167, D-K=0/254, E-K=-77/580, E-I=-700/208, F-I=-109/886, F-H=-1799/279, B-M=-2387/394

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) 0-1-12 to 3-4-11, Interior(1) 3-4-11 to 11-9-11, Exterior(2R) 11-9-11 to 20-11-14, Interior(1) 20-11-14 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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=25.0 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) Provide adequate drainage to prevent water ponding.
5) All plates are 3x6 MT20 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=252, M=228.
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.

October 1,2025

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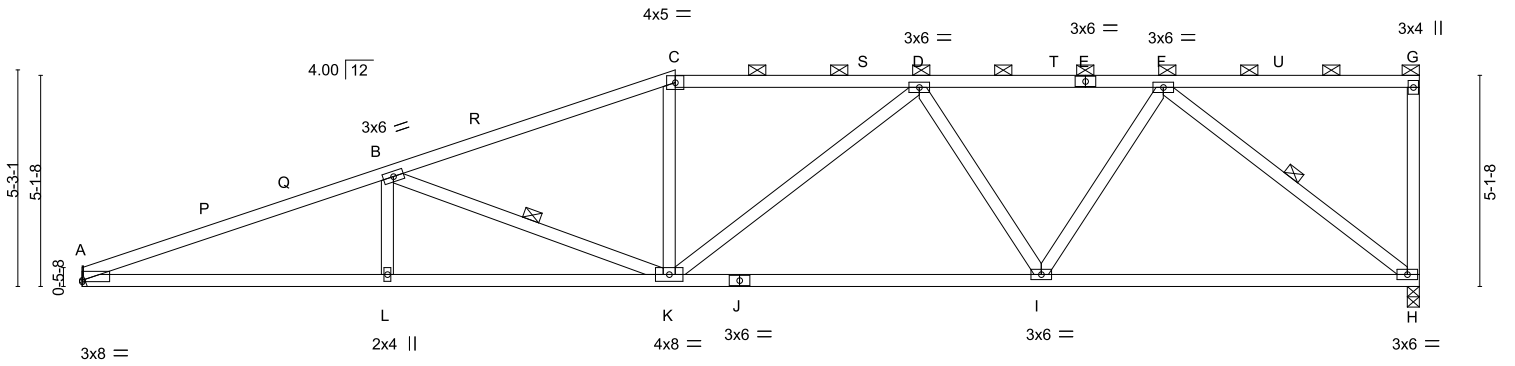
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B6	Half Hip	1	1	I76722065
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:33 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-O9GBsQVuzATJ8RmvWVF9QF_iTyTlCCXEV3yc4UyYTz4

7-4-15	14-4-12	20-3-14	26-2-15	32-5-8
7-4-15	6-11-14	5-11-1	5-11-1	6-2-9

Scale = 1:55.9



7-4-15	14-4-12	23-3-6	32-5-8
7-4-15	6-11-14	8-10-10	9-2-2

Plate Offsets (X,Y)-- [A:0-0-0,0-0-6]

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	0.86	Vert(LL)	-0.23	I-K	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.45	I-K	>857	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.12	H	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.17	K-L	>999	240	Weight: 164 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
A-C: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-4 max.): C-G.
BOT CHORD Rigid ceiling directly applied or 9-4-14 oc bracing.
WEBS 1 Row at midpt B-K, F-H

REACTIONS. (size) A=Mechanical, H=0-3-8
Max Horz A=202(LC 11)
Max Uplift A=-235(LC 8), H=-248(LC 8)
Max Grav A=1568(LC 31), H=1664(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-3677/672, B-C=-2608/554, C-D=-2440/563, D-F=-2181/424, G-H=-254/78
BOT CHORD A-L=-578/3412, K-L=-578/3412, I-K=-375/2470, H-I=-280/1702
WEBS B-L=0/254, B-K=-1242/247, C-K=0/510, D-K=-152/448, D-I=-612/222, F-I=-83/960, F-H=-2134/362

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) 0-0-0 to 3-2-15, Interior(1) 3-2-15 to 9-9-11, Exterior(2R) 9-9-11 to 18-11-14, Interior(1) 18-11-14 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) A=235, H=248.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

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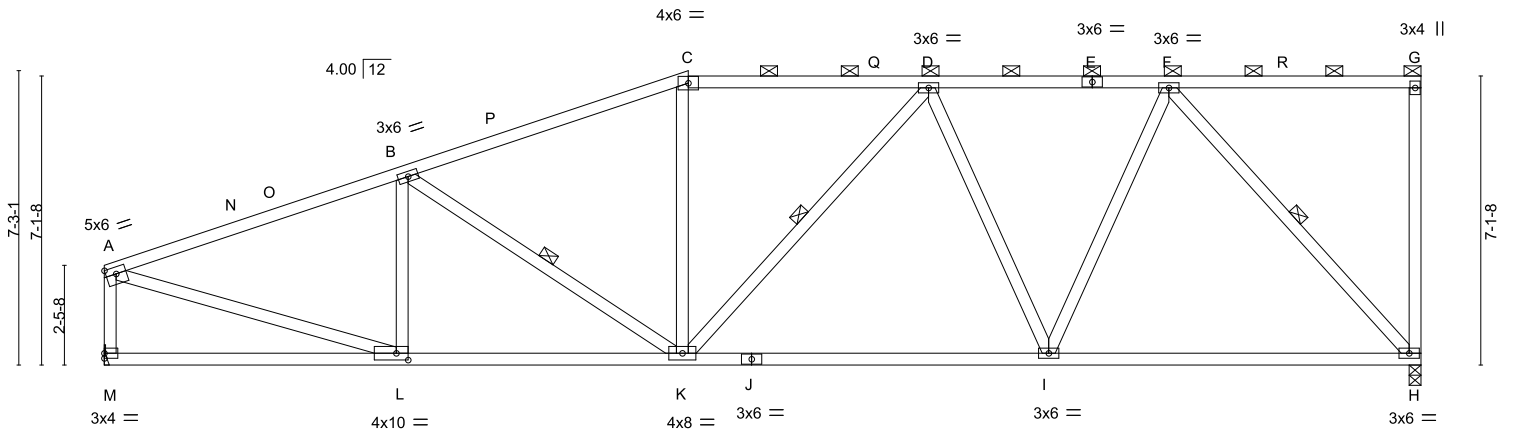
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	B6-A	Half Hip	1	1	I76722066
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:33 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-O9GBsQVuzATJ8RmvWVF9QF_h8yStC99EV3yc4UyYTz4

7-4-2	14-4-12	20-3-14	26-2-15	32-5-8
7-4-2	7-0-10	5-11-1	5-11-1	6-2-9

Scale = 1:56.8



7-4-2	14-4-12	23-3-6	32-5-8
7-4-2	7-0-10	8-10-10	9-2-2

Plate Offsets (X,Y)-- [A:Edge,0-2-0], [L:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.17	H-I	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.36	H-I	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.07	H	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 197 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* A-C: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-0 max.): C-G.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt B-K, D-K, F-H

REACTIONS. (size) H=0-3-8, M=Mechanical
Max Horz M=276(LC 9)
Max Uplift H=-249(LC 8), M=-231(LC 8)
Max Grav H=1855(LC 28), M=1718(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-2317/394, B-C=-1959/436, C-D=-1825/449, D-F=-1681/359, G-H=-287/84, A-M=-1646/303
BOT CHORD L-M=-256/351, K-L=-332/2096, I-K=-317/1932, H-I=-240/1344
WEBS B-L=-471/192, B-K=-502/201, C-K=0/265, D-K=-181/422, D-I=-631/201, F-I=-78/847, F-H=-1992/297, A-L=-349/2071

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) 0-1-12 to 3-4-11, Interior(1) 3-4-11 to 9-9-11, Exterior(2R) 9-9-11 to 18-11-14, Interior(1) 18-11-14 to 29-0-13, Exterior(2E) 29-0-13 to 32-3-12 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=25.0 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) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=249, M=231.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	C1	Common	14	1	I76722067
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:34 2025 Page 1
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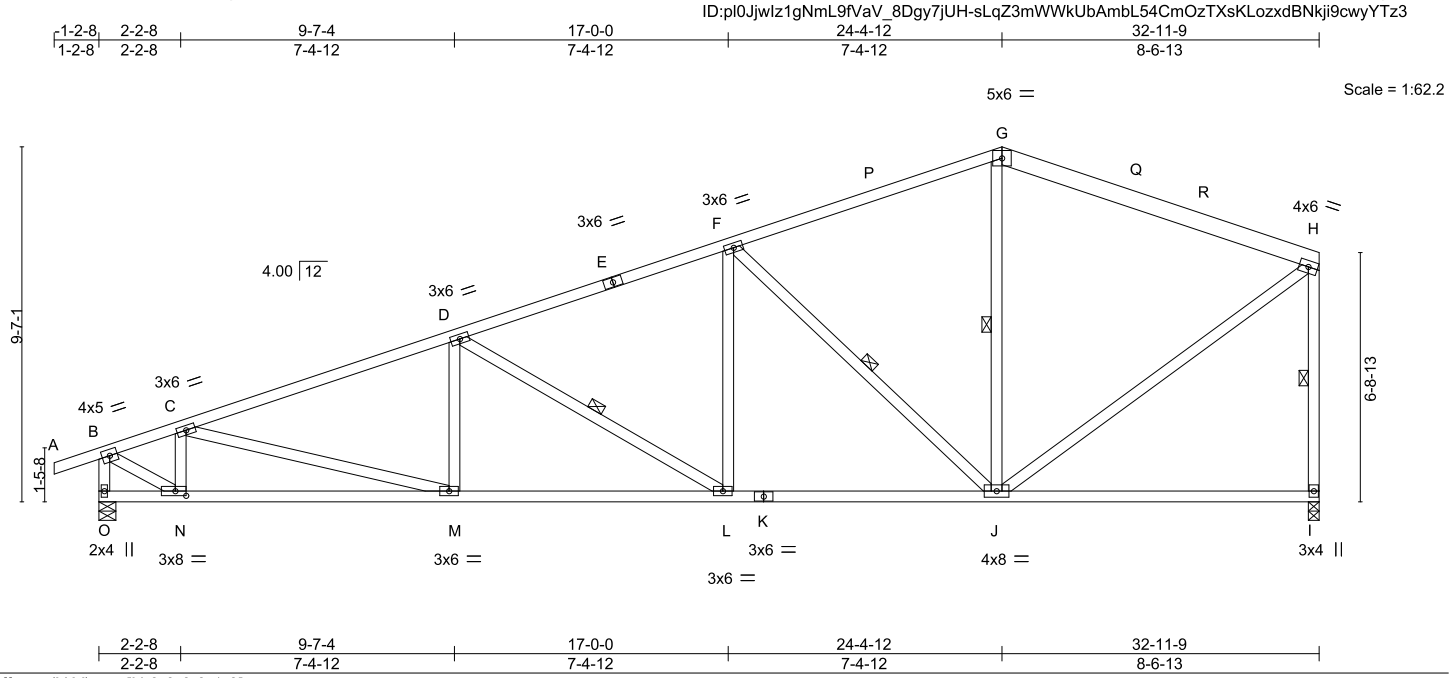

Plate Offsets (X,Y)-- [N:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.16	I-J	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.33	I-J	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.07	I	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 208 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
G-H: 2x6 SP No.1, E-G: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt D-L, F-J, G-J, H-I

REACTIONS. (size) O=0-5-8, I=0-3-8
Max Horz O=238(LC 9)
Max Uplift O=-287(LC 8), I=-173(LC 8)
Max Grav O=1679(LC 19), I=1472(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1825/285, C-D=-2693/446, D-F=-2152/424, F-G=-1275/349, G-H=-1176/341, B-O=-1678/316, H-I=-1395/312
BOT CHORD N-O=-228/267, M-N=-376/1747, L-M=-395/2478, J-L=-247/1970
WEBS C-N=-930/243, C-M=-137/755, D-L=-635/172, F-L=-5/496, F-J=-1213/269, G-J=-17/322, B-N=-323/2057, H-J=-145/1336

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 2-2-8, Interior(1) 2-2-8 to 21-1-3, Exterior(2R) 21-1-3 to 27-8-5, Interior(1) 27-8-5 to 29-6-4, Exterior(2E) 29-6-4 to 32-9-13 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=287, I=173.
7) 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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 109 lb down and 84 lb up at 2-3-0 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-B=-70, B-G=-70, G-H=-70, I-O=-20

October 1,2025

Continued on page 2

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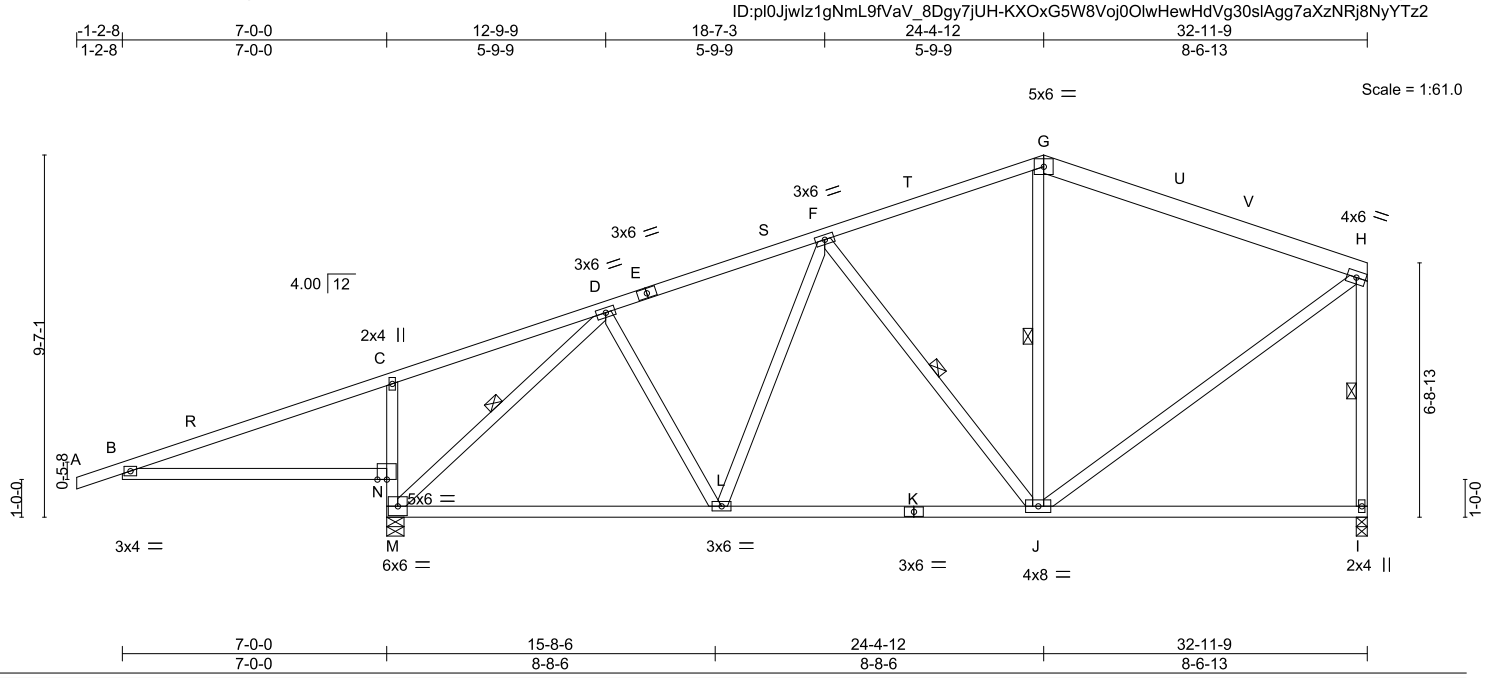
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: C=-62

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	C2	Roof Special	6	1	I76722068
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:35 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-KXOxG5W8Voj0OlwHewHdVg30slAgg7aXzNRj8NyYTz2



7-0-0	15-8-6	24-4-12	32-11-9
7-0-0	8-8-6	8-8-6	8-6-13

LOADING (psf)
TCLL 25.0
(Roof Snow=25.0)
TCDL 10.0
BCLL 0.0
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2018/TPI2014

CSI.
TC 1.00
BC 0.68
WB 0.65
Matrix-MS

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.14	I-J	>999	240
Vert(CT)	-0.31	L-M	>996	180
Horz(CT)	0.02	I	n/a	n/a

PLATES MT20 **GRIP** 244/190

Weight: 198 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
G-H: 2x6 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
C-M: 2x4 SP 2400F 2.0E

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
Except:
6-0-0 oc bracing: M-N
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
4-9-4 oc bracing: B-N.
WEBS 1 Row at midpt D-M, F-J, G-J, H-I

REACTIONS. (size) M=0-5-8, I=0-3-8
Max Horz M=240(LC 9)
Max Uplift M=-485(LC 8), I=-137(LC 9)
Max Grav M=2060(LC 19), I=1159(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-564/1068, C-D=-359/824, D-F=-917/161, F-G=-800/242, G-H=-748/229,
M-N=-726/354, C-N=-593/261, H-I=-1082/198
BOT CHORD B-N=-928/591, L-M=-178/627, J-L=-155/905
WEBS D-M=-1828/470, D-L=-73/478, F-J=-399/161, H-J=-81/809

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 2-1-1, Interior(1) 2-1-1 to 21-1-3, Exterior(2R) 21-1-3 to 27-8-5, Interior(1) 27-8-5 to 29-6-4, Exterior(2E) 29-6-4 to 32-9-13 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) M=485, I=137.
7) 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D1	MONOPITCH SUPPORTED	1	1	I76722069
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:35 2025 Page 1
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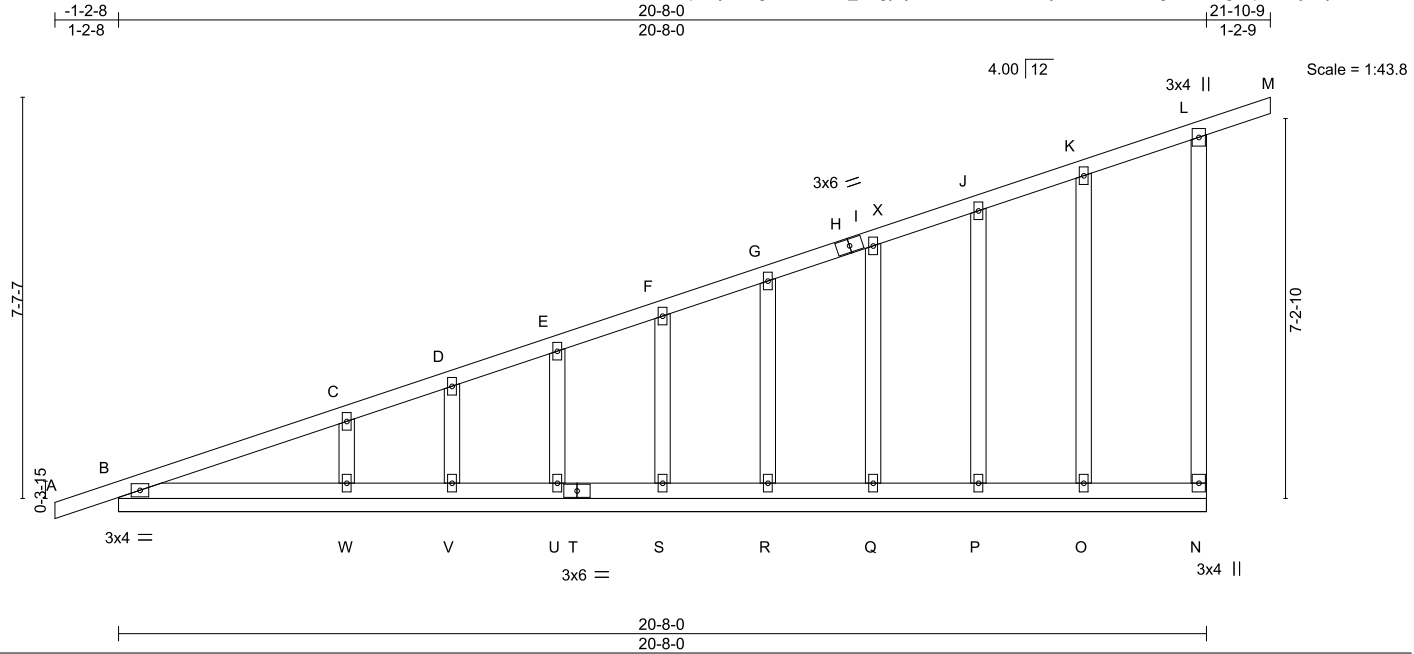

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.01	M	n/r	120	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.01	M	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	N	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 119 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 20-8-0.
(lb) - Max Horz B=317(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) N, S, U, V, W, R, Q, P, O, B
Max Grav All reactions 250 lb or less at joint(s) S, U, V, R, Q, P, O, B except N=268(LC 19), W=361(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-258/240, L-N=-250/148

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 Corner(3E) -1-2-8 to 1-9-8, Exterior(2N) 1-9-8 to 18-10-9, Corner(3E) 18-10-9 to 21-10-9 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) 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.
3) 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
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N, S, U, V, W, R, Q, P, O, B.
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.

October 1,2025

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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D1-A	Monopitch Supported Gable	1	1	I76722070
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:36 2025 Page 1
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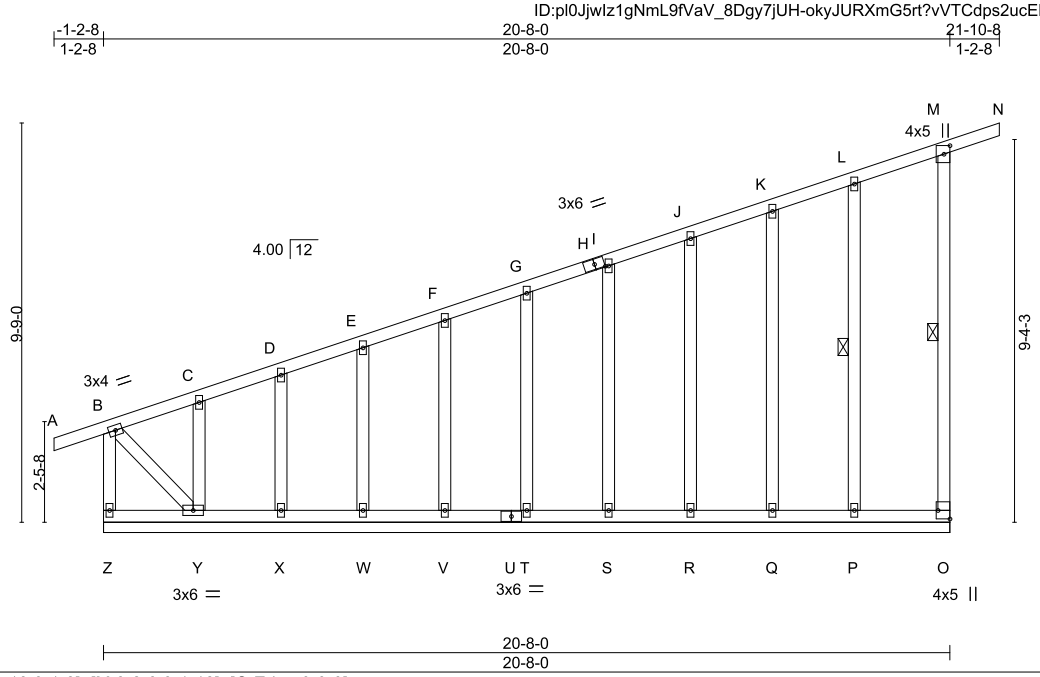

Plate Offsets (X,Y)-- [H:0-2-13,0-1-8], [M:0-2-8,0-1-12], [O:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.01	N	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.02	N	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	-0.00	O	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
M-O: 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt M-O, L-P

REACTIONS. All bearings 20-8-0.
(lb) - Max Horz Z=396(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) O, T, V, W, X, S, R, Q, P except Y=-312(LC 9)
Max Grav All reactions 250 lb or less at joint(s) T, V, W, X, Y, S, R, P except Z=387(LC 23), O=307(LC 19), Q=259(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-Z=-366/312, B-C=-279/262, C-D=-260/251, M-O=-289/175
BOT CHORD Y-Z=-372/431
WEBS B-Y=-402/423

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 Corner(3E) -1-2-8 to 1-9-8, Exterior(2N) 1-9-8 to 18-10-8, Corner(3E) 18-10-8 to 21-10-8 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) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O, T, V, W, X, S, R, Q, P except (jt=lb) Y=312.
11) N/A
12) 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.

October 1,2025

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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D2	Monopitch	3	1	I76722071
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:36 2025 Page 1
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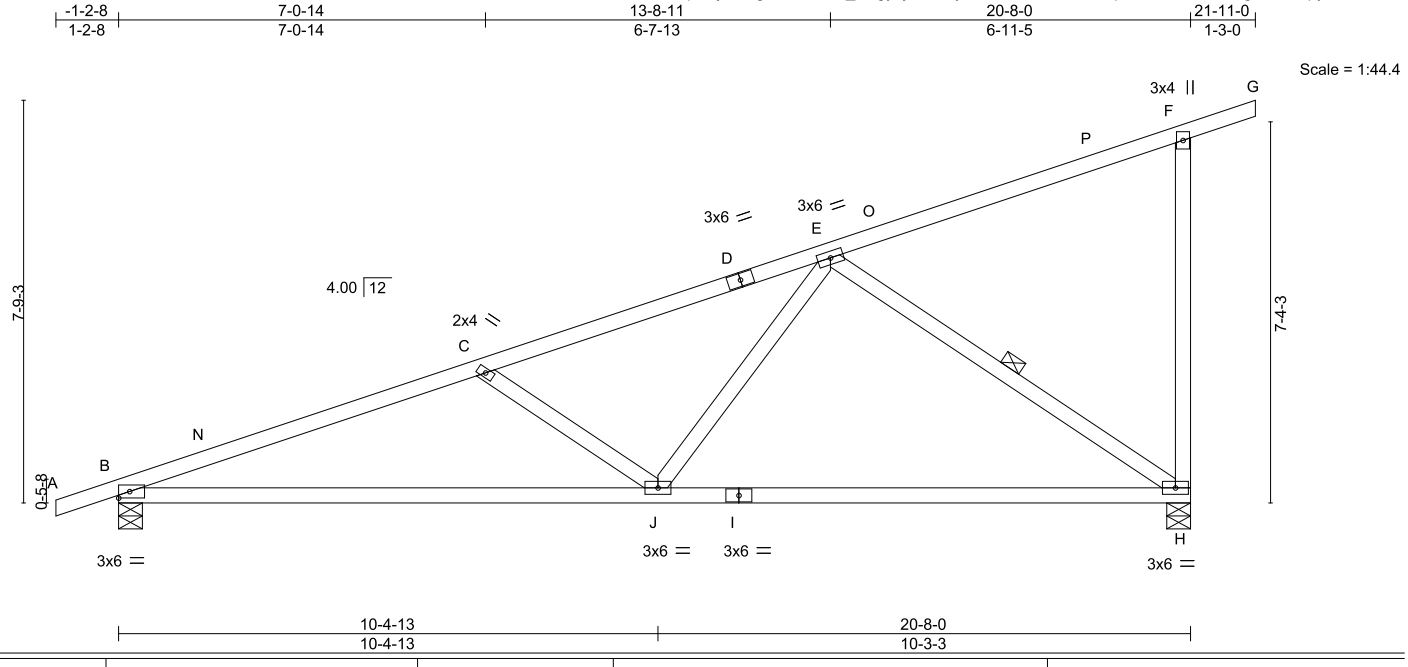

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.25	H-J	>980	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.51	H-J	>480	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	H	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.07	J-M	>999	240	Weight: 103 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt E-H

REACTIONS. (size) B=0-5-8, H=0-5-8
Max Horz B=320(LC 9)
Max Uplift B=-174(LC 8), H=-212(LC 12)
Max Grav B=950(LC 3), H=1111(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1818/289, C-E=-1485/184, F-H=-412/154
BOT CHORD B-J=-357/1693, H-J=-156/912
WEBS C-J=-486/240, E-J=-9/791, E-H=-1078/269

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 1-9-8, Interior(1) 1-9-8 to 18-11-0, Exterior(2E) 18-11-0 to 21-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=174, H=212.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D2-A	Monopitch	3	1	I76722072
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:37 2025 Page 1
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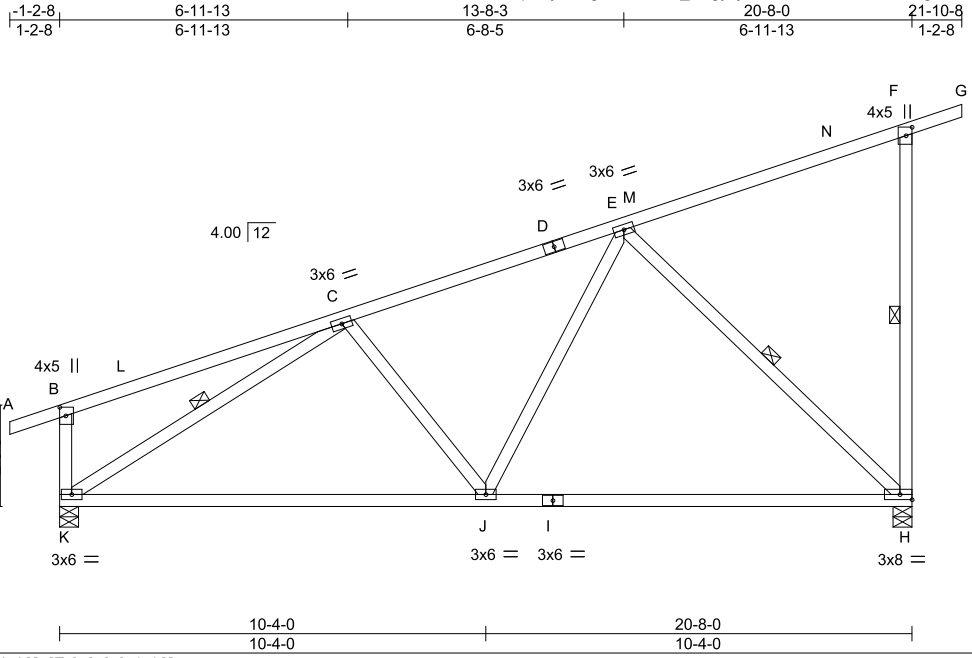

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [F:0-2-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.24	H-J	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.49	H-J	>494	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	H	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 127 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt F-H, E-H, C-K

REACTIONS. (size) H=0-5-8, K=0-5-8
Max Horz K=396(LC 9)
Max Uplift H=-223(LC 12), K=-168(LC 8)
Max Grav H=1261(LC 19), K=1047(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-E=-1028/171, F-H=-475/151, B-K=-363/172
BOT CHORD J-K=-246/1008, H-J=-159/732
WEBS E-J=-14/498, E-H=-998/237, C-K=-1082/154

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 1-9-8, Interior(1) 1-9-8 to 18-10-8, Exterior(2E) 18-10-8 to 21-10-8 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=223, K=168.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D3	Monopitch	8	1	I76722073
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:37 2025 Page 1
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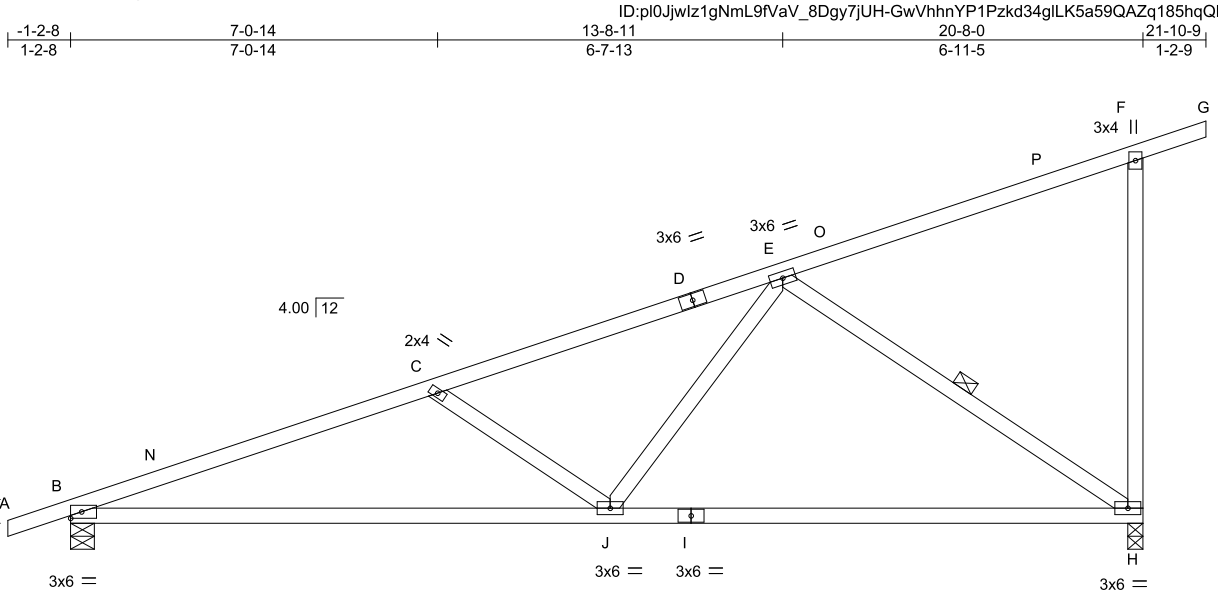

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.25	H-J	>980	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.51	H-J	>480	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	H	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.07	J-M	>999	240	Weight: 103 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt E-H

REACTIONS. (size) B=0-5-8, H=0-3-8
Max Horz B=319(LC 9)
Max Uplift B=-175(LC 8), H=-211(LC 12)
Max Grav B=951(LC 3), H=1108(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1819/290, C-E=-1486/185, F-H=-408/151
BOT CHORD B-J=-357/1694, H-J=-157/914
WEBS C-J=-486/240, E-J=-9/791, E-H=-1079/269

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 1-9-8, Interior(1) 1-9-8 to 18-10-9, Exterior(2E) 18-10-9 to 21-10-9 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=175, H=211.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	D3-A	Monopitch	8	1	I76722074
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:38 2025 Page 1
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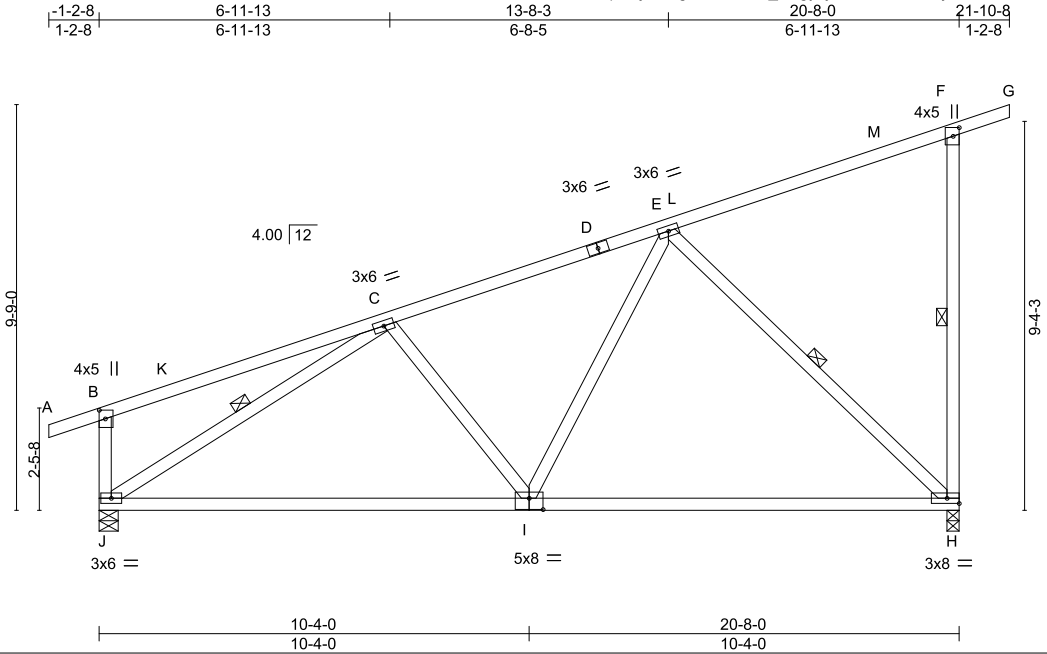

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [F:0-2-8,0-1-12], [I:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.23	H-I	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.47	H-I	>520	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	H	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 127 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt F-H, E-H, C-J

REACTIONS. (size) H=0-3-8, J=0-5-8
Max Horz J=396(LC 9)
Max Uplift H=-223(LC 12), J=-168(LC 8)
Max Grav H=1261(LC 19), J=1047(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-E=-1027/172, F-H=-475/151, B-J=-363/172
BOT CHORD I-J=-246/1008, H-I=-159/732
WEBS E-I=-15/498, E-H=-998/238, C-J=-1081/154

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 1-9-8, Interior(1) 1-9-8 to 18-10-8, Exterior(2E) 18-10-8 to 21-10-8 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=223, J=168.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	E1	Monopitch Supported Gable	1	1	I76722075
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:38 2025 Page 1
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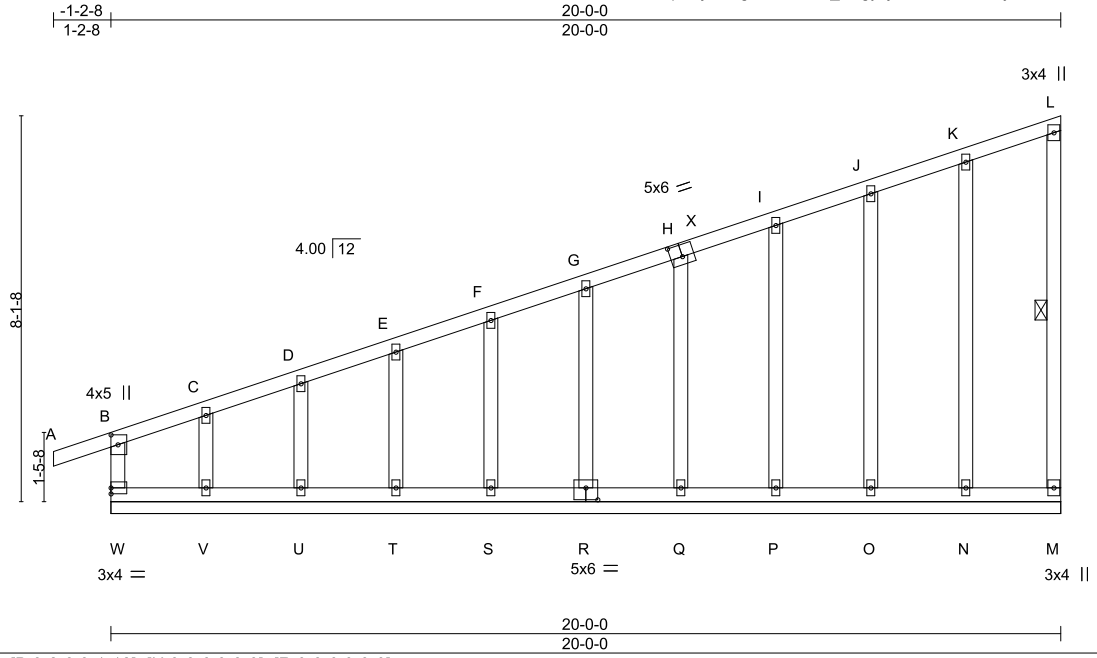

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [H:0-3-0,0-3-0], [R:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.00	B	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.02	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	M	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 132 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* L-M: 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: Q-R.
WEBS 1 Row at midpt L-M

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz W=332(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) M, N, O, P, Q, R, S, T, U except V=-259(LC 9)
Max Grav All reactions 250 lb or less at joint(s) M, O, Q, R, S, T, U, V except W=313(LC 23), N=261(LC 19), P=251(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-277/279

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 Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 16-10-4, Corner(3E) 16-10-4 to 19-10-4 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
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, N, O, P, Q, R, S, T, U except (jt=lb) V=259.
12) 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.

October 1,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	E2	Monopitch	2	1	I76722076
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:39 2025 Page 1
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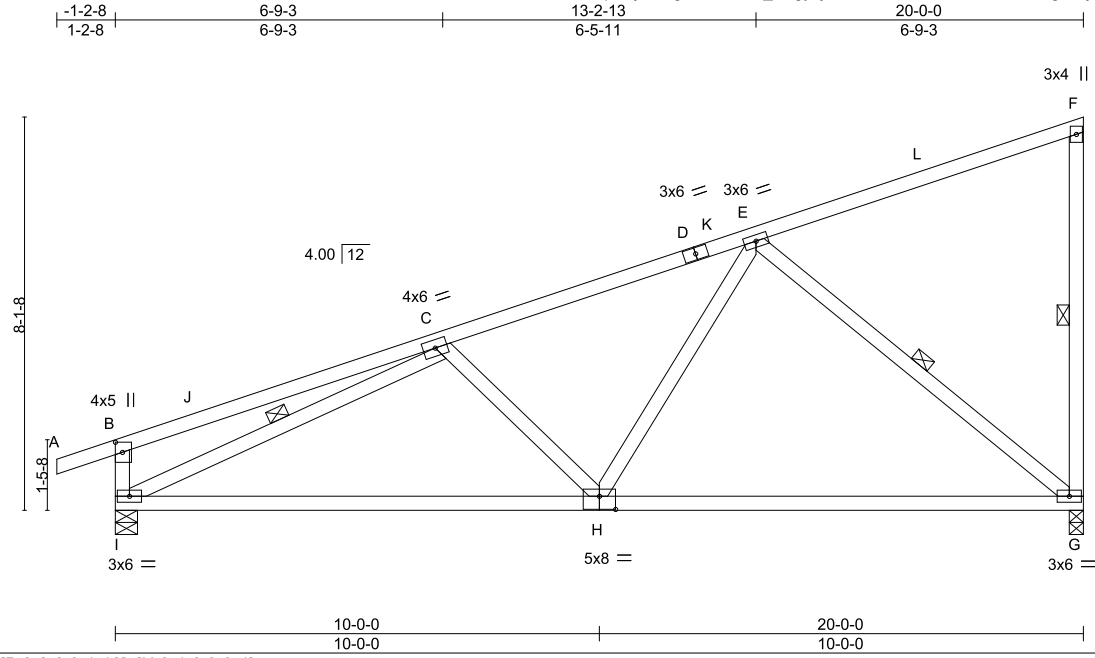

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [H:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.21	G-H	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.42	G-H	>560	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	G	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 115 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt F-G, E-G, C-I

REACTIONS. (size) G=0-3-8, I=0-5-8
Max Horz I=332(LC 9)
Max Uplift G=-176(LC 12), I=-176(LC 8)
Max Grav G=1090(LC 19), I=1032(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-304/85, C-E=-1218/203, F-G=-295/69, B-I=-402/180
BOT CHORD H-I=-255/1266, G-H=-145/865
WEBS C-H=-282/195, E-H=-6/543, E-G=-1103/246, C-I=-1180/185

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 1-9-8, Interior(1) 1-9-8 to 16-10-4, Exterior(2E) 16-10-4 to 19-10-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=176, I=176.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	E3	Monopitch	8	1	I76722077
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:39 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-CIdS6TafZ0DStMD2tmMZgWEjEMYUc_f6u?PwH8yYTz_

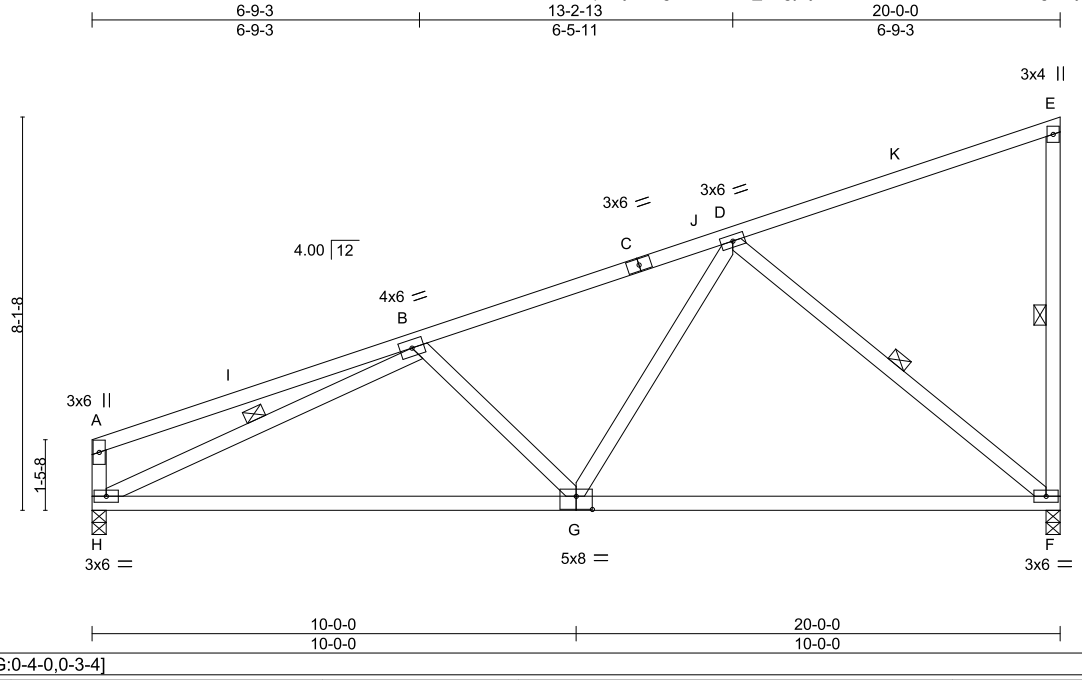

Plate Offsets (X,Y)-- [G:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.21	F-G	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.42	F-G	>560	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 113 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt E-F, D-F, B-H

REACTIONS. (size) F=0-3-8, H=0-3-8
Max Horz H=323(LC 9)
Max Uplift F=-176(LC 12), H=-121(LC 8)
Max Grav F=1081(LC 18), H=930(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-263/55, B-D=-1219/210, E-F=-293/70, A-H=-276/98
BOT CHORD G-H=-259/1278, F-G=-145/857
WEBS B-G=-297/198, D-G=-9/547, D-F=-1092/246, B-H=-1231/215

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-10-4, Exterior(2E) 16-10-4 to 19-10-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) F=176, H=121.
6) 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.

October 1,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	F1	Monopitch Supported Gable	1	1	I76722078
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:40 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-gVBqKpaHKKLJUWoFRTtoCkn3Qm1cLV4G6f9UpayYTyz

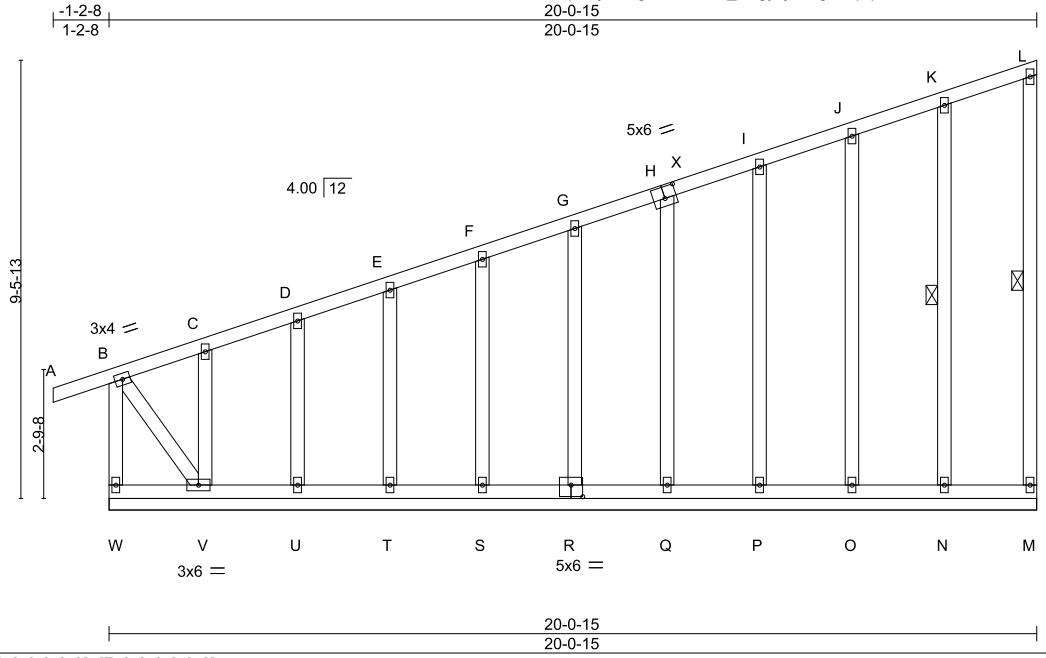

Plate Offsets (X,Y)-- [H:0-3-0,0-3-0], [R:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	A	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	-0.00	M	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: V-W.
WEBS 1 Row at midpt L-M, K-N

REACTIONS. All bearings 20-0-15.
(lb) - Max Horz W=240(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) M, N, O, P, Q, R, S, T, U except V=-359(LC 12)
Max Grav All reactions 250 lb or less at joint(s) M, O, Q, R, S, T, U, V except W=361(LC 12), N=260(LC 19), P=255(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-W=-389/176, B-C=-322/112, C-D=-293/100, D-E=-257/89
BOT CHORD V-W=-307/141
WEBS B-V=-232/506

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 Corner(3E) -1-2-8 to 2-0-15, Exterior(2N) 2-0-15 to 16-11-3, Corner(3E) 16-11-3 to 19-11-3 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, N, O, P, Q, R, S, T, U except (jt=lb) V=359.
11) N/A
12) 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.

October 1,2025

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	F2	Monopitch	2	1	I76722079
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:41 2025 Page 1
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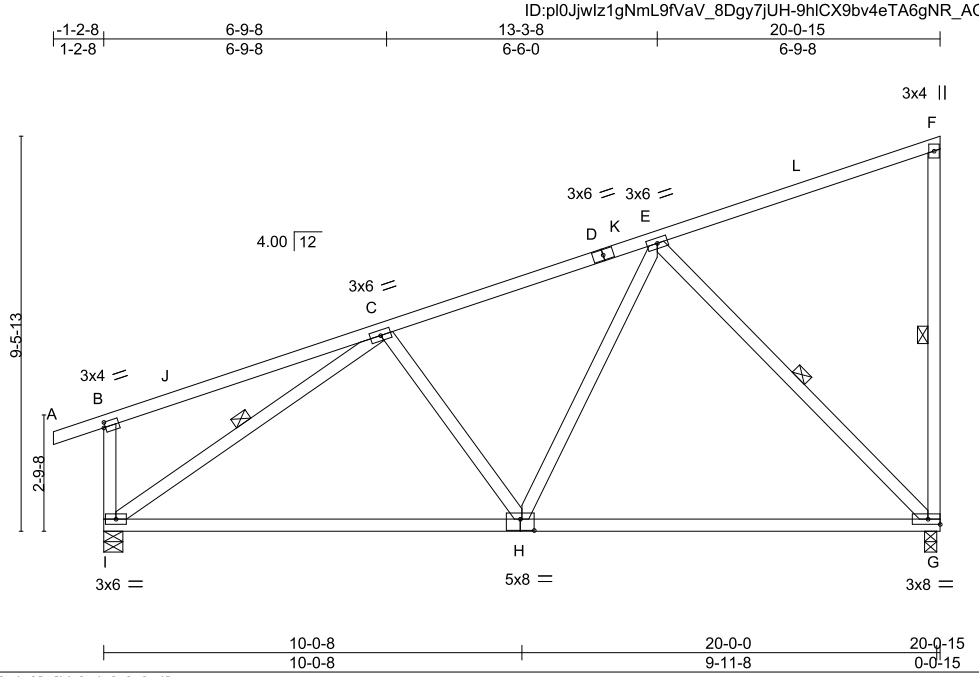

Plate Offsets (X,Y)-- [B:0-0-8,0-1-8], [H:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.22	G-H	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.45	G-H	>523	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	G	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 125 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt F-G, E-G, C-I

REACTIONS. (size) G=0-3-8, I=0-5-8
Max Horz I=382(LC 9)
Max Uplift G=-182(LC 12), I=-171(LC 8)
Max Grav G=1094(LC 19), I=1036(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-E=-965/195, F-G=-297/69, B-I=-348/169
BOT CHORD H-I=-242/918, G-H=-161/702
WEBS E-H=-11/462, E-G=-988/232, C-I=-1032/171

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 1-9-8, Interior(1) 1-9-8 to 16-11-3, Exterior(2E) 16-11-3 to 19-11-3 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=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=182, I=171.
7) 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.

October 1,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	F3	Monopitch	8	1	I76722080
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:41 2025 Page 1
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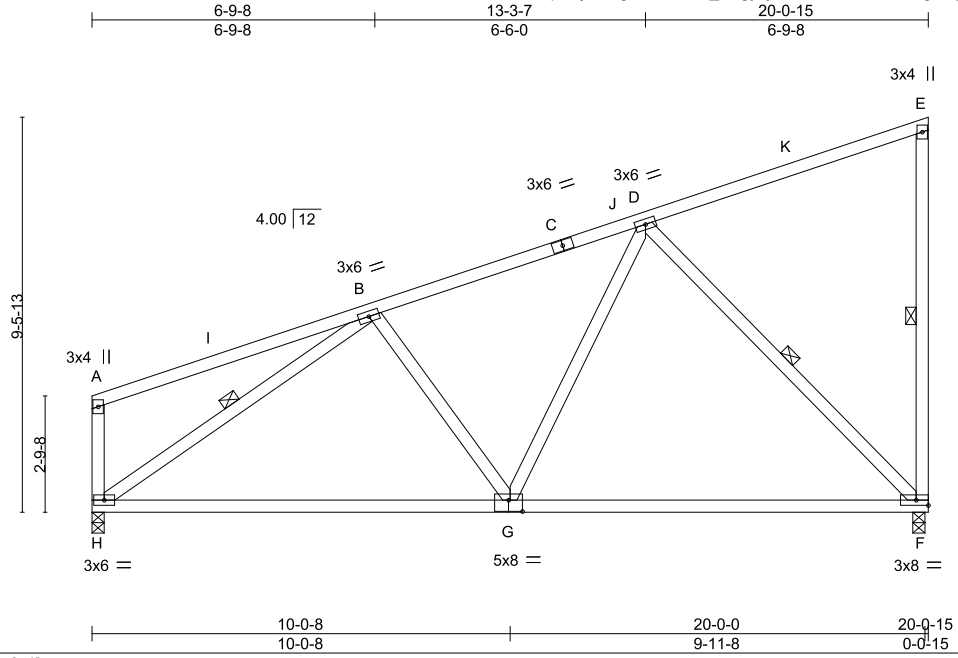

Plate Offsets (X,Y)-- [G:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.22	F-G	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.45	F-G	>523	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 123 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt E-F, D-F, B-H

REACTIONS. (size) F=0-3-8, H=0-3-8
Max Horz H=373(LC 9)
Max Uplift F=-181(LC 12), H=-118(LC 8)
Max Grav F=1085(LC 18), H=933(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-964/198, E-F=-295/69
BOT CHORD G-H=-241/925, F-G=-160/695
WEBS D-G=-12/465, D-F=-978/231, B-H=-1050/200

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-11-3, Exterior(2E) 16-11-3 to 19-11-3 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=25.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) F=181, H=118.
6) 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.

October 1,2025

MiTek®
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	FL	Roof Special Girder	2	2	I76722081
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:42 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-dtJakVcXrxb1kqydYuvGH9sFbaaUpEjZazebtTyYTyx

1-9-12	6-11-12	13-9-12	20-7-12	27-5-12	32-7-12	34-5-8
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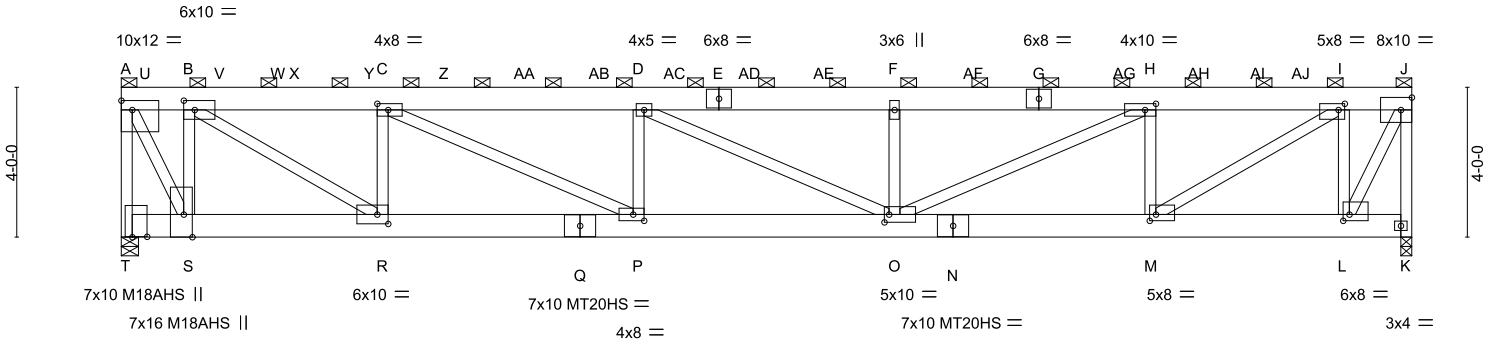


1-9-12	6-11-12	13-9-12	20-7-12	27-5-12	32-7-12	34-5-8
1-9-12	5-2-0	6-10-0	6-10-0	6-10-0	5-2-0	1-9-12

Plate Offsets (X,Y)-- [A:Edge,0-3-0], [B:0-3-8,0-3-0], [C:0-3-8,0-2-0], [H:0-3-8,0-2-0], [I:0-2-0,0-2-0], [L:0-2-0,0-2-0], [M:0-2-0,0-2-0], [O:0-1-8,0-2-8], [P:0-3-8,0-2-0], [R:0-3-8,0-3-0], [S:0-7-4,Edge], [T:0-0-2,0-4-12]

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	0.84	Vert(LL)	-0.38	O-P	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.63	O-P	>646	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.10	K	n/a	n/a	M18AHS	186/179
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.26	O-P	>999	240	Weight: 606 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
A-T,J-K,A-S,J-L: 2x4 SP 2400F 2.0E
C-P,D-O,H-O,I-M,B-R: 2x4 SP 1650F 1.5E

BRACING-
TOP CHORD 2-0-0 oc purlins (5-3-9 max.): A-J, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) T=0-5-8, K=0-3-8
Max Horz T=-124(LC 10)
Max Uplift T=-2359(LC 8), K=-1035(LC 9)
Max Grav T=14195(LC 1), K=6629(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-T=-13449/2341, A-B=-6385/1090, B-C=-14281/2556, C-D=-18650/3337, D-F=-17492/3064, F-H=-17492/3064, H-I=-11401/2001, I-J=-3311/626, J-K=-6582/1137
BOT CHORD R-S=-1144/6385, P-R=-2482/14281, O-P=-3202/18650, M-O=-1865/11401, L-M=-543/3311
WEBS C-R=-4867/1021, C-P=-872/4879, D-P=-2063/483, D-O=-1399/341, F-O=-2289/481, H-O=-1187/6802, H-M=-5155/983, I-M=-1645/9680, B-S=-6095/1243, A-S=-2466/14106, B-R=-1774/9449, J-L=-1231/7301, I-L=-6397/1130

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, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member S-B 2x4 - 2 rows staggered 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) 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 30-3-12, Corner(3) 30-3-12 to 34-3-12 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) T, K 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) T=2359, K=1035.

October 1,2025

Continued on page 2

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

NOTES-

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.
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) 747 lb down and 178 lb up at 0-7-12, 742 lb down and 186 lb up at 2-7-12, 742 lb down and 186 lb up at 4-7-12, 742 lb down and 186 lb up at 6-7-12, 742 lb down and 186 lb up at 8-7-12, 742 lb down and 186 lb up at 10-7-12, 742 lb down and 186 lb up at 12-7-12, 742 lb down and 186 lb up at 14-7-12, 594 lb down and 135 lb up at 16-7-12, 594 lb down and 135 lb up at 18-7-12, 594 lb down and 135 lb up at 20-7-12, 594 lb down and 135 lb up at 22-7-12, 594 lb down and 135 lb up at 24-7-12, 594 lb down and 135 lb up at 26-7-12, 594 lb down and 135 lb up at 28-7-12, and 594 lb down and 135 lb up at 30-7-12, and 594 lb down and 135 lb up at 32-7-12 on top chord, and 7393 lb down and 1172 lb up at 1-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

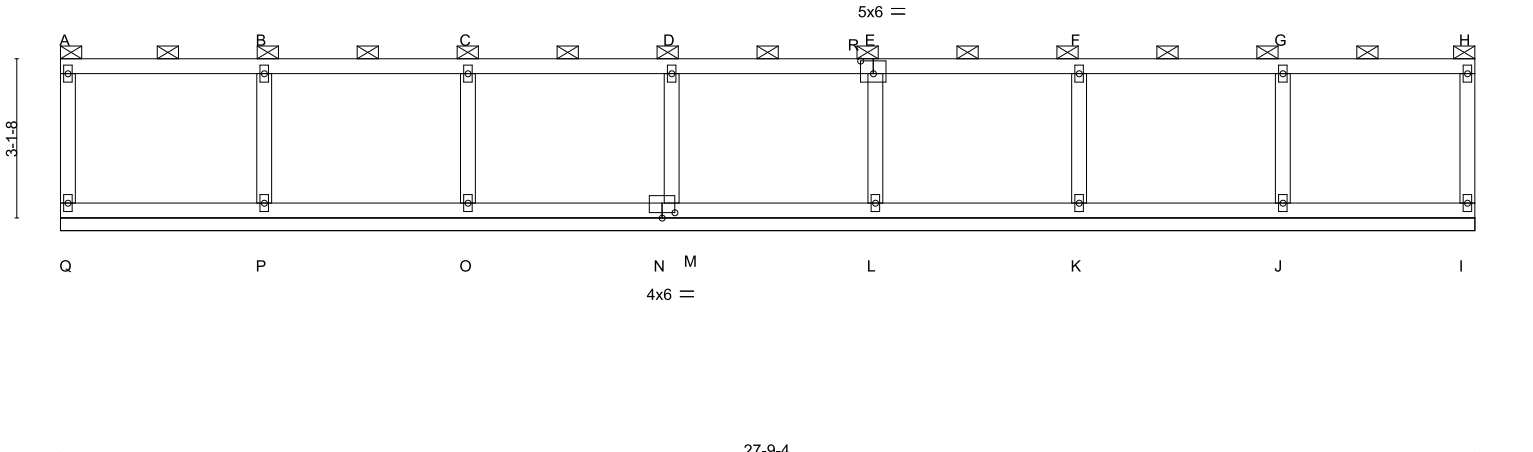
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-J=-60, K-T=-20
   Concentrated Loads (lb)
   Vert: F=-554 I=-554 G=-554 S=-7374(B) U=-717 V=-702 X=-702 Y=-702 Z=-702 AA=-702 AB=-702 AC=-702 AD=-554 AE=-554 AF=-554 AG=-554 AH=-554 AJ=-554

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	FL2	GABLE	1	2	I76722082
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:43 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-54tzyrd9cFjuL_Xq6bRVqMPbo_2bYv6ipdN8PvyYTyw

27-9-4
27-9-4

Scale = 1:45.2



27-9-4
27-9-4

Plate Offsets (X,Y)-- [E:0-3-0,0-3-0], [N:0-3-0,0-1-4]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	I	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 226 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): A-H, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-9-4.
(lb) - Max Horz Q=-103(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) Q, I, P, O, M, L, K, J
Max Grav All reactions 250 lb or less at joint(s) Q, I except P=362(LC 2), O=335(LC 2), M=340(LC 2), L=340(LC 2), K=339(LC 2), J=351(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-P=-256/175

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: 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 12-1-12, Exterior(2) 12-1-12 to 15-7-8, Corner(3) 15-7-8 to 27-7-8 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
4) 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.
5) 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
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 4-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Q, I, P, O, M, L, K, J.
13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 1,2025

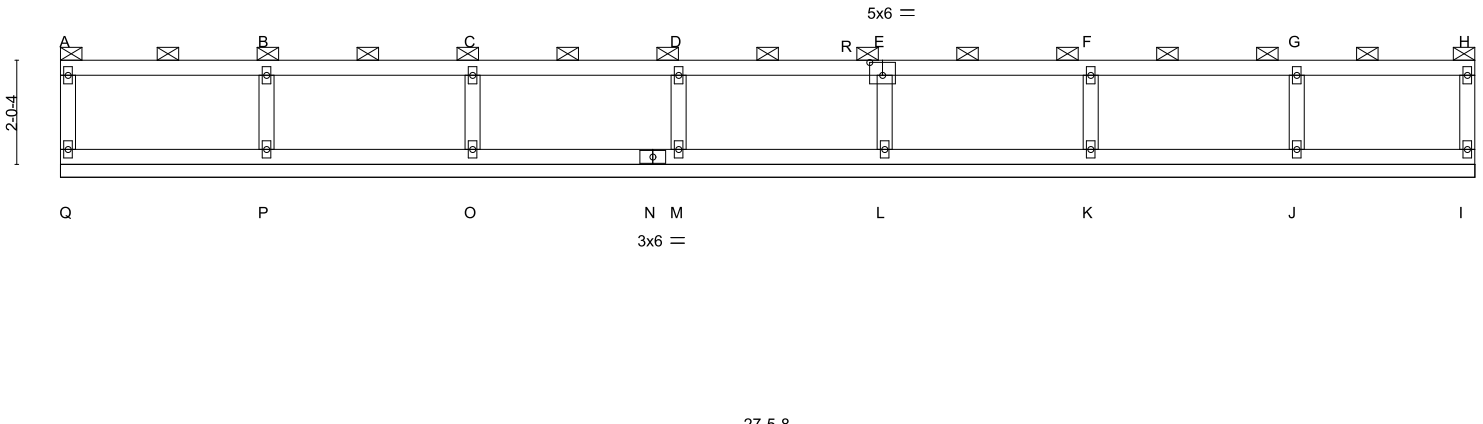
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	FL3	GABLE	1	2	I76722083
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:43 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-54tzyrd9cFjuL_Xq6bRVqMPcw_38YvAipdN8PvyYTyw

27-5-8
27-5-8

Scale = 1:44.7



27-5-8
27-5-8

Plate Offsets (X,Y)-- [E:0-3-0,0-3-0]

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	I	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 198 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): A-H, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-5-8.
(lb) - Max Horz Q=-63(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) Q, I, P, O, M, L, K, J
Max Grav All reactions 250 lb or less at joint(s) Q, I except P=362(LC 2), O=335(LC 2), M=340(LC 2), L=339(LC 2), K=344(LC 2), J=333(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-P=-255/190

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: 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 12-1-12, Exterior(2) 12-1-12 to 15-3-12, Corner(3) 15-3-12 to 27-3-12 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) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Q, I, P, O, M, L, K, J.
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.

October 1,2025

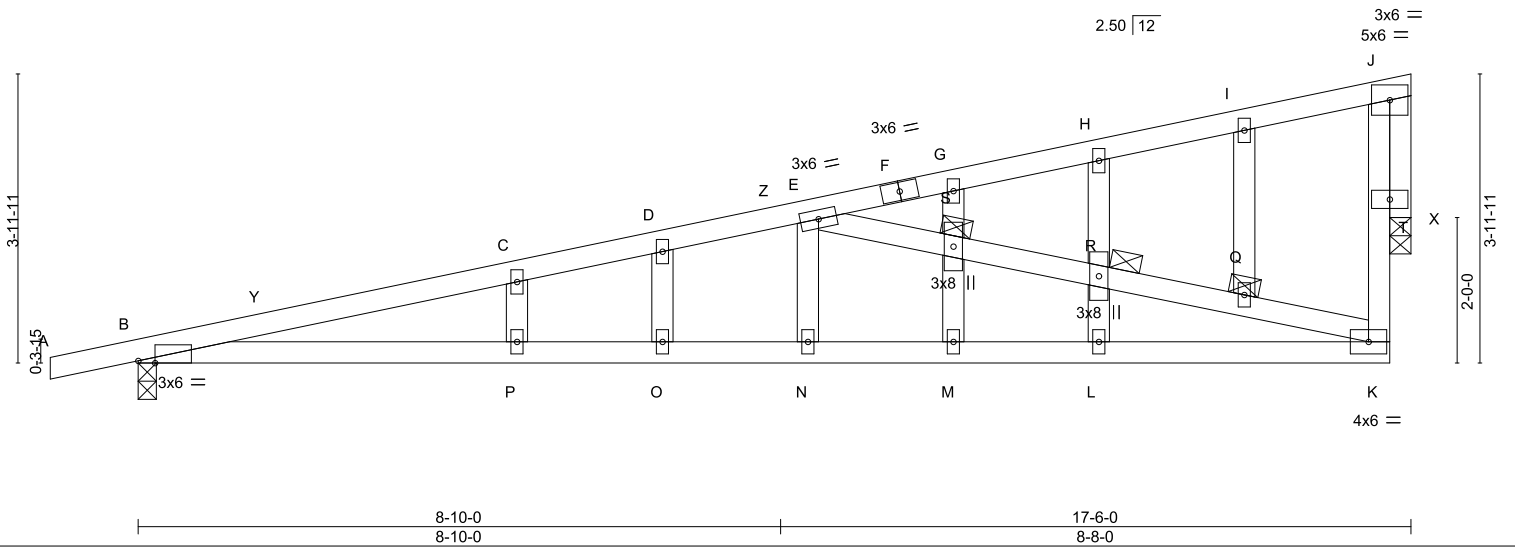
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G1	GABLE	1	1	I76722084
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:44 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-ZGRL9AdoNZrlz860gJykNaxcnNCBH9us1H7hyLyYTyv

-1-2-8 / 1-2-8 | 8-10-0 / 8-10-0 | 17-6-0 / 8-8-0

Scale = 1:31.7



8-10-0 / 8-10-0 | 17-6-0 / 8-8-0

Plate Offsets (X,Y)-- [B:0-2-12,Edge]

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	0.79	Vert(LL)	-0.31	P-W	>678	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.58	P-W	>357	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.03	X	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.27	P-W	>765	240	Weight: 88 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP 1650F 1.5E
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3 *Except*
	J-T: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-3-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt E-R, K-R
JOINTS	1 Brace at Jt(s): R

REACTIONS. (size) B=0-3-0, X=0-3-8
Max Horz B=121(LC 9)
Max Uplift B=-167(LC 8), X=-137(LC 12)
Max Grav B=836(LC 3), X=817(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2185/286, C-D=-2155/305, D-E=-2137/316, K-T=-110/780, J-T=-110/780
BOT CHORD B-P=-351/2117, O-P=-351/2117, N-O=-351/2117, M-N=-351/2117, L-M=-351/2117, K-L=-351/2117
WEBS E-N=-41/448, E-S=-2079/374, R-S=-2046/368, Q-R=-2073/371, K-Q=-2127/384, J-X=-831/140

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 1-9-8, Interior(1) 1-9-8 to 17-0-12 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) 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.
3) 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
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) X 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) B=167, X=137.
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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G1-A	GABLE	1	1	I76722085
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:44 2025 Page 1
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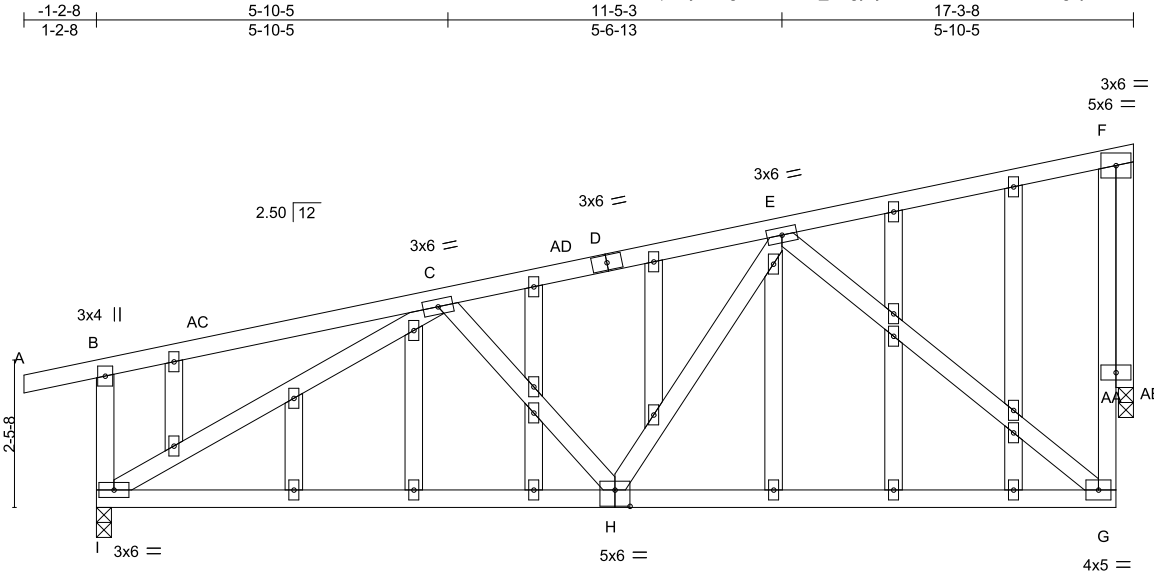

Plate Offsets (X,Y)-- [H:0-3-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.11	H-I	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.23	H-I	>876	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.06	AB	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 141 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except*
F-AA: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) I=0-3-0, AB=0-3-0
Max Horz I=165(LC 9)
Max Uplift I=-154(LC 8), AB=-150(LC 12)
Max Grav I=931(LC 19), AB=904(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-E=-1022/98, G-AA=-86/696, F-AA=-86/696, B-I=-298/154
BOT CHORD H-I=-210/996, G-H=-130/818
WEBS E-H=0/367, E-G=-969/197, C-I=-1088/134, F-AB=-908/151

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 1-9-8, Interior(1) 1-9-8 to 16-10-4 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
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
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) AB 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) I=154, AB=150.
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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G2	MONOPITCH	3	1	I76722086
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:45 2025 Page 1
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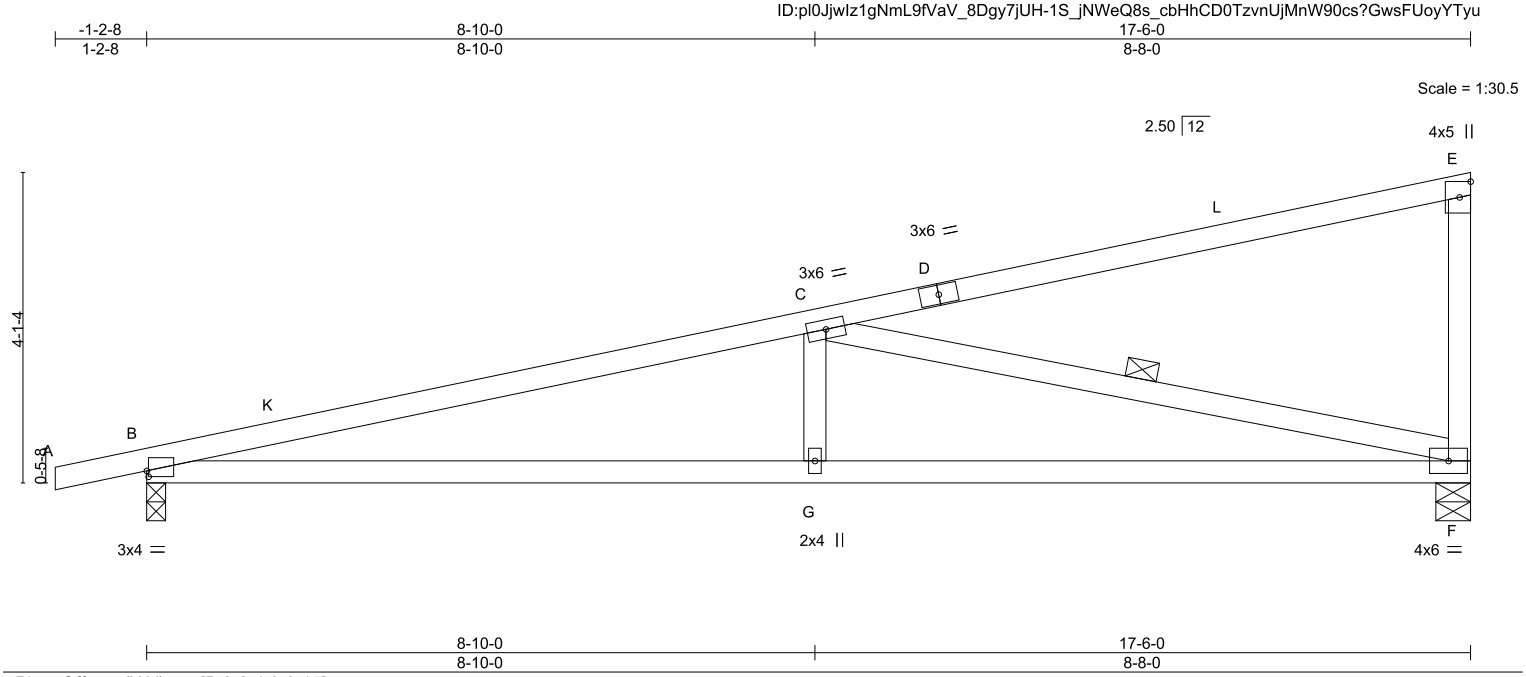

Plate Offsets (X,Y)-- [B:0-0-4,0-0-15]

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	1.00	Vert(LL)	-0.17	G-J	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.34	G-J	>618	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.06	F	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.13	G-J	>999	240	Weight: 75 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
A-D: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt C-F

REACTIONS. (size) F=0-5-8, B=0-3-0
Max Horz B=155(LC 11)
Max Uplift F=-137(LC 12), B=-172(LC 8)
Max Grav F=846(LC 3), B=836(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2145/321, E-F=-302/101
BOT CHORD B-G=-338/2067, F-G=-338/2067
WEBS C-G=0/378, C-F=-2050/373

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 1-9-8, Interior(1) 1-9-8 to 14-4-4, Exterior(2E) 14-4-4 to 17-4-4 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
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 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) F=137, B=172.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G2-A	Monopitch	3	1	I76722087
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:45 2025 Page 1
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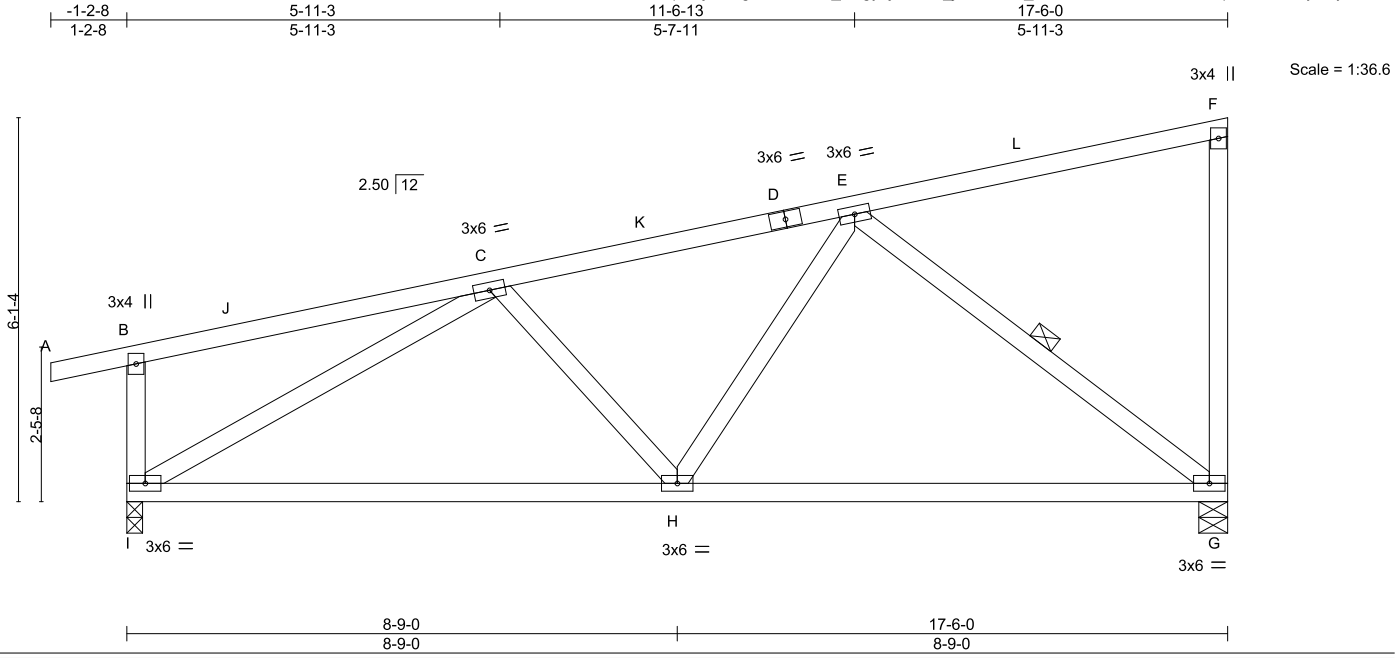

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.13	G-H	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.26	G-H	>805	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.03	G	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 99 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-3-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt E-G

REACTIONS. (size) G=0-5-8, I=0-3-0
Max Horz I=230(LC 9)
Max Uplift G=-140(LC 12), I=-173(LC 8)
Max Grav G=945(LC 19), I=935(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-E=-1034/159, B-I=-302/155
BOT CHORD H-I=-169/1005, G-H=-100/827
WEBS E-H=0/384, E-G=-1027/197, C-I=-1093/190

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 1-9-8, Interior(1) 1-9-8 to 14-4-4, Exterior(2E) 14-4-4 to 17-4-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=140, I=173.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G3	MONOPITCH SUPPORTED	1	1	I76722088
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:46 2025 Page 1
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-1-2-8 / 1-2-8 — 17-0-8 / 17-0-8

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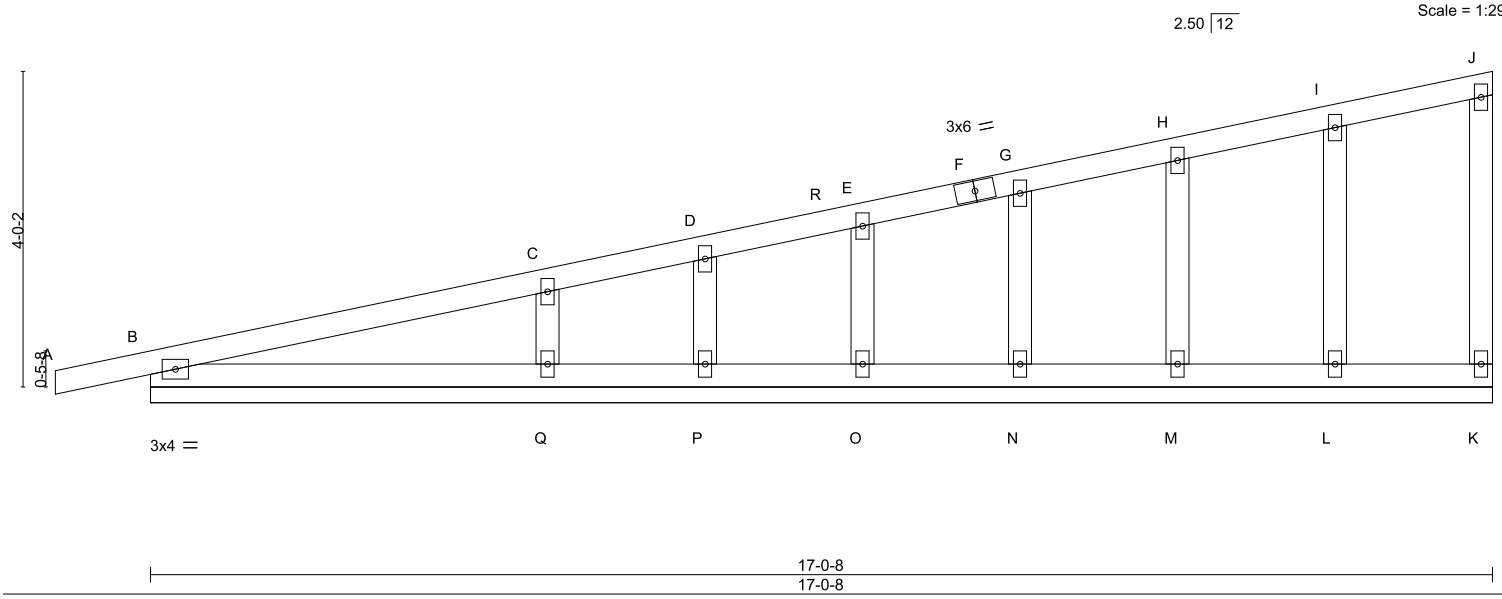

17-0-8 / 17-0-8

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	0.28	Vert(LL)	0.01	A	n/r	120	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.20	Vert(CT)	0.03	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	K	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 17-0-8.
(lb) - Max Horz B=150(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) K, B, L, M, N, O, P, Q
Max Grav All reactions 250 lb or less at joint(s) K, B, L, M, N, O, P except Q=435(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS C-Q=-288/208

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 Corner(3E) -1-2-8 to 1-9-8, Exterior(2N) 1-9-8 to 13-10-12, Corner(3E) 13-10-12 to 16-10-12 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) 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.
3) 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, B, L, M, N, O, P, Q.
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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G3-A	GABLE	1	1	I76722089
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:46 2025 Page 1
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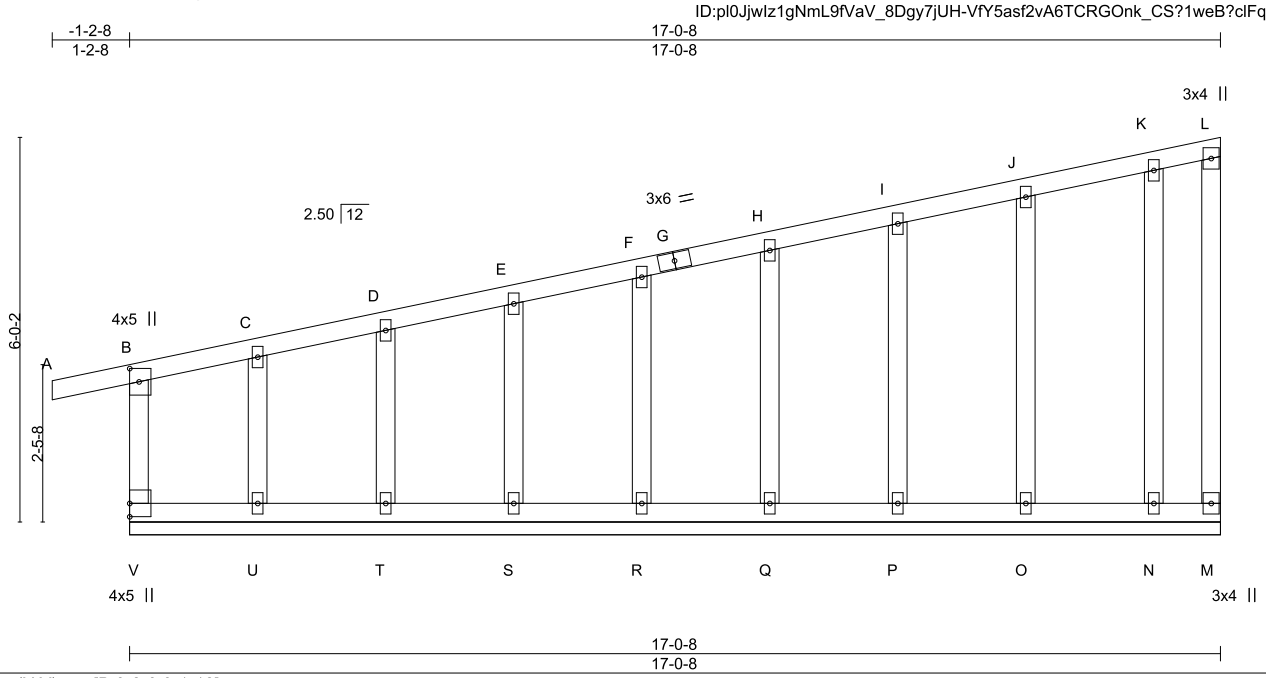

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.01	A	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.01	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	M	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 109 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 17-0-8.
(lb) - Max Horz V=226(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) M, T, S, R, Q, P, O except U=-261(LC 9)
Max Grav All reactions 250 lb or less at joint(s) M, U, T, S, R, Q, P, O, N except V=292(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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 Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 13-10-12, Corner(3E) 13-10-12 to 16-10-12 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) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, T, S, R, Q, P, O except (jt=lb) U=261.
12) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G4	MONO TRUSS	1	3	I76722090
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:47 2025 Page 1
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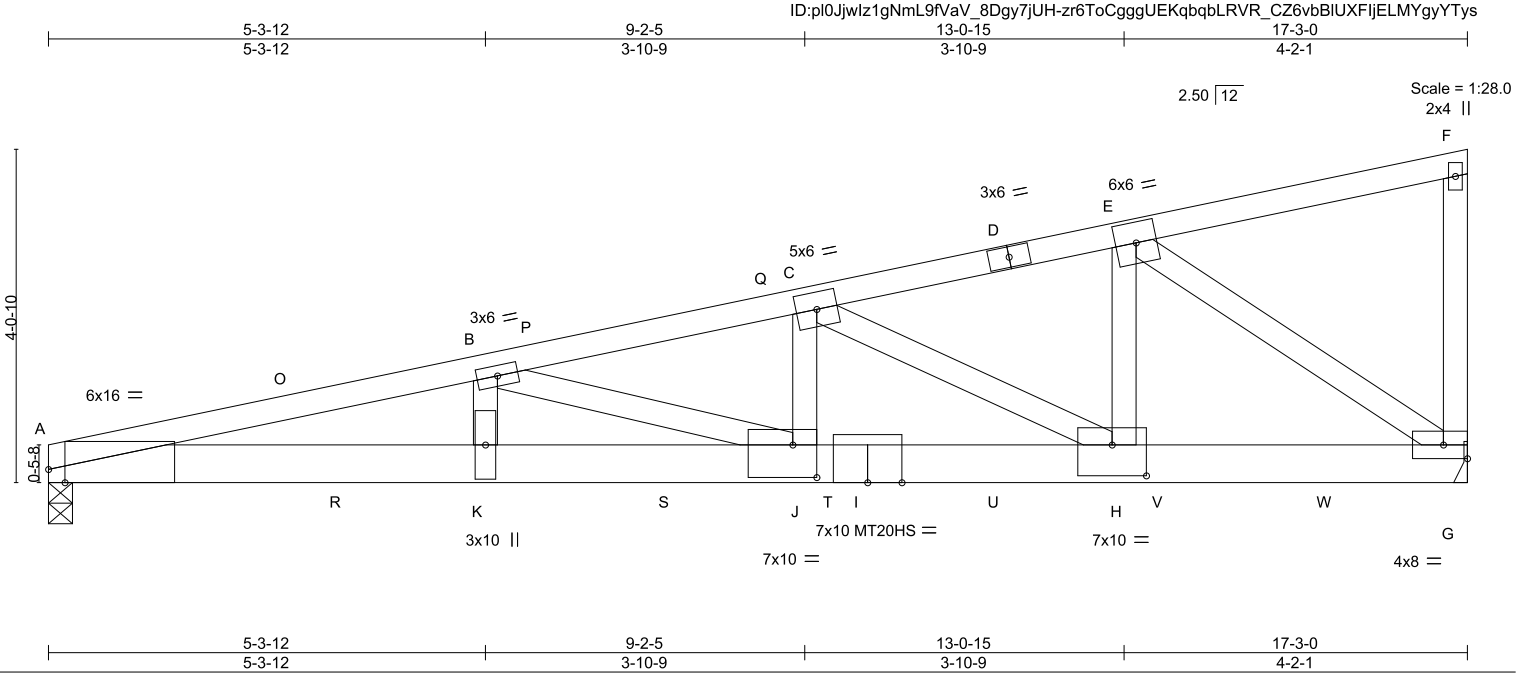

Plate Offsets (X,Y)-- [A:0-2-6,Edge], [H:0-5-0,0-4-8], [J:0-3-8,0-4-12]

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	0.80	Vert(LL)	-0.27	J-K	>770	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.46	J-K	>441	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.08	G	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.19	J-K	>999	240	Weight: 291 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
A-D: 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
G-I: 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
E-H: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) G=Mechanical, A=0-3-8
Max Horz A=146(LC 11)
Max Uplift G=-1138(LC 8), A=-1176(LC 8)
Max Grav G=7385(LC 3), A=7740(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-25085/3812, B-C=-17850/2711, C-E=-9266/1469
BOT CHORD A-K=-3735/24540, J-K=-3735/24540, H-J=-2628/17475, G-H=-1358/9053
WEBS B-K=-478/3552, B-J=-7408/1159, C-J=-797/5779, C-H=-9469/1427, E-H=-1134/7844, E-G=-10934/1717

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member C-J 2x4 - 2 rows staggered at 0-4-0 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 Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 12-10-6, Exterior(2R) 12-10-6 to 17-1-4 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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=1138, A=1176.
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.

October 1,2025

Continued on page 2

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NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1742 lb down and 277 lb up at 1-7-0, 1742 lb down and 277 lb up at 3-7-0, 1742 lb down and 277 lb up at 5-7-0, 2081 lb down and 288 lb up at 7-7-0, 1578 lb down and 246 lb up at 9-7-0, 1580 lb down and 250 lb up at 11-7-0, and 1583 lb down and 253 lb up at 13-7-0, and 1533 lb down and 255 lb up at 15-7-0 on bottom 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-F=-60, G-L=-20
   Concentrated Loads (lb)
   Vert: K=-1652(B) N=-1652(B) R=-1652(B) S=-2081(B) T=-1578(B) U=-1580(B) V=-1583(B) W=-1532(B)

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	G4-A	Jack-Closed Girder	1	3	I76722091
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:48 2025 Page 1
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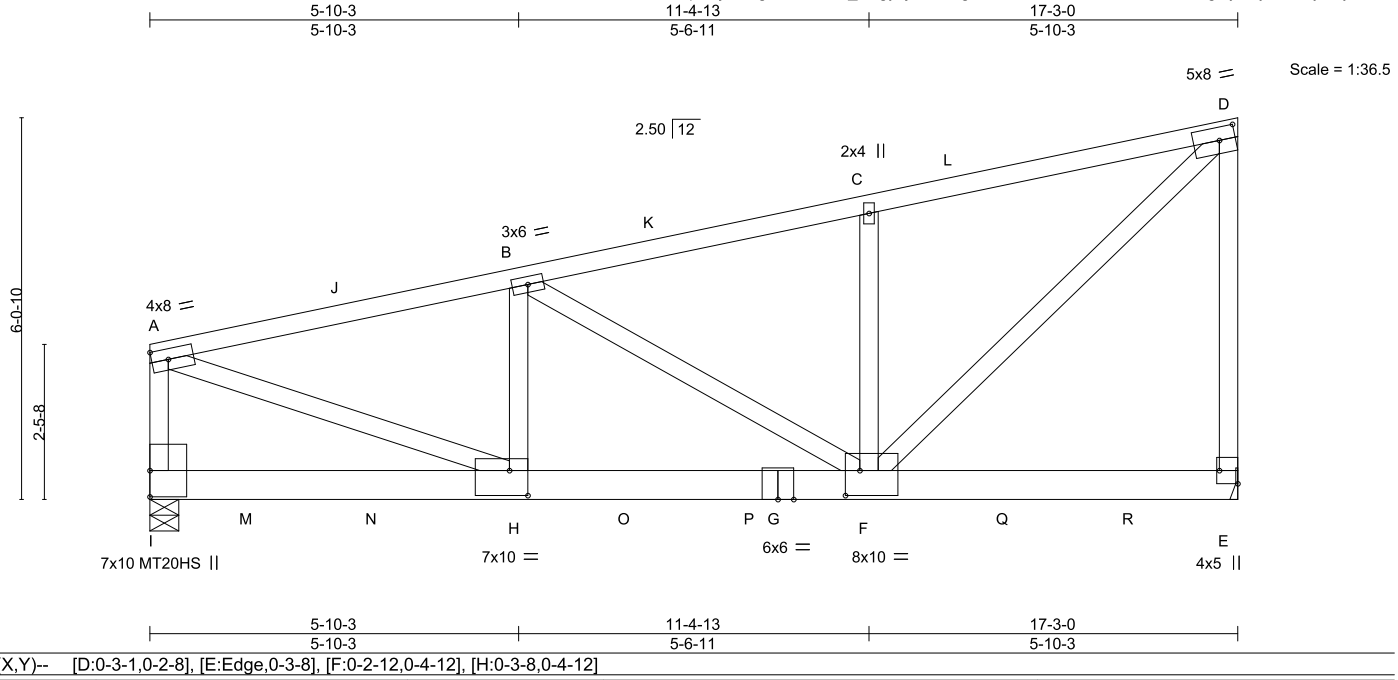

Plate Offsets (X,Y)-- [D:0-3-1,0-2-8], [E:Edge,0-3-8], [F:0-2-12,0-4-12], [H:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.15	F-H	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.23	F-H	>875	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.02	E	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 349 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
A-I,A-H,D-F: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) I=0-5-8, E=Mechanical
Max Horz I=219(LC 31)
Max Uplift I=-1154(LC 8), E=-1121(LC 8)
Max Grav I=8494(LC 18), E=8289(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-I=-6589/939, A-B=-11555/1557, B-C=-8514/1188, C-D=-8533/1239, D-E=-6672/970
BOT CHORD H-I=-249/401, F-H=-1495/11269
WEBS A-H=-1545/11589, B-H=-365/2177, B-F=-3493/505, C-F=-567/187, D-F=-1571/11570

NOTES-
1) 3-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.
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 Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-10-6, Exterior(2R) 12-10-6 to 17-1-4 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=25.0 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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) I=1154, E=1121.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1855 lb down and 272 lb up at 1-7-0, 1855 lb down and 272 lb up at 3-7-0, 1855 lb down and 272 lb up at 5-7-0, 2373 lb down and 284 lb up at 7-7-0, 1801 lb down and 241 lb up at 9-7-0, 1808 lb down and 245 lb up at 11-7-0, and 1777 lb down and 248 lb up at 13-7-0, and 1698 lb down and 251 lb up at 15-7-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

October 1,2025

LOAD CASE(S) Standard

Continued on page 2

MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-D=-70, E-I=-20
   Concentrated Loads (lb)
   Vert: H=-1855(F) F=-1808(F) M=-1855(F) N=-1855(F) O=-2373(F) P=-1801(F) Q=-1777(F) R=-1698(F)

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H1	Monopitch Supported Gable	1	1	I76722092
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:49 2025 Page 1
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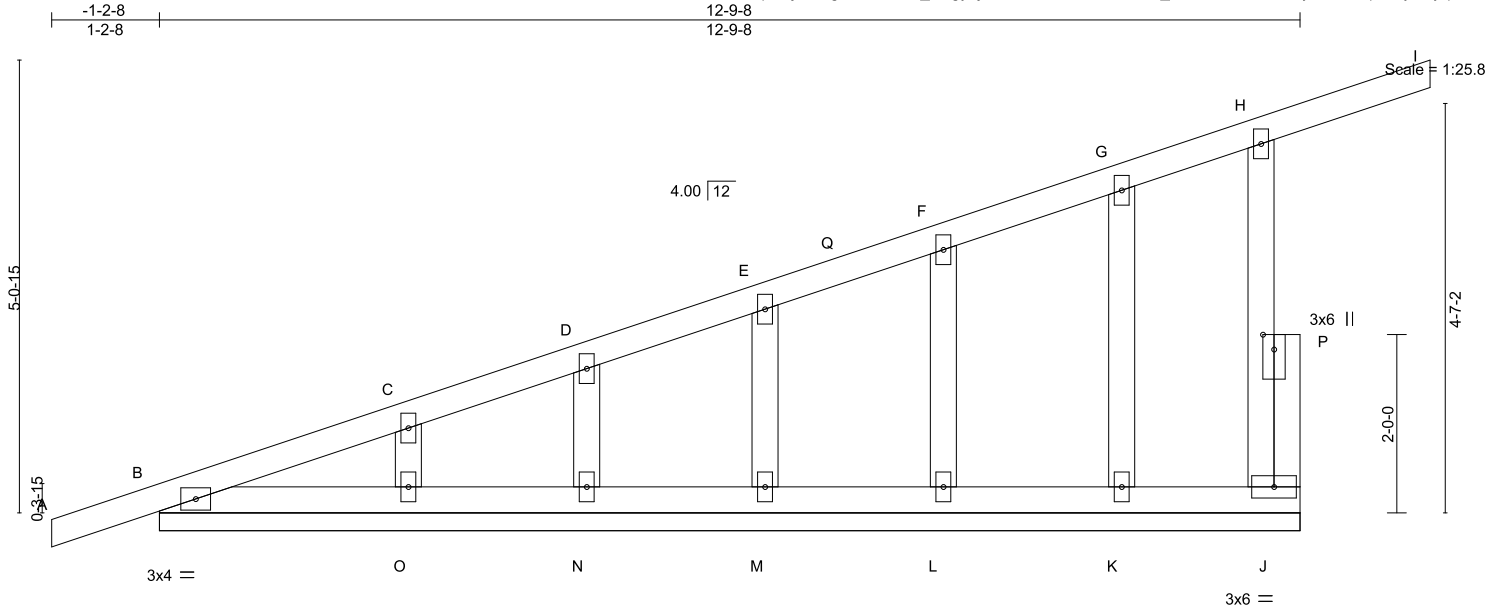

Plate Offsets (X,Y)-- [P:0-2-0,0-1-8]

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	0.49	Vert(LL)	0.01	I	n/r	120	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	I	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	J	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-9-8.
(lb) - Max Horz B=209(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) B, K, L, M, N, O except J=-107(LC 9)
Max Grav All reactions 250 lb or less at joint(s) B, K, L, M, N, O except J=328(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD H-J=-325/281

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 Corner(3E) -1-2-8 to 1-9-8, Exterior(2N) 1-9-8 to 11-3-0, Corner(3E) 11-3-0 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) 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.
3) 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
4) Unbalanced snow loads have been considered for this design.
5) 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.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, K, L, M, N, O except (jt=lb) J=107.
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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H1-A	GABLE	1	1	I76722093
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:49 2025 Page 1
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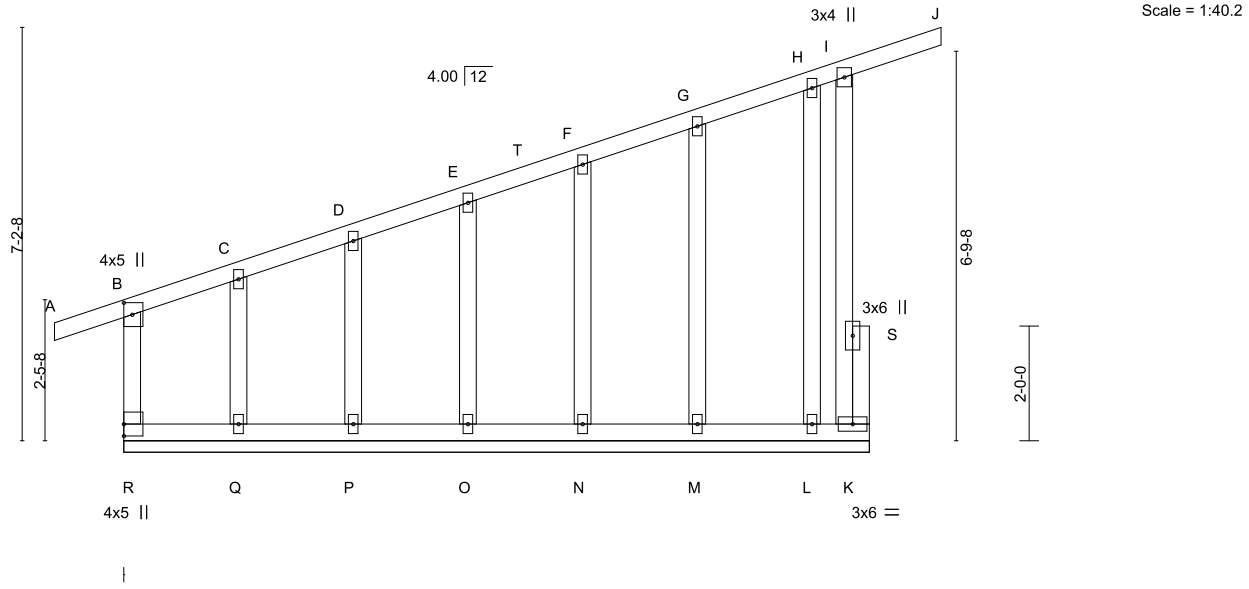


Plate Offsets (X,Y)-- [B:0-2-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.00	I-J	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.45	Vert(CT)	0.00	I-J	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	K	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 96 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 13-0-0.
(lb) - Max Horz R=288(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) O, N, M, L except K=-426(LC 9), Q=-338(LC 9)
Max Grav All reactions 250 lb or less at joint(s) Q, P, O, N, M except R=329(LC 23), K=314(LC 18), L=415(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD I-K=-385/370

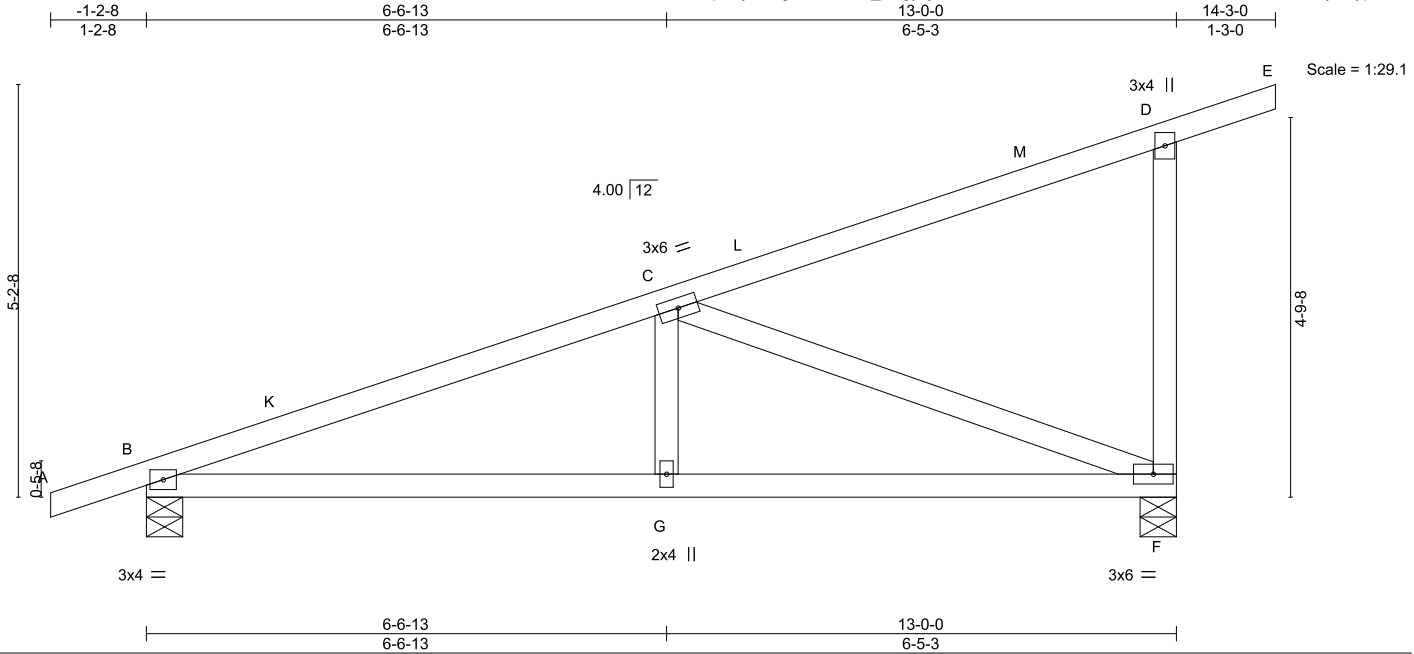
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 11-3-0, Corner(3E) 11-3-0 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O, N, M, L except (jt=lb) K=426, Q=338.
12) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H2	Monopitch	3	1	I76722094
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:50 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-OQocQEiYzPcuh3ZA0Z39crBi7oLvhsKkQCa09?yYTyp



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	0.48	Vert(LL)	-0.05	G-J	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.10	G-J	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.02	F	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.04	G-J	>999	240	Weight: 62 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, F=0-5-8
Max Horz B=211(LC 9)
Max Uplift B=-125(LC 8), F=-147(LC 12)
Max Grav B=626(LC 3), F=761(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1031/144, D-F=-377/174
BOT CHORD B-G=-156/940, F-G=-156/940
WEBS C-G=0/286, C-F=-973/210

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 1-9-8, Interior(1) 1-9-8 to 11-3-0, Exterior(2E) 11-3-0 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=125, F=147.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H2-A	Monopitch	3	1	I76722095
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:50 2025 Page 1
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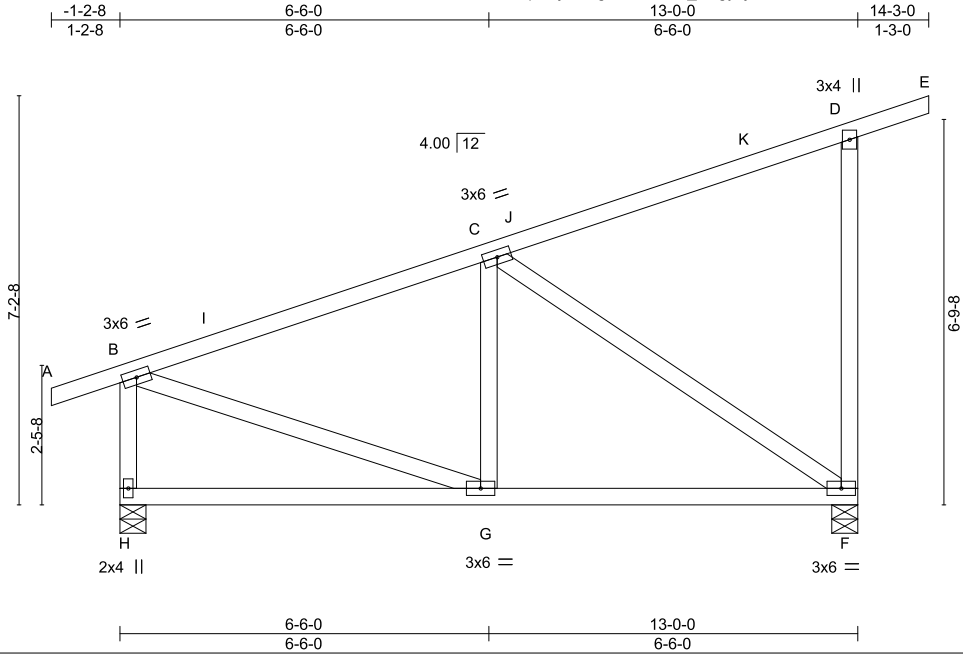

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.04	F-G	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.08	F-G	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 82 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=0-5-8
Max Horz H=288(LC 9)
Max Uplift H=-119(LC 8), F=-158(LC 12)
Max Grav H=707(LC 19), F=866(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-652/100, D-F=-441/168, B-H=-650/212
BOT CHORD G-H=-269/331, F-G=-131/561
WEBS C-F=-655/153, B-G=-26/539

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 1-9-8, Interior(1) 1-9-8 to 11-3-0, Exterior(2E) 11-3-0 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=119, F=158.
7) 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.

October 1,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H3	Jack-Closed	8	1	I76722096
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:50 2025 Page 1
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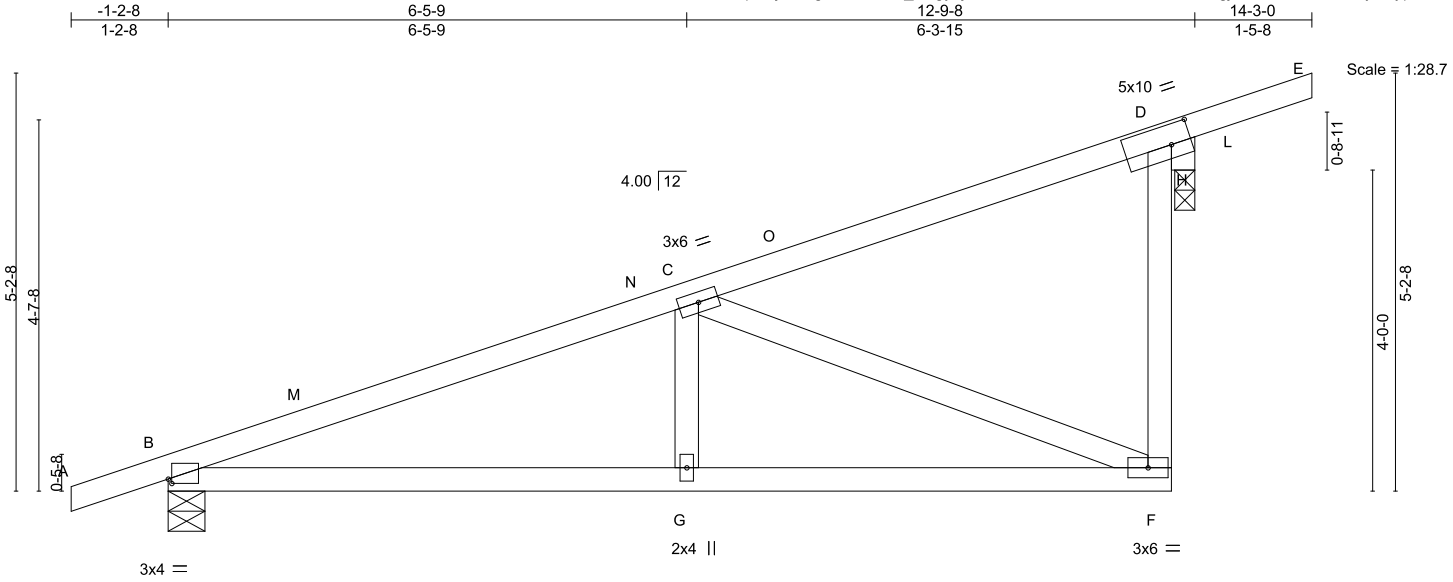

Plate Offsets (X,Y)-- [B:0-0-9,0-0-10], [D:0-3-0,0-3-0]

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	0.64	Vert(LL)	-0.05	G-K	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.10	G-K	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	L	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-MS		Wind(LL)	0.04	G-K	>999	240	Weight: 61 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, L=0-3-0
Max Horz B=204(LC 9)
Max Uplift B=-119(LC 8), L=-154(LC 8)
Max Grav B=615(LC 3), L=762(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-999/119, F-H=-37/426, D-H=-37/426
BOT CHORD B-G=-143/910, F-G=-143/910
WEBS C-G=0/271, C-F=-913/195, D-L=-949/266

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 1-9-8, Interior(1) 1-9-8 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) L considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=119, L=154.
8) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A	I76722097
251348	H3-A	Jack-Closed	8	1	Job Reference (optional)	

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Aug 14 2025 MiTek Industries, Inc. Wed Oct 1 15:29:38 2025 Page 1
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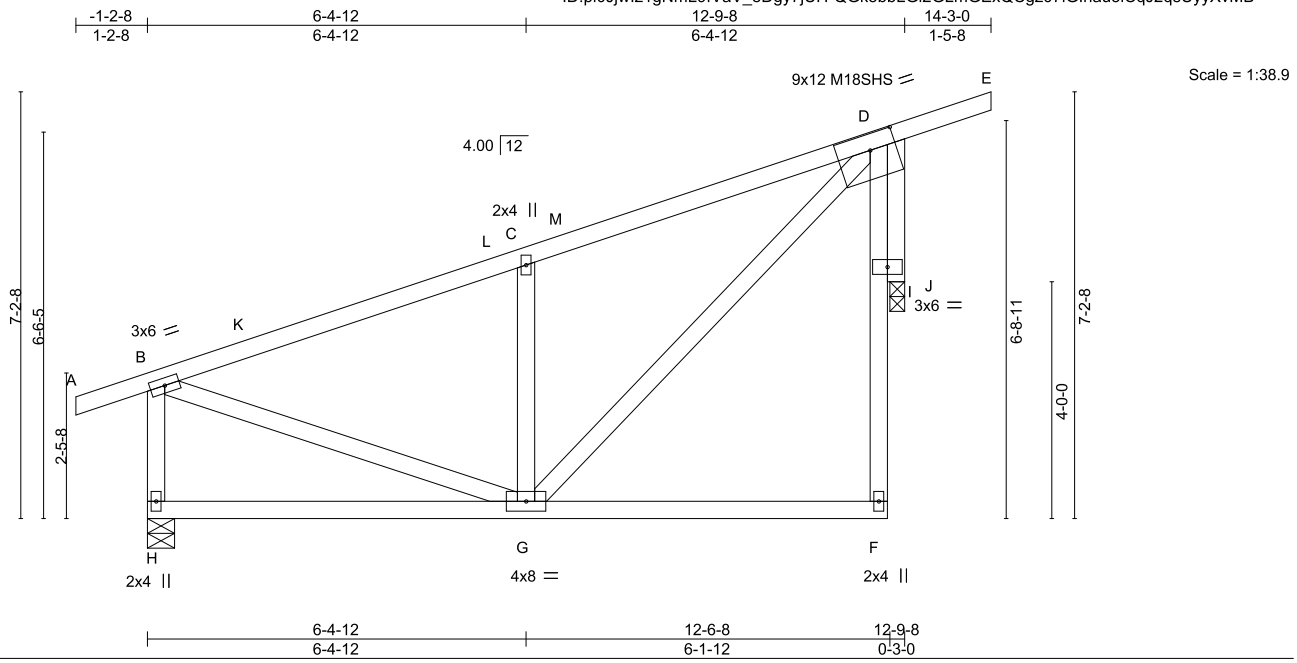

Plate Offsets (X,Y)-- [D:0-5-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.04	G-H	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.07	G-H	>999	180	M18SHS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.10	J	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 86 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, J=0-3-0
Max Horz H=249(LC 9)
Max Uplift H=-95(LC 8), J=-182(LC 8)
Max Grav H=694(LC 19), J=869(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-H=-635/170, B-K=-622/17, K-L=-497/33, C-L=-483/34, C-M=-655/99, D-M=-560/120
BOT CHORD G-H=-231/257
WEBS B-G=0/504, C-G=-543/200, D-G=-182/691, D-J=-878/245

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 1-9-8, Interior(1) 1-9-8 to 14-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
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) Bearing at joint(s) J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint H and 182 lb uplift at joint J.
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.

October 1,2025

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H4	Jack-Closed	9	1	I76722098
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:51 2025 Page 1
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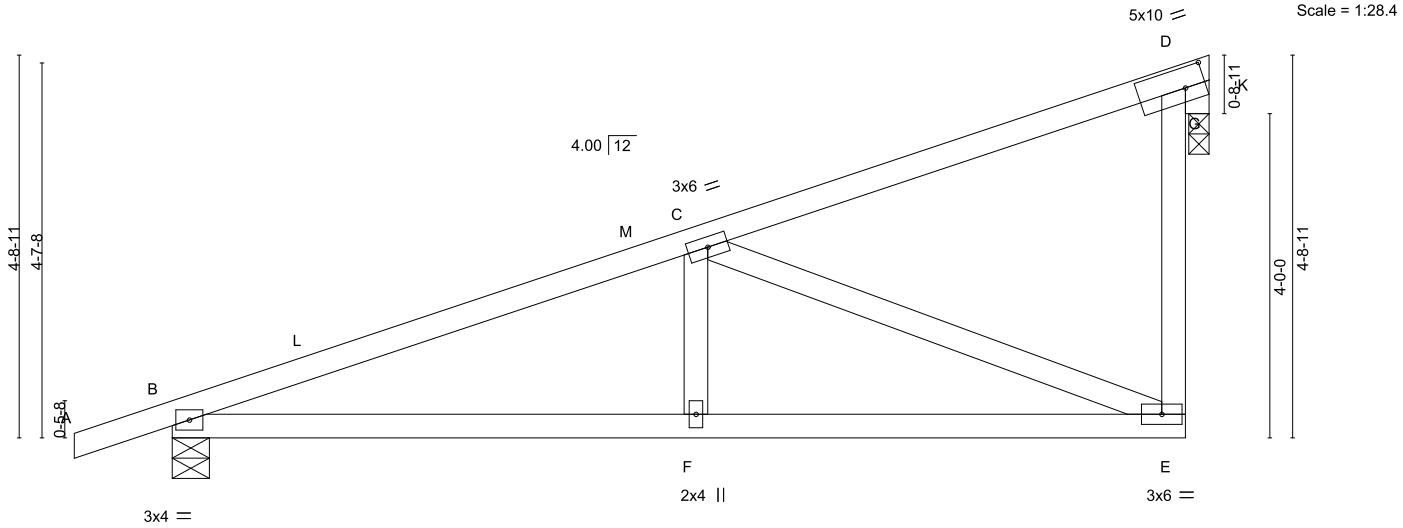

Plate Offsets (X,Y)-- [D:0-3-0,0-3-0]

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	0.75	Vert(LL)	-0.05	F-J	>999	360	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.10	F-J	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.03	K	n/a	n/a		
BCLL	10.0	Code IRC2018/TPI2014		Matrix-MS		Wind(LL)	0.04	F-J	>999	240	Weight: 59 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
C-F,C-E: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, K=0-3-0
Max Horz B=179(LC 9)
Max Uplift B=-129(LC 8), K=-104(LC 8)
Max Grav B=641(LC 3), K=614(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1080/177, E-G=-44/454, D-G=-44/454
BOT CHORD B-F=-151/987, E-F=-151/987
WEBS C-F=0/270, C-E=-985/210, D-K=-828/162

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 1-9-8, Interior(1) 1-9-8 to 12-4-4 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
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) K considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=129, K=104.
8) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	H4-A	Jack-Closed	9	1	Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Feb 18 2025 MiTek Industries, Inc. Wed Oct 1 15:16:22 2025 Page 1
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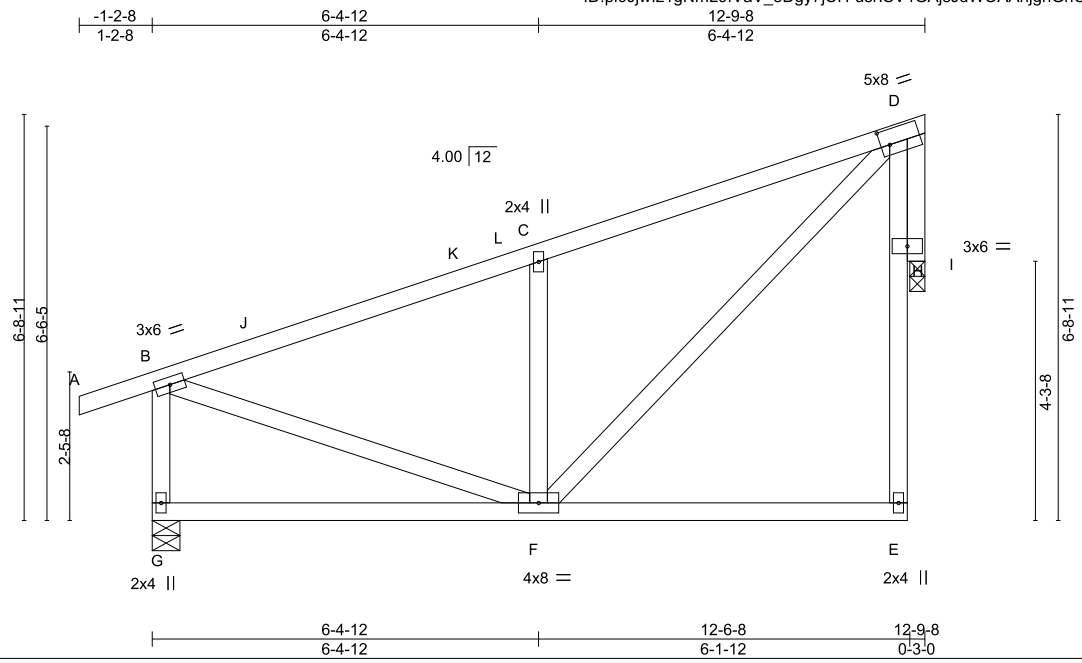

Plate Offsets (X,Y)-- [D:0-1-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.04	F-G	>999	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.08	F-G	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.11	I	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 83 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-11-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, I=0-3-0
Max Horz G=229(LC 9)
Max Uplift G=-110(LC 8), I=-126(LC 8)
Max Grav G=736(LC 19), I=694(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-677/198, B-J=-690/63, J-K=-630/68, K-L=-560/79, C-L=-540/81, C-D=-741/171
BOT CHORD F-G=-210/272
WEBS B-F=-10/577, C-F=-636/215, D-F=-182/784, D-I=-706/129

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 1-9-8, Interior(1) 1-9-8 to 12-4-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) I considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint G and 126 lb uplift at joint I.
8) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J1	Monopitch Supported Gable	1	1	I76722100
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:52 2025 Page 1
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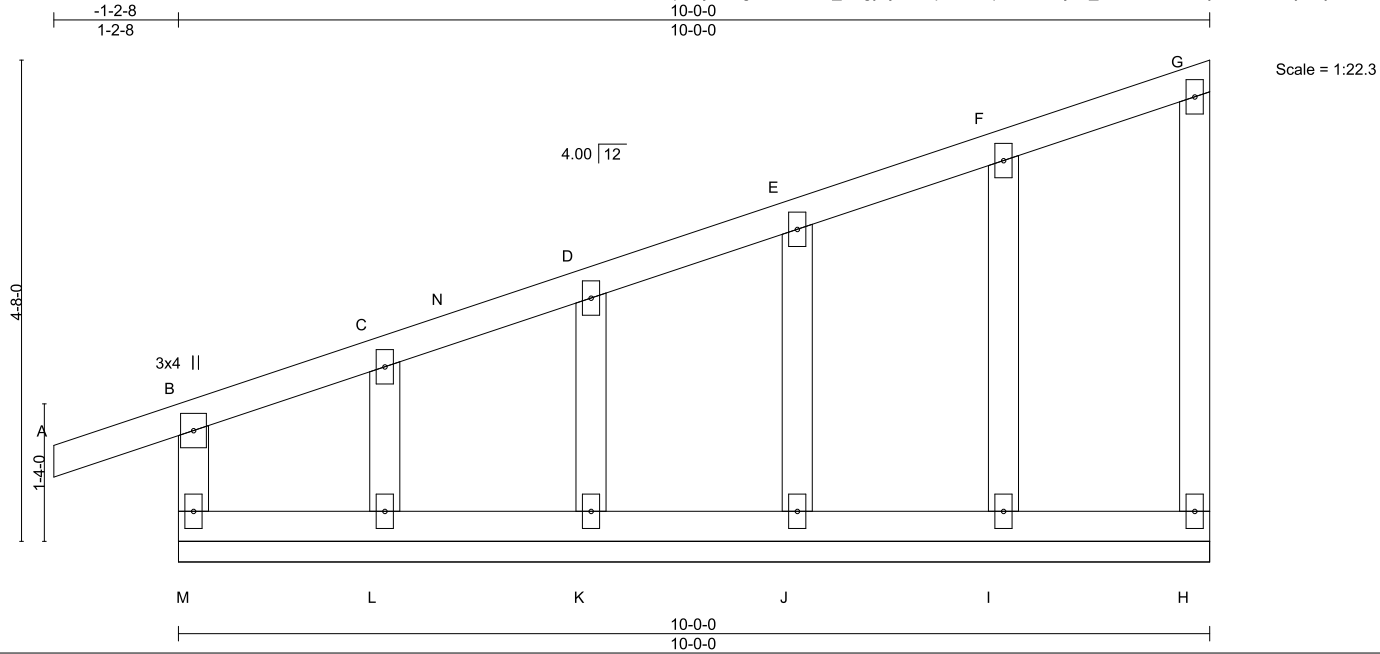

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.00	B	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.01	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	H	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 54 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 10-0-0.
(lb) - Max Horz M=186(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) M, H, I, J, K except L=-127(LC 9)
Max Grav All reactions 250 lb or less at joint(s) H, J, L except M=264(LC 18), I=261(LC 19), K=255(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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 Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 6-10-4, Corner(3E) 6-10-4 to 9-10-4 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
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, H, I, J, K except (jt=lb) L=127.
11) N/A
12) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J1A	Monopitch Supported Gable	1	1	I76722101
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:53 2025 Page 1
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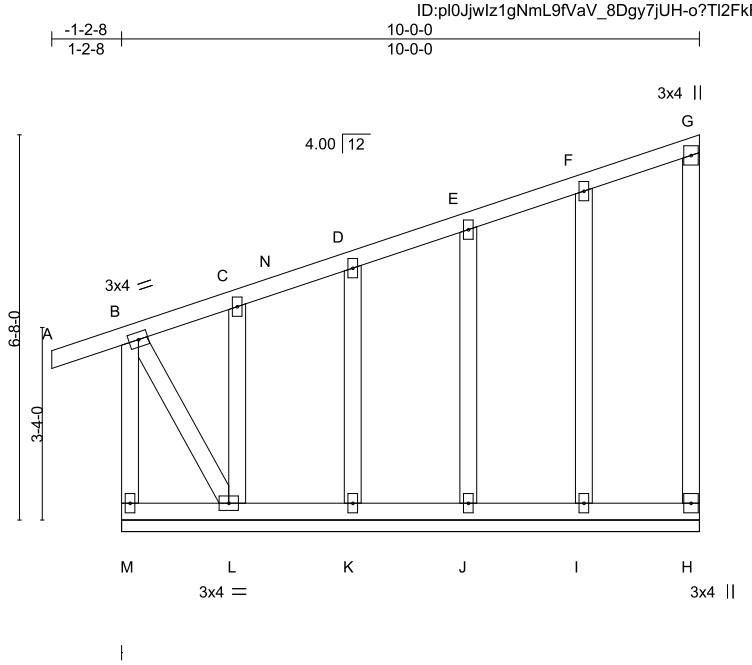

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	0.00	A	n/r	120	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.00	B	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	H	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: L-M.

REACTIONS. All bearings 10-0-0.
(lb) - Max Horz M=259(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) H, I, J, K except L=-296(LC 9)
Max Grav All reactions 250 lb or less at joint(s) H, J, L except M=359(LC 23), I=259(LC 19), K=251(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-M=-340/392
BOT CHORD	L-M=-242/348
WEBS	B-L=-448/338

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 Corner(3E) -1-2-8 to 2-0-0, Exterior(2N) 2-0-0 to 6-10-4, Corner(3E) 6-10-4 to 9-10-4 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
2) 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.
3) TCLL: ASCE 7-16; Pf=25.0 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
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, I, J, K except (jt=lb) L=296.
12) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J2	Monopitch	1	1	I76722102
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:53 2025 Page 1
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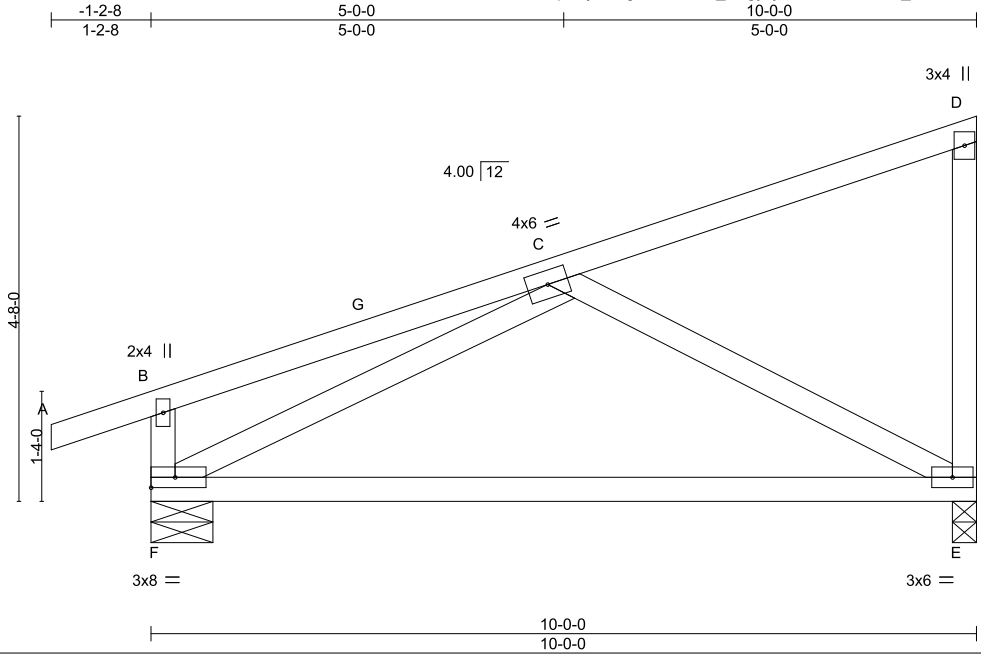

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.30	E-F	>391	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.59	E-F	>196	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.01	E	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 56 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) E=0-3-8, F=0-9-0
Max Horz F=186(LC 9)
Max Uplift E=-88(LC 12), F=-114(LC 8)
Max Grav E=580(LC 19), F=625(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-F=-306/175
BOT CHORD E-F=-149/538
WEBS C-E=-573/270, C-F=-449/197

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 1-9-8, Interior(1) 1-9-8 to 6-10-4, Exterior(2E) 6-10-4 to 9-10-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) F=114.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J2-A	Monopitch	1	1	I76722103
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:54 2025 Page 1
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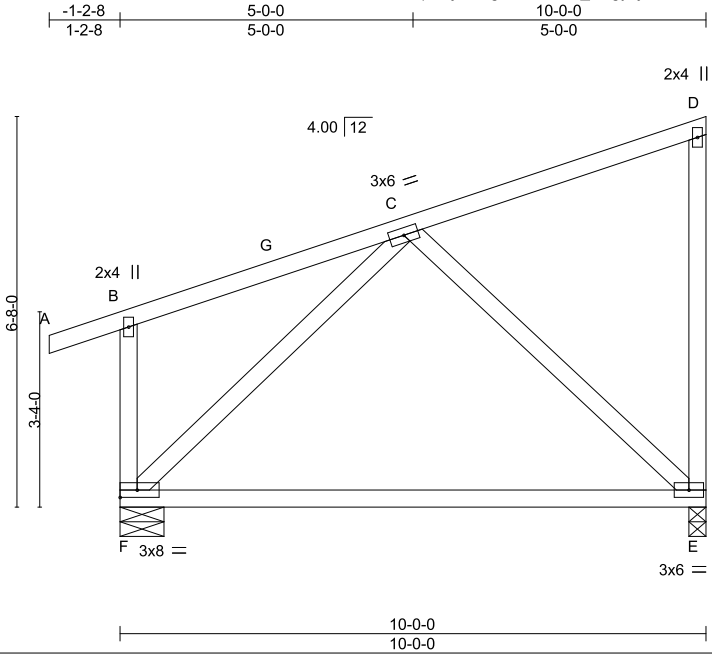

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.31	E-F	>379	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.61	E-F	>190	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 65 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) E=0-3-8, F=0-9-0
Max Horz F=259(LC 9)
Max Uplift E=-99(LC 9), F=-112(LC 8)
Max Grav E=580(LC 19), F=625(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-F=-261/170
BOT CHORD E-F=-156/310
WEBS C-E=-395/187, C-F=-378/155

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 1-9-8, Interior(1) 1-9-8 to 6-10-4, Exterior(2E) 6-10-4 to 9-10-4 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
2) TCLL: ASCE 7-16; Pf=25.0 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 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) F=112.
7) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J3	Monopitch	2	1	I76722104
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:54 2025 Page 1
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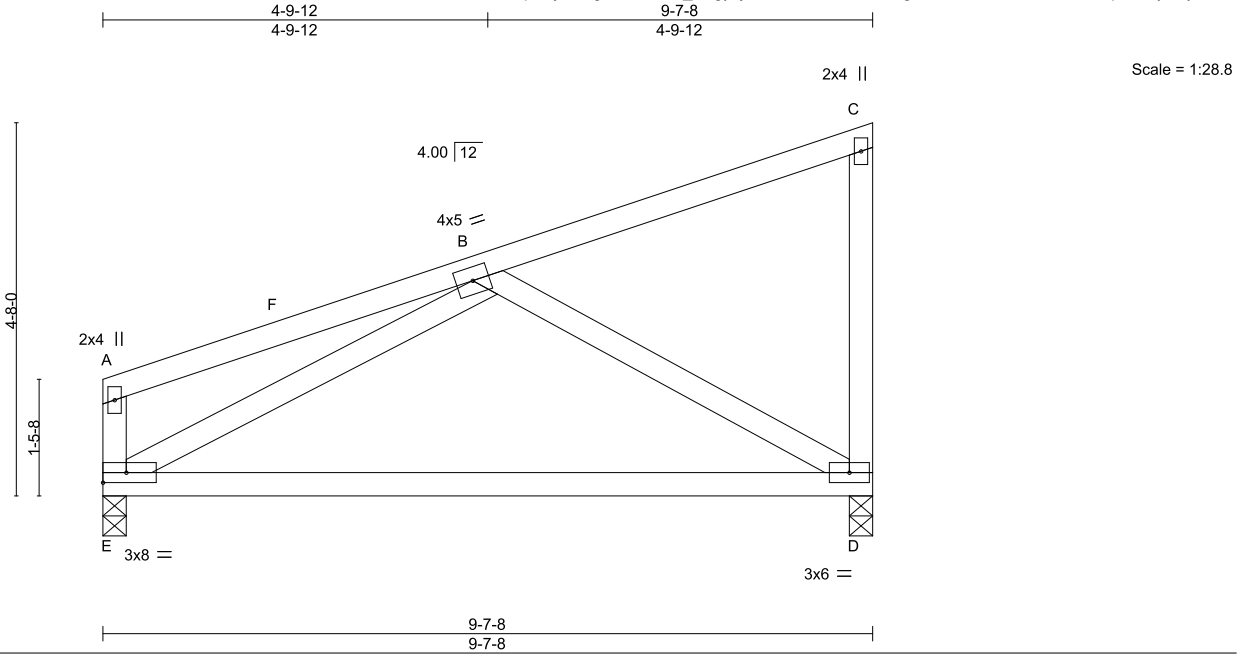

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.26	D-E	>436	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.51	D-E	>219	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.01	D	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 53 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) D=0-3-8, E=0-3-8
Max Horz E=176(LC 11)
Max Uplift D=-86(LC 12), E=-56(LC 8)
Max Grav D=567(LC 18), E=510(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD D-E=-148/507
WEBS B-D=-550/273, B-E=-442/208

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-5-12, Exterior(2E) 6-5-12 to 9-5-12 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=25.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, E.
6) 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.

October 1,2025

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

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	J3-A	Monopitch	2	1	I76722105
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:55 2025 Page 1
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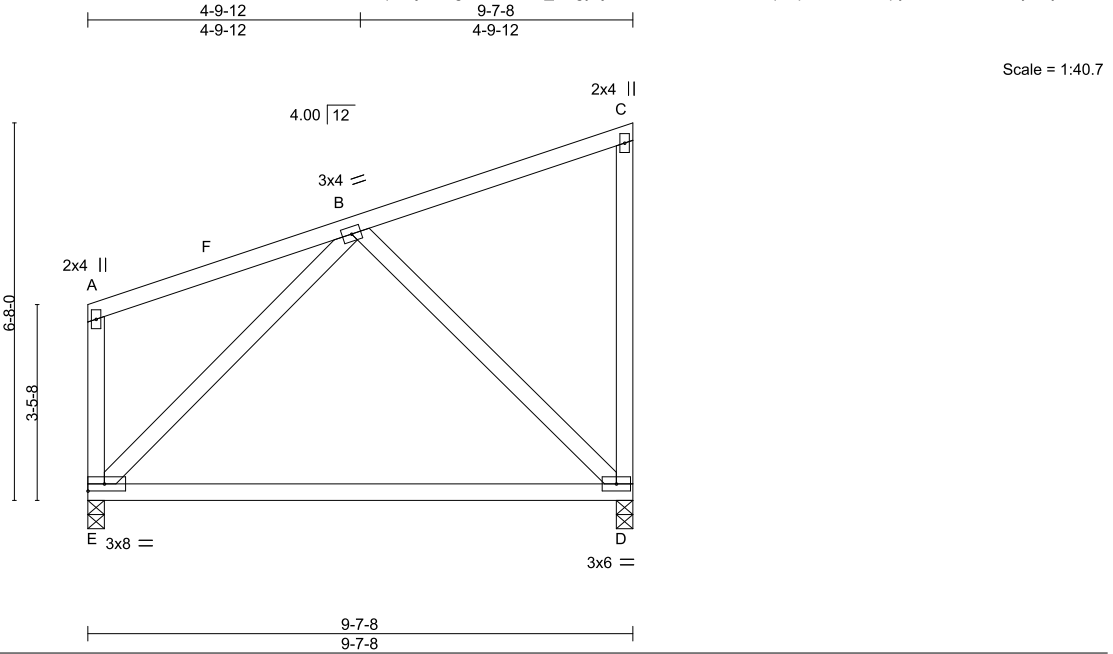

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.28	D-E	>399	240	MT20	244/190
(Roof Snow=25.0)		Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.56	D-E	>200	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 62 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) D=0-3-8, E=0-3-8
Max Horz E=249(LC 9)
Max Uplift D=-100(LC 9), E=-61(LC 8)
Max Grav D=566(LC 18), E=510(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD D-E=-151/304
WEBS B-D=-387/182, B-E=-368/184

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-5-12, Exterior(2E) 6-5-12 to 9-5-12 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=25.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, E.
6) 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.

October 1,2025

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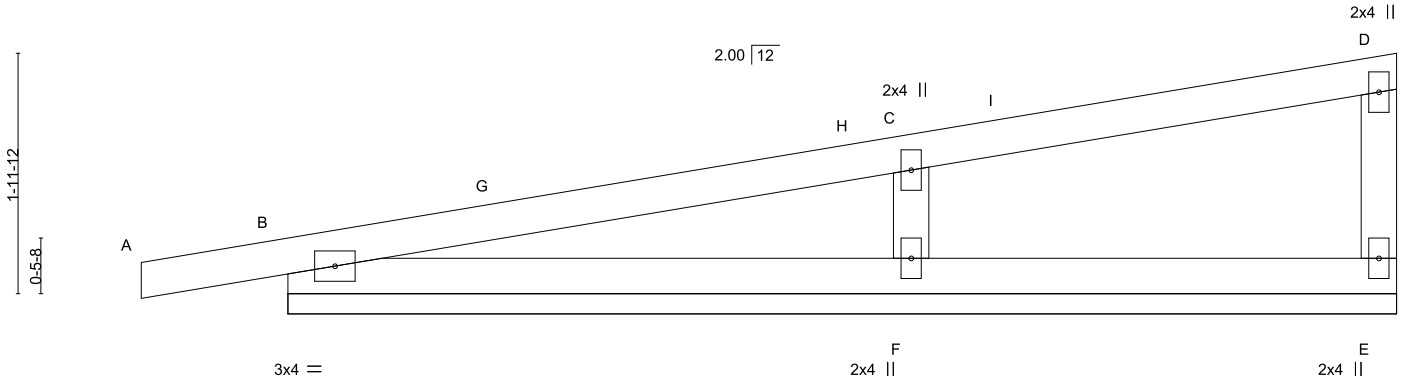
Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	K1	Valley	13	1	I76722106
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:55 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-kNbVTxmhnxEBnqS7p7eKJuuaDp6OMJNTZUHnrCyYTyk

-1-2-8 1-2-8 | 9-1-10 9-1-10

Scale = 1:19.0



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	0.40	Vert(LL)	0.01	A	n/r	120	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.23	Vert(CT)	0.03	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	E	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) E=9-1-10, B=9-1-10, F=9-1-10
Max Horz B=66(LC 9)
Max Uplift E=-20(LC 8), B=-81(LC 8), F=-81(LC 8)
Max Grav E=133(LC 19), B=293(LC 19), F=552(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS C-F=-426/234

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 1-9-8, Interior(1) 1-9-8 to 4-8-15, Exterior(2R) 4-8-15 to 8-11-14 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 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E, B, F.
8) 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.

October 1,2025

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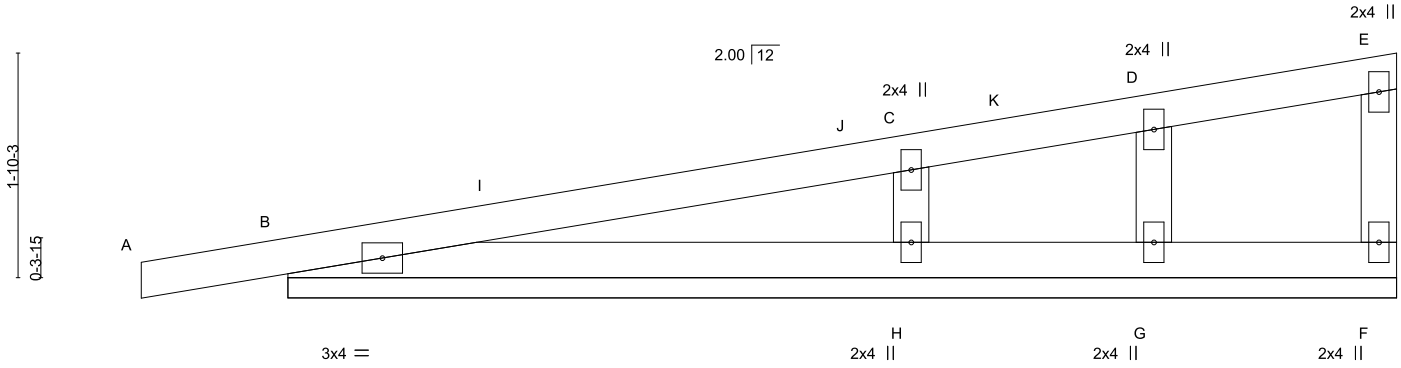
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	REUNION / TYPE BLDG A
251348	K2	GABLE	2	1	I76722107
					Job Reference (optional)

Heartland Truss, LLC., Plattsburg, MO - 64477, 8.830 s Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 09:50:55 2025 Page 1
ID:pl0JjwIz1gNmL9fVaV_8Dgy7jUH-kNbVTxmhnxEBnqS7p7eKJuuaQp6NMJTTZUHnrCyYTyk

-1-2-8 1-2-8 | 9-1-10 9-1-10

Scale = 1:19.0



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	0.38	Vert(LL)	0.02	A	n/r	120	MT20	244/190
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.23	Vert(CT)	0.03	A	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	F	n/a	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 9-1-10.
(lb) - Max Horz B=64(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) F, B, G, H
Max Grav All reactions 250 lb or less at joint(s) F, G except B=295(LC 19), H=528(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS C-H=-397/187

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 1-9-8, Interior(1) 1-9-8 to 4-8-15, Exterior(2R) 4-8-15 to 8-11-14 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 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, B, G, H.
8) 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.

October 1,2025

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Chesterfield, MO 63017
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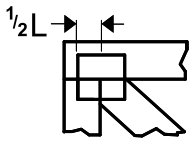
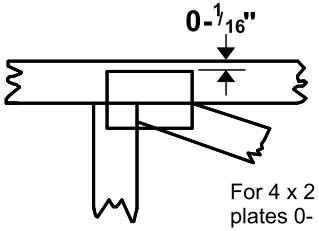
Symbols

PLATE LOCATION AND ORIENTATION



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

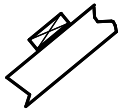
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

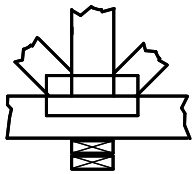
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

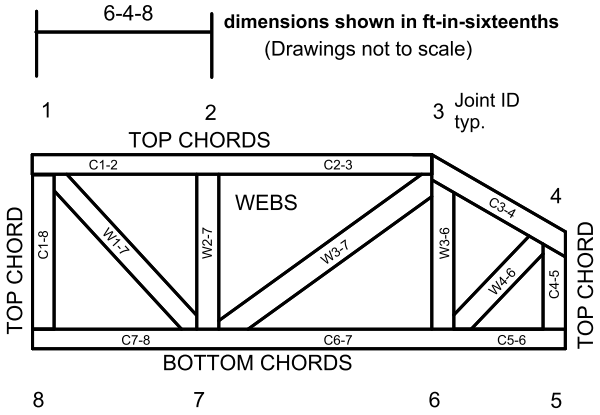


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.