RE: P220321-P220321-02
Roof - Osage Lot 50

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

Site Information:

Customer: Clover & Hive Project Name: P220321-P220321-02
Lot/Block: 50 Model:
Address: 2109 / 2101 South West Osage Drive Subdivision: Osage
City: Lee's Summit State: MO

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 48 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I53048638	A1	7/13/2022	21	I53048658	D3	7/13/2022
2	I53048639	A2	7/13/2022	22	I53048659	E1	7/13/2022
3	I53048640	A3	7/13/2022	23	I53048660	E2	7/13/2022
4	I53048641	A4	7/13/2022	24	I53048661	E3	7/13/2022
5	I53048642	A5	7/13/2022	25	I53048662	E4	7/13/2022
6	I53048643	A6	7/13/2022	26	I53048663	E5	7/13/2022
7	I53048644	A7	7/13/2022	27	I53048664	J1	7/13/2022
8	I53048645	A8	7/13/2022	28	I53048665	J2	7/13/2022
9	I53048646	A9	7/13/2022	29	I53048666	J3	7/13/2022
10	I53048647	A10	7/13/2022	30	I53048667	J4	7/13/2022
11	I53048648	A11	7/13/2022	31	I53048668	J5	7/13/2022
12	I53048649	B1	7/13/2022	32	I53048669	J6	7/13/2022
13	I53048650	B2	7/13/2022	33	I53048670	J7	7/13/2022
14	I53048651	B3	7/13/2022	34	I53048671	J8	7/13/2022
15	I53048652	C1	7/13/2022	35	I53048672	J9	7/13/2022
16	I53048653	C2	7/13/2022	36	I53048673	J10	7/13/2022
17	I53048654	C3	7/13/2022	37	I53048674	J11	7/13/2022
18	I53048655	CJ1	7/13/2022	38	I53048675	PG1	7/13/2022
19	I53048656	D1	7/13/2022	39	I53048676	PG2	7/13/2022
20	I53048657	D2	7/13/2022	40	I53048677	PG3	7/13/2022

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

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

July 13, 2022

Sevier, Scott

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

RE: P220321-P220321-02 - Roof - Osage Lot 50

Site Information:

Project Customer: Clover & Hive Project Name: P220321-P220321-02
Lot/Block: 50 Subdivision: Osage
Address: 2109 / 2101 South West Osage Drive
City, County: Lee's Summit State: MO

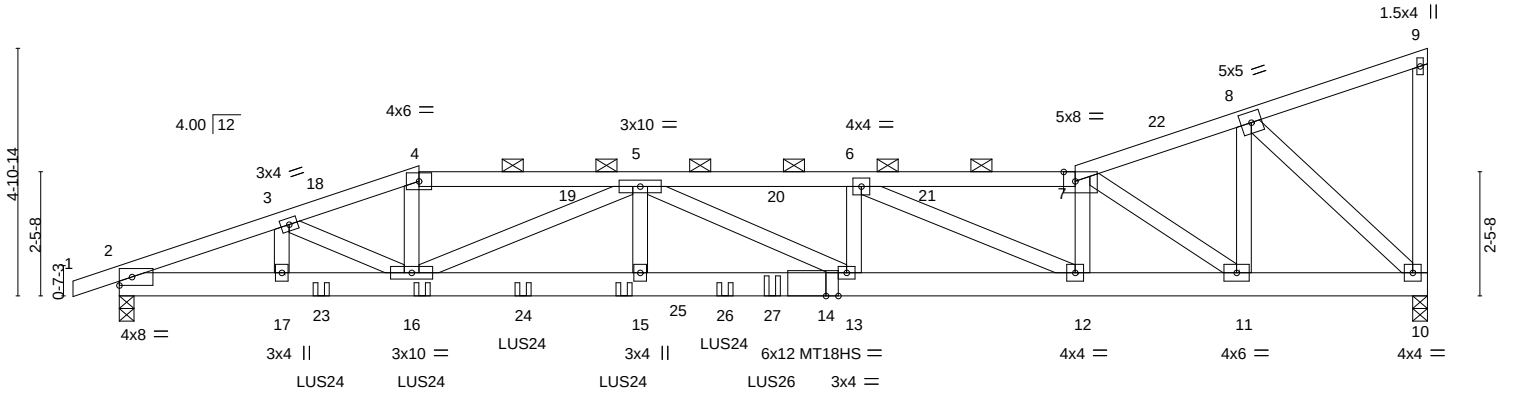
No.	Seal#	Truss Name	Date
41	I53048678	V1	7/13/2022
42	I53048679	V2	7/13/2022
43	I53048680	V3	7/13/2022
44	I53048681	V4	7/13/2022
45	I53048682	V5	7/13/2022
46	I53048683	V6	7/13/2022
47	I53048684	V7	7/13/2022
48	I53048685	V8	7/13/2022

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A1	Roof Special Girder	2	2	I53048638
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:20 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-8tRMmGMAvdLT1u6bAEK8DAxobzf2VVUamt1T9YyynfX

0-11-0	3-2-10	5-11-4	10-3-13	14-6-11	18-11-4	22-3-6	25-11-0
0-11-0	3-2-10	2-8-10	4-4-9	4-2-13	4-4-9	3-4-2	3-7-10

Scale = 1:45.6



3-2-10	5-11-4	10-3-13	14-6-11	18-11-4	22-3-6	25-11-0
3-2-10	2-8-10	4-4-9	4-2-13	4-4-9	3-4-2	3-7-10

Plate Offsets (X,Y)-- [7:0-2-12,Edge], [14:0-2-15,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.34	13-15	>893	240	MT20	118/123
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.51	13-15	>597	180	MT18HS	113/123
TCDL	10.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.08	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 275 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 1 1/2" x 5 1/2" 2.0E Microllam® LVL *Except*
10-14: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-12 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=208(LC 64)
Max Uplift 10=-460(LC 16), 2=-676(LC 12)
Max Grav 10=2294(LC 42), 2=3213(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7410/1568, 3-4=-8003/1663, 4-5=-7500/1574, 5-6=-10275/1985, 6-7=-6430/1247, 7-8=-2458/518
BOT CHORD 2-17=-1600/6800, 16-17=-1600/6800, 15-16=-2147/10906, 13-15=-2147/10906, 12-13=-1947/10275, 11-12=-1245/6543, 10-11=-518/2302
WEBS 3-16=-111/942, 4-16=-393/2153, 5-16=-3755/675, 5-15=-190/1305, 5-13=-815/261, 6-13=-196/1267, 6-12=-4237/814, 7-12=-265/1709, 7-11=-5035/955, 8-11=-501/2853, 8-10=-3158/655

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 0-7-0 oc.
Bottom chords connected as follows: 1 1/2" x 5 1/2" - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior(1) 13-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.

July 13,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-0-0 from the left end to 12-0-0 to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent at 12-11-4 from the left end to connect truss(es) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

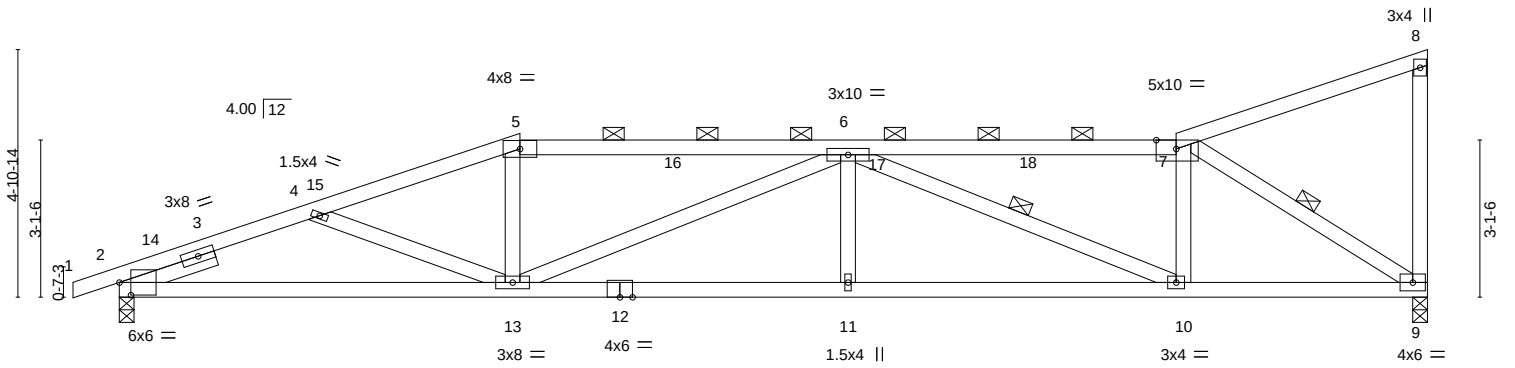
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-7=-70, 7-9=-70, 2-10=-20
   Concentrated Loads (lb)
   Vert: 16=-356(F) 23=-558(F) 24=-356(F) 25=-356(F) 26=-356(F) 27=-1052(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A2	Roof Special	2	1	I53048639
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:27 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-RDM?EfRZGmETMy9x5Cyn0ej_FnxQecGcNTEKveyynfQ

0-11-0	3-11-10	7-11-4	14-5-4	20-11-4	25-11-0
0-11-0	3-11-10	3-11-10	6-6-0	6-6-0	4-11-12

Scale = 1:45.6



7-11-4	14-5-4	20-11-4	25-11-0
7-11-4	6-6-0	6-6-0	4-11-12

Plate Offsets (X,Y)-- [2:0-2-12,0-3-0], [7:0-4-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.25	11-13	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.40	11-13	>780	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.12	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 108 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-7: 2x4 SP 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SPF No.2 1-11-11

BRACING-

TOP CHORD	Sheathed or 2-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-7 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 6-7-3 oc bracing.
WEBS	1 Row at midpt 6-10, 7-9

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=210(LC 13)
Max Uplift 9=-243(LC 16), 2=-268(LC 12)
Max Grav 9=1255(LC 41), 2=1350(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2654/651, 4-5=-2729/580, 5-6=-2583/574, 6-7=-1912/379, 8-9=-253/120
BOT CHORD 2-13=-796/2388, 11-13=-667/3409, 10-11=-667/3409, 9-10=-388/1946
WEBS 4-13=-344/227, 5-13=0/414, 6-13=-901/120, 6-11=0/261, 6-10=-1631/332, 7-10=-62/763, 7-9=-2257/425

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior(1) 15-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

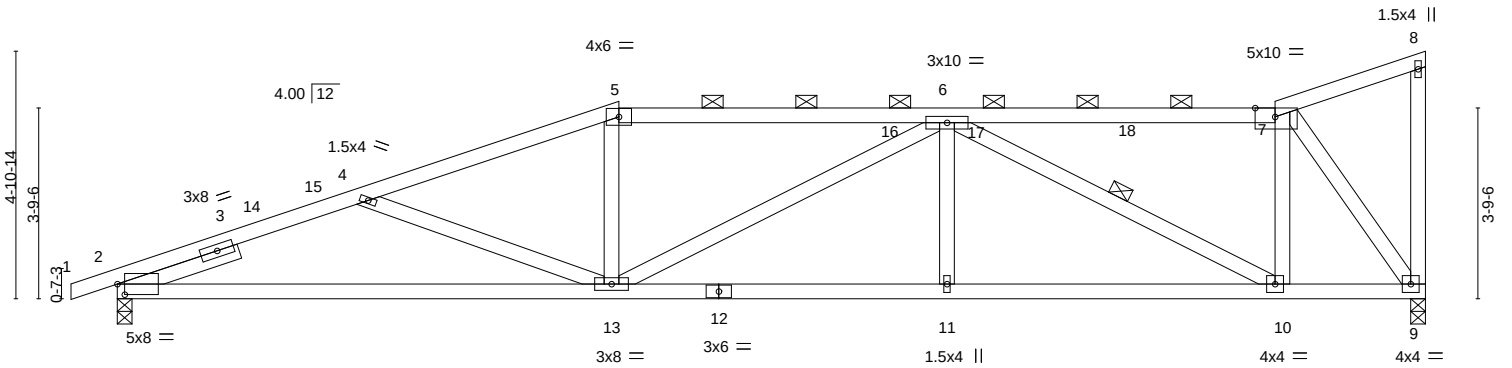
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A3	Roof Special	2	1	I53048640
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:29 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-NcUmfLTpoOUBcGIKCd_F53oJhbd56YtvrnjR_XyynfO

0-11-0 4-11-10 9-11-4 16-5-4 22-11-4 25-11-0
0-11-0 4-11-10 4-11-10 6-6-0 6-6-0 2-11-12

Scale = 1:45.6



9-11-4 16-5-4 22-11-4 25-11-0
9-11-4 6-6-0 6-6-0 2-11-12

Plate Offsets (X,Y)-- [2:0-1-12,0-2-8], [7:0-4-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.18	2-13	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.40	2-13	>770	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.10	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 112 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Sheathed or 2-4-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-11 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 6-5-11 oc bracing.
WEBS 1 Row at midpt 6-10

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=210(LC 13)
Max Uplift 9=-243(LC 16), 2=-268(LC 12)
Max Grav 9=1331(LC 41), 2=1425(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2825/652, 4-5=-2404/526, 5-6=-2268/526, 6-7=-1023/231
BOT CHORD 2-13=-804/2564, 11-13=-526/2571, 10-11=-526/2571, 9-10=-220/1057
WEBS 4-13=-646/238, 5-13=0/353, 6-13=-347/284, 6-10=-1753/363, 7-10=-112/932, 7-9=-1693/312

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior(1) 17-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

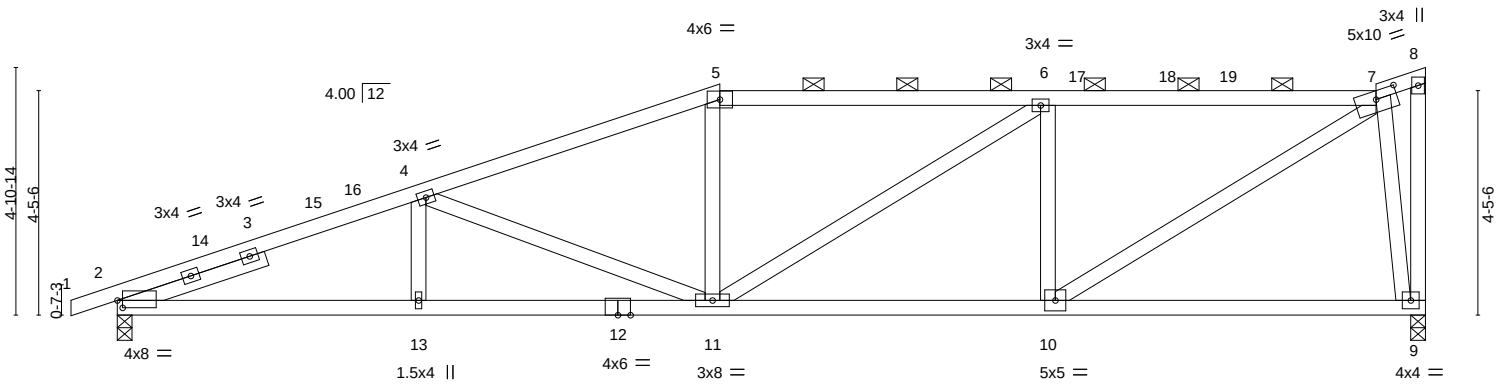
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A4	Roof Special	2	1	I53048641
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:31 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-J_cW40U4K?kvraSjK21jAUufHPMLaRMCI5CY2PyynfM

0-11-0 5-11-10 11-11-4 18-5-4 24-11-4 25-11-0
0-11-0 5-11-10 5-11-10 6-6-0 6-6-0 0-11-12

Scale = 1:45.6



5-11-10 11-11-4 18-5-4 25-11-0
5-11-10 5-11-10 6-6-0 7-5-12

Plate Offsets (X,Y)-- [2:0-1-4,0-1-12], [7:0-5-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.14	11-13	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.25	11-13	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 122 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 1650F 1.5E *Except* 7-8: 2x4 SPF No.2
BOT CHORD	2x4 SP 1650F 1.5E *Except* 9-12: 2x4 SPF No.2
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SPF No.2 3-0-13

BRACING-

TOP CHORD	Sheathed or 3-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-2 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 6-10-12 oc bracing.

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=210(LC 13)
Max Uplift 9=-243(LC 16), 2=-268(LC 12)
Max Grav 9=1407(LC 41), 2=1501(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3011/585, 4-5=-2030/488, 5-6=-1912/492, 6-7=-1882/436
BOT CHORD 2-13=-739/2734, 11-13=-739/2734, 10-11=-400/1882, 9-10=-105/313
WEBS 4-11=-986/228, 5-11=0/279, 6-11=-152/584, 6-10=-854/288, 7-10=-366/1863, 7-9=-1525/341

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 11-11-4, Exterior(2R) 11-11-4 to 19-0-2, Interior(1) 19-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

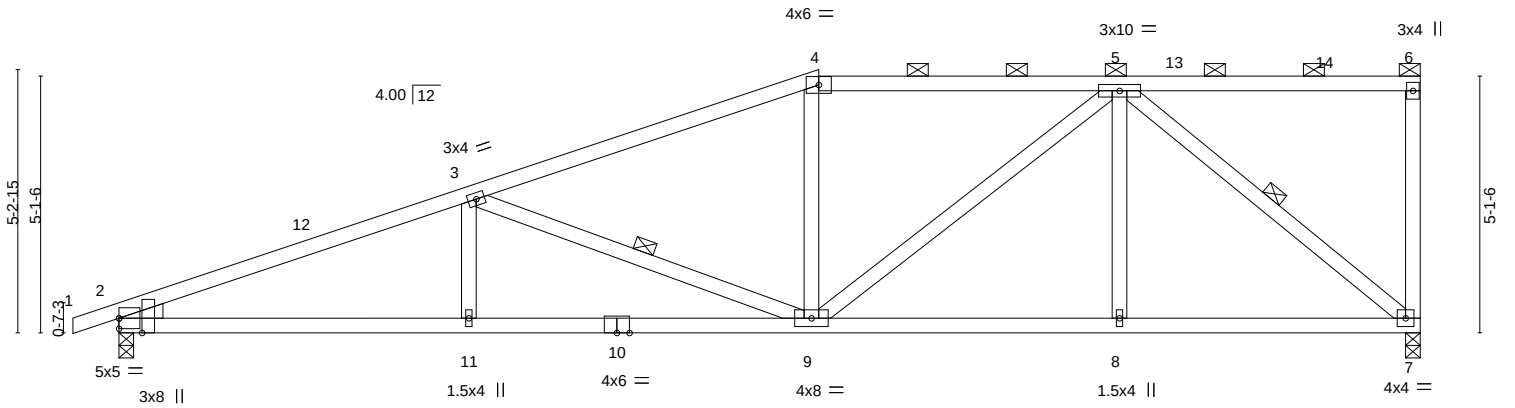
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A5	Half Hip	2	1	I53048642
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:32 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-nBAuHMVi5JsmTk1vtlYyjhQoxoh0JxuLXlx5bryynfL

0-11-0 6-11-10 13-11-4 19-11-2 25-11-0
0-11-0 6-11-10 6-11-10 5-11-14 5-11-14

Scale = 1:45.9



6-11-10 13-11-4 19-11-2 25-11-0
6-11-10 6-11-10 5-11-14 5-11-14

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.18	2-11	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.31	2-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.08	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 114 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except* 4-6: 2x4 SPF No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 7-10: 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 2-10-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-9-15 oc bracing.
WEBS 1 Row at midpt 3-9, 5-7

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=221(LC 13)
Max Uplift 7=-243(LC 12), 2=-267(LC 12)
Max Grav 7=1393(LC 37), 2=1575(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3255/567, 3-4=-1890/431, 4-5=-1666/439, 6-7=-264/102
BOT CHORD 2-11=-749/2937, 9-11=-749/2937, 8-9=-350/1325, 7-8=-350/1325
WEBS 3-11=0/299, 3-9=-1358/286, 5-9=-171/797, 5-8=0/255, 5-7=-1687/384

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 13-11-4, Exterior(2R) 13-11-4 to 21-0-2, Interior(1) 21-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A6	Half Hip	2	1	I53048643
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:34 2022 Page 1
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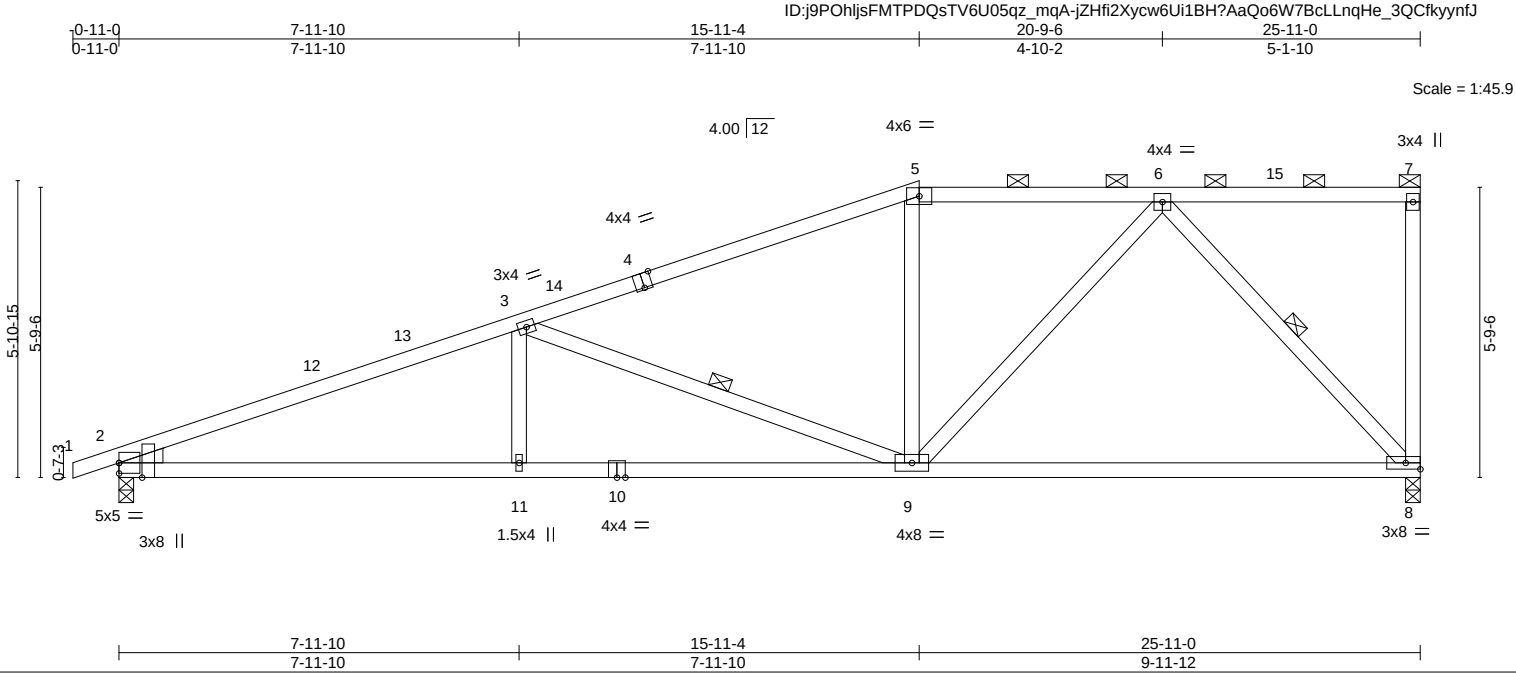

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.27	8-9	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.55	8-9	>558	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 118 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except*
5-7: 2x4 SPF No.2, 1-4: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed, except end verticals, and 2-0-0 oc purlins (4-4-8 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 8-1-15 oc bracing.
WEBS 1 Row at midpt 3-9, 6-8

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=252(LC 13)
Max Uplift 8=-246(LC 12), 2=-265(LC 12)
Max Grav 8=1306(LC 37), 2=1638(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3354/549, 3-5=-1748/366, 5-6=-1509/380
BOT CHORD 2-11=-754/3025, 9-11=-754/3025, 8-9=-326/920
WEBS 3-11=0/308, 3-9=-1621/353, 6-9=-149/996, 6-8=-1332/410

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 15-11-4, Exterior(2R) 15-11-4 to 23-0-2, Interior(1) 23-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A7	Half Hip	2	1	I53048644
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:41 2022 Page 1
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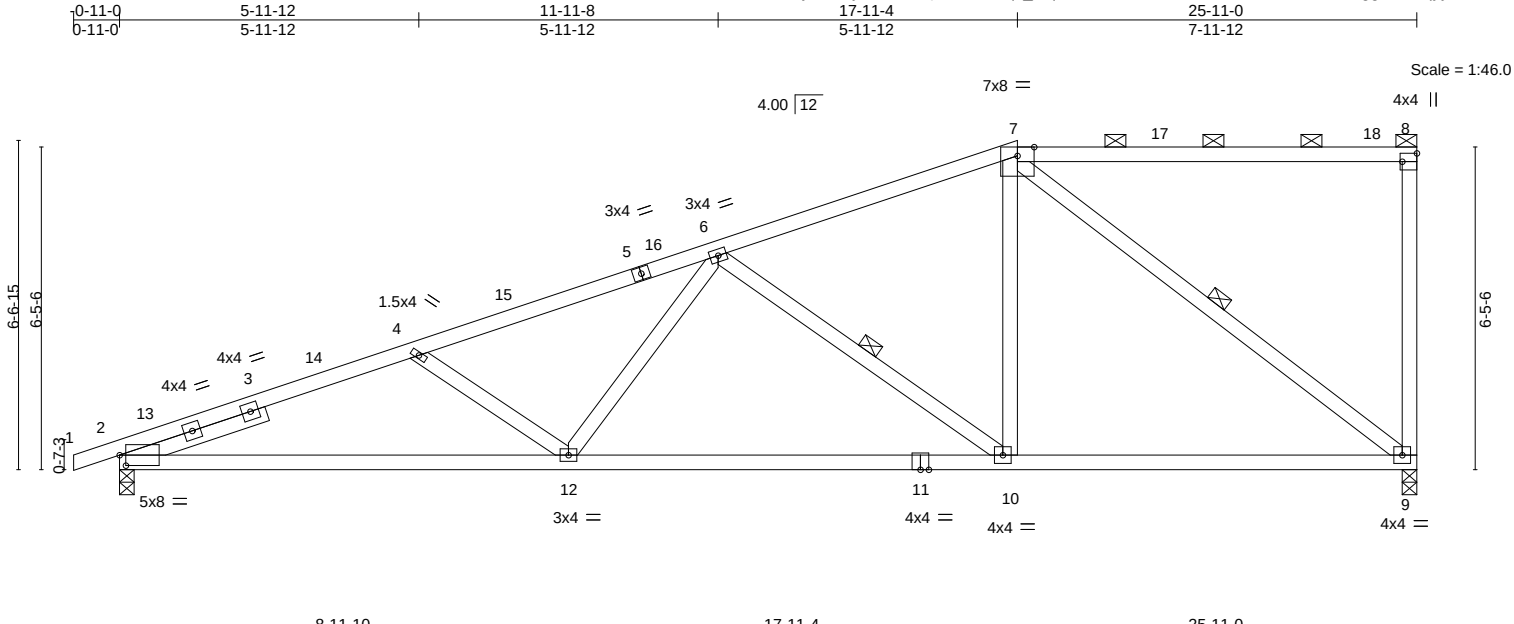

Plate Offsets (X,Y)-- [2:0-1-8,0-2-8], [8:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.19	10-12	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.33	10-12	>946	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.09	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 7-8: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 2-11: 2x4 SP 1650F 1.5E
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SPF No.2 3-0-11

BRACING-

TOP CHORD	Sheathed or 2-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied or 7-5-5 oc bracing.
WEBS	1 Row at midpt 6-10, 7-9

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=283(LC 13)
Max Uplift 9=-249(LC 12), 2=-262(LC 12)
Max Grav 9=1207(LC 37), 2=1622(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3480/565, 4-6=-2933/462, 6-7=-1455/327, 8-9=-426/145
BOT CHORD 2-12=-768/3175, 10-12=-614/2332, 9-10=-375/1253
WEBS 4-12=-593/214, 6-12=-20/630, 6-10=-1311/295, 7-10=-61/959, 7-9=-1579/391

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 17-11-4, Exterior(2R) 17-11-4 to 25-0-2, Interior(1) 25-0-2 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A8	Half Hip	2	1	I53048645
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:43 2022 Page 1
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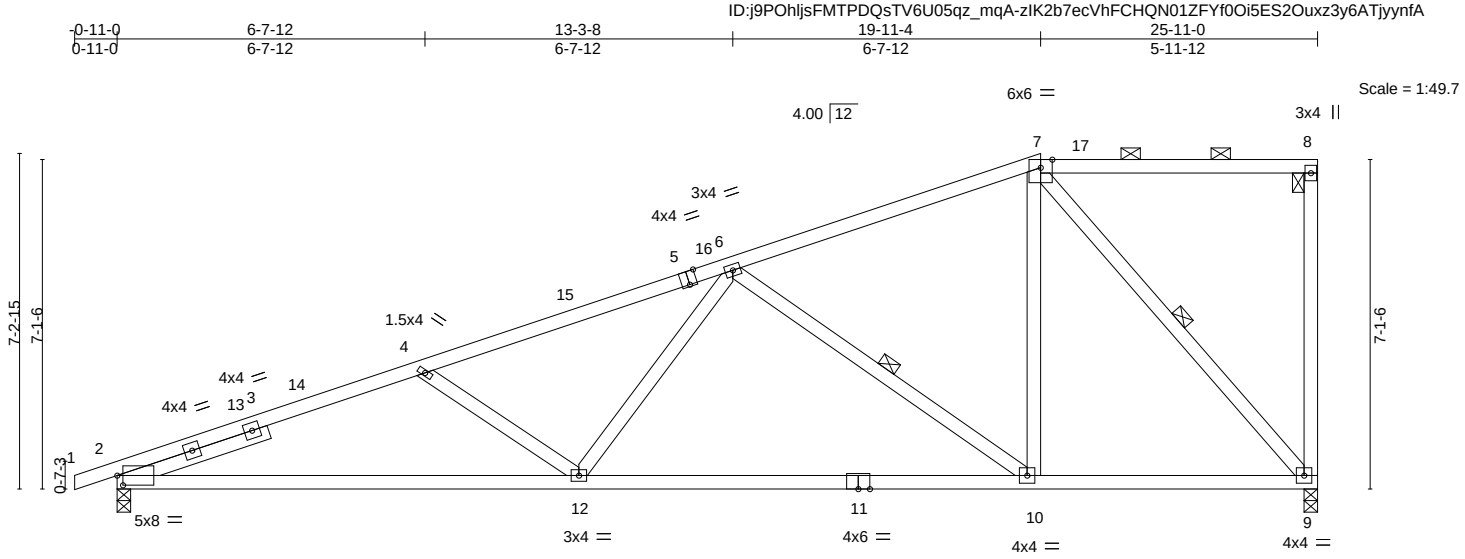

Plate Offsets (X,Y)-- [2:0-1-8,0-2-8], [5:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.18	10-12	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.38	10-12	>810	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.09	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 123 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 1650F 1.5E *Except* 7-8: 2x4 SPF No.2
BOT CHORD	2x4 SP 1650F 1.5E *Except* 9-11: 2x4 SPF No.2
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SPF No.2 3-4-15

BRACING-

TOP CHORD	Sheathed or 3-4-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied or 7-7-14 oc bracing.
WEBS	1 Row at midpt 6-10, 7-9

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=314(LC 13)
Max Uplift 9=-252(LC 12), 2=-258(LC 12)
Max Grav 9=1281(LC 38), 2=1587(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3472/548, 4-6=-2880/432, 6-7=-1190/277, 8-9=-313/126
BOT CHORD 2-12=-758/3187, 10-12=-580/2214, 9-10=-311/986
WEBS 4-12=-680/241, 6-12=-19/726, 6-10=-1491/330, 7-10=-89/1051, 7-9=-1517/370

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 19-11-4, Exterior(2E) 19-11-4 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A9	Half Hip	2	1	I53048646
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:45 2022 Page 1
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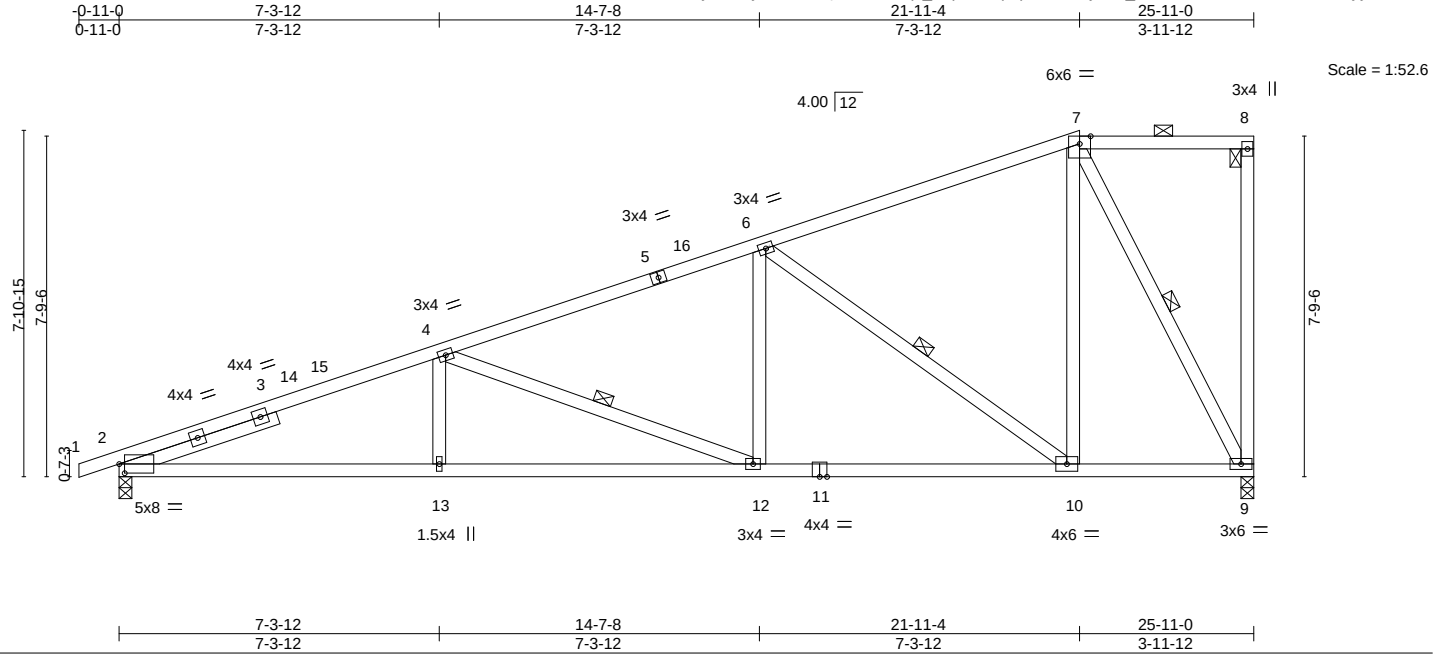


Plate Offsets (X,Y)-- [2:0-1-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.20	12-13	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.33	12-13	>944	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.10	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 132 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 2400F 2.0E *Except* 7-8: 2x4 SPF No.2, 1-5: 2x4 SP 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 2-11: 2x4 SP 1650F 1.5E
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SPF No.2 3-9-5

BRACING-

TOP CHORD	Sheathed or 3-8-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied or 8-2-7 oc bracing.
WEBS	1 Row at midpt 4-12, 6-10, 7-9

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=344(LC 13)
Max Uplift 9=-256(LC 12), 2=-255(LC 12)
Max Grav 9=1391(LC 38), 2=1546(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3418/491, 4-6=-2314/362, 6-7=-882/225
BOT CHORD 2-13=-706/3140, 12-13=-706/3140, 10-12=-516/2089, 9-10=-242/679
WEBS 4-13=0/287, 4-12=-1123/236, 6-12=0/550, 6-10=-1712/336, 7-10=-128/1120, 7-9=-1497/368

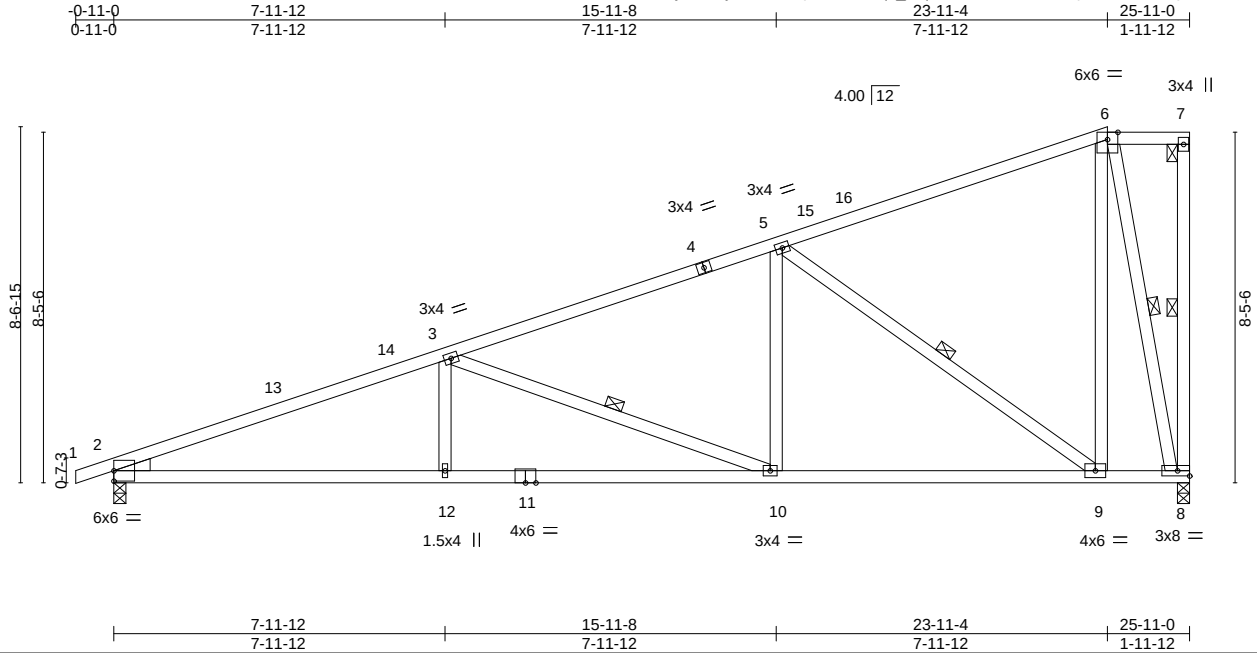
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 21-11-4, Exterior(2E) 21-11-4 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A10	Half Hip	2	1	I53048647
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:24 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-0ehtcdPhzrsvVVQMP4P4O?5QiaxLREHAhV?gJJyynfT



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.22	2-12	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.39	2-12	>799	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 132 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E *Except*
6-7: 2x4 SPF No.2, 1-4: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-

TOP CHORD Sheathed or 2-9-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 7-1-5 oc bracing.
WEBS 1 Row at midpt 7-8, 3-10, 5-9, 6-8

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=376(LC 13)
Max Uplift 8=-260(LC 12), 2=-251(LC 12)
Max Grav 8=1507(LC 38), 2=1501(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3376/478, 3-5=-2110/325, 5-6=-553/173
BOT CHORD 2-12=-683/3087, 10-12=-683/3087, 9-10=-455/1879, 8-9=-163/361
WEBS 3-12=0/344, 3-10=-1289/279, 5-10=0/610, 5-9=-1842/357, 6-9=-162/1189, 6-8=-1634/377

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 23-11-4, Exterior(2E) 23-11-4 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	A11	Monopitch	4	1	I53048648
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:26 2022 Page 1
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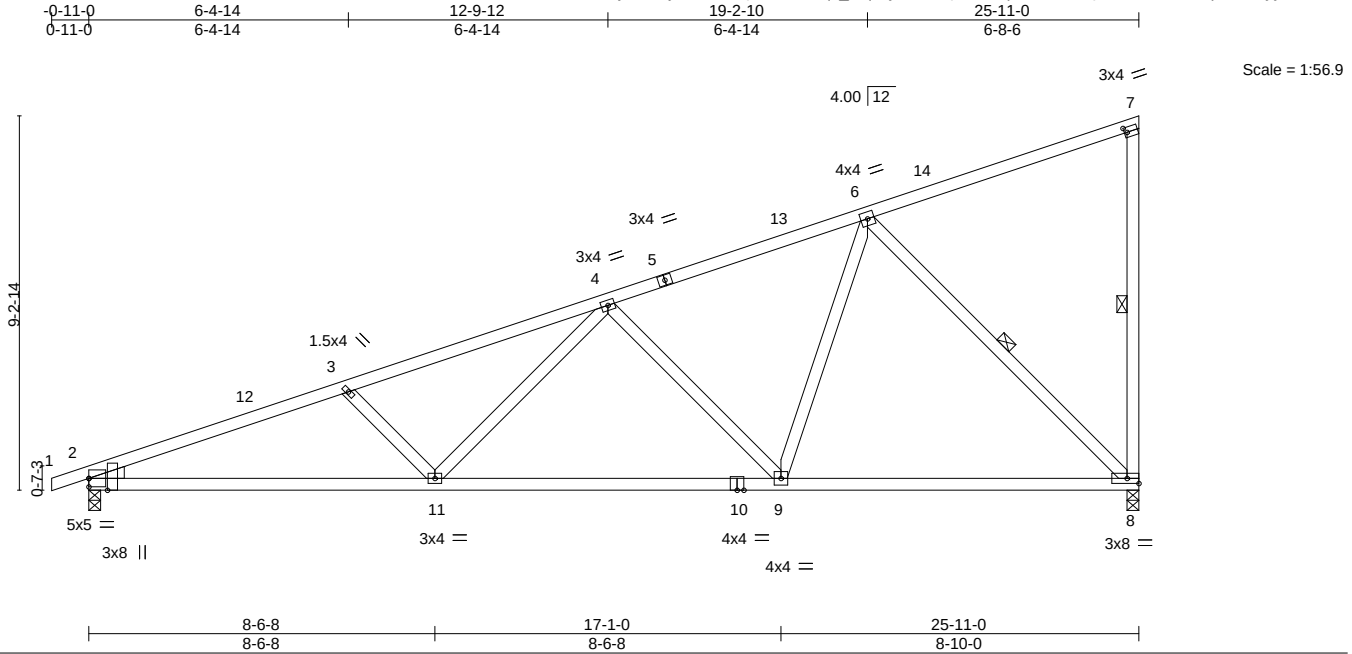

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [7:0-0-13,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.17	8-9	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.35	8-9	>881	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.08	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 108 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 2-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-10-11 oc bracing.
WEBS 1 Row at midpt 7-8, 6-8

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=410(LC 13)
Max Uplift 8=-268(LC 16), 2=-246(LC 12)
Max Grav 8=1443(LC 23), 2=1281(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2754/514, 3-4=-2458/451, 4-6=-1426/296, 7-8=-305/149
BOT CHORD 2-11=-720/2526, 9-11=-516/1822, 8-9=-333/1053
WEBS 3-11=-392/220, 4-11=-84/647, 4-9=-793/275, 6-9=-102/801, 6-8=-1483/349

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 25-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	B1	Common Supported Gable	4	1	I53048649
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:46 2022 Page 1
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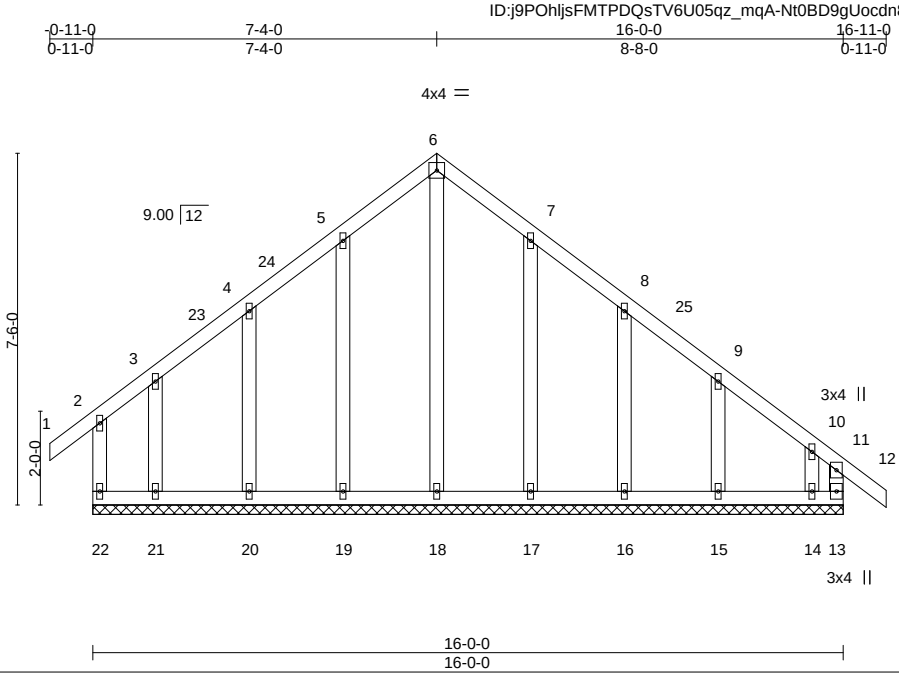

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.00	12	n/r	90		
TCDL	10.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 83 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 16-0-0.
(lb) - Max Horz 22=-232(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 22, 18, 19, 20, 17, 16, 15 except 13=-335(LC 13), 21=-102(LC 16), 14=-275(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 22, 18, 21, 15 except 13=364(LC 14), 19=290(LC 23), 20=260(LC 23), 17=292(LC 24), 16=250(LC 24), 14=332(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-133/255, 5-6=-175/337, 6-7=-175/337, 7-8=-139/255, 10-11=-255/245
WEBS 6-18=-316/110, 5-19=-251/115, 7-17=-253/116

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 7-4-0, Corner(3R) 7-4-0 to 12-4-0, Exterior(2N) 12-4-0 to 16-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 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 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	B2	Common	12	1	I53048650
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:49 2022 Page 1
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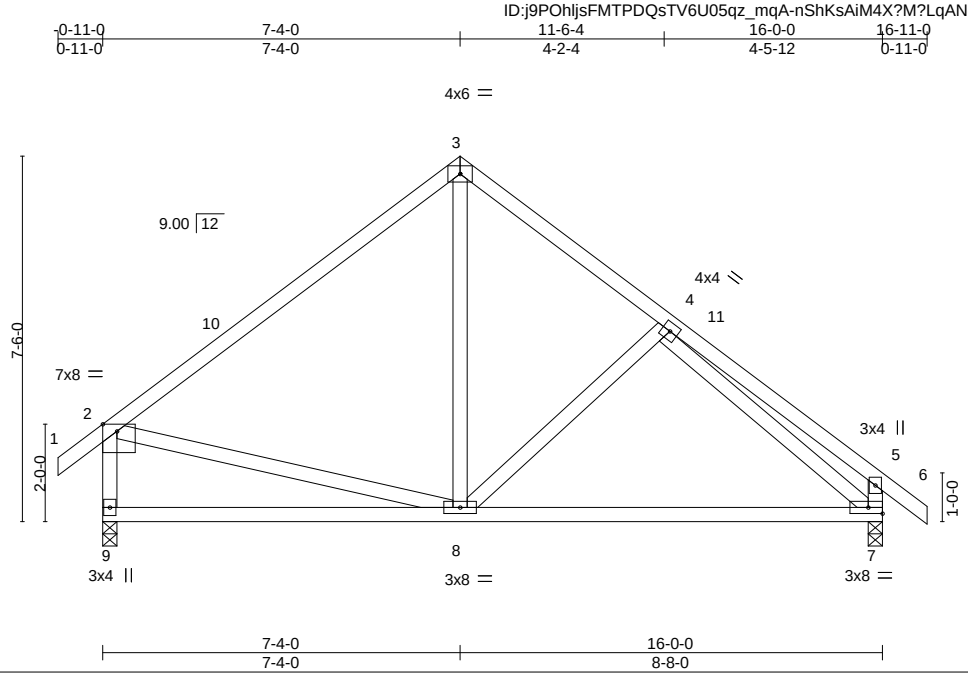

Plate Offsets (X,Y)-- [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.12	7-8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	7-8	>786	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 79 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except*
3-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
2-9: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 7=0-3-8
Max Horz 9=-239(LC 14)
Max Uplift 9=-101(LC 16), 7=-111(LC 17)
Max Grav 9=866(LC 23), 7=869(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-754/154, 3-4=-708/187, 4-5=-318/118, 2-9=-804/193, 5-7=-359/149
BOT CHORD 8-9=-233/342, 7-8=-43/655
WEBS 3-8=-38/334, 4-8=-298/199, 2-8=-43/357, 4-7=-685/79

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 7-4-0, Exterior(2R) 7-4-0 to 12-4-0, Interior(1) 12-4-0 to 16-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 7. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	B3	Common	12	1	I53048651
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:51 2022 Page 1
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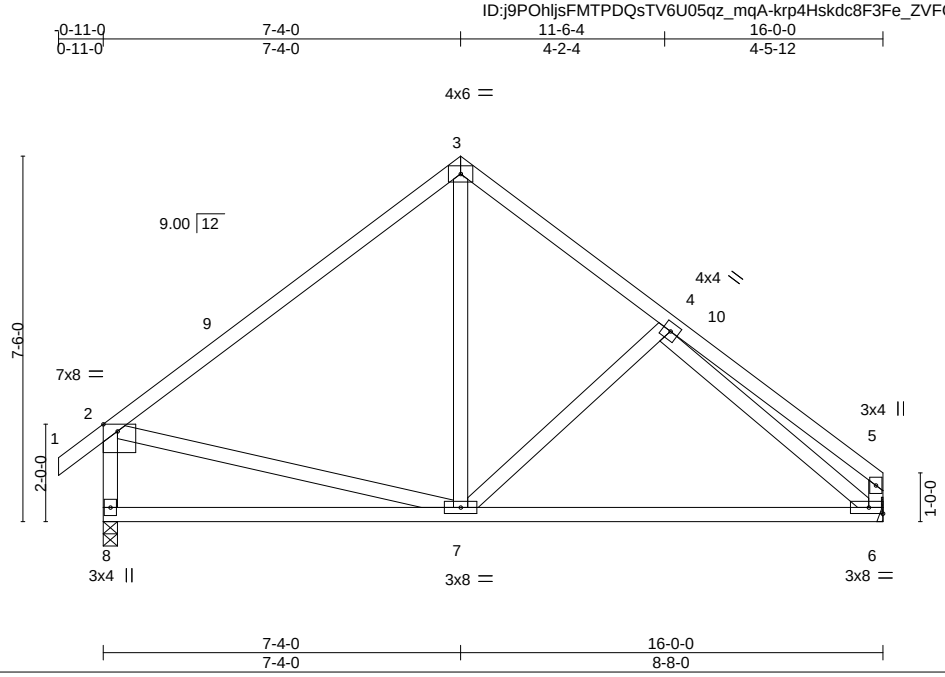

Plate Offsets (X,Y)-- [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.12	6-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	6-7	>786	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 77 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
2-8: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=-225(LC 14)
Max Uplift 8=-101(LC 16), 6=-85(LC 17)
Max Grav 8=867(LC 23), 6=792(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-756/154, 3-4=-713/188, 4-5=-294/85, 2-8=-805/193, 5-6=-268/93
BOT CHORD 7-8=-242/332, 6-7=-91/665
WEBS 3-7=-40/336, 4-7=-308/202, 2-7=-43/359, 4-6=-701/116

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 7-4-0, Exterior(2R) 7-4-0 to 12-4-0, Interior(1) 12-4-0 to 15-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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) 6.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	C1	Half Hip Girder	2	2	I53048652
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:54 2022 Page 1
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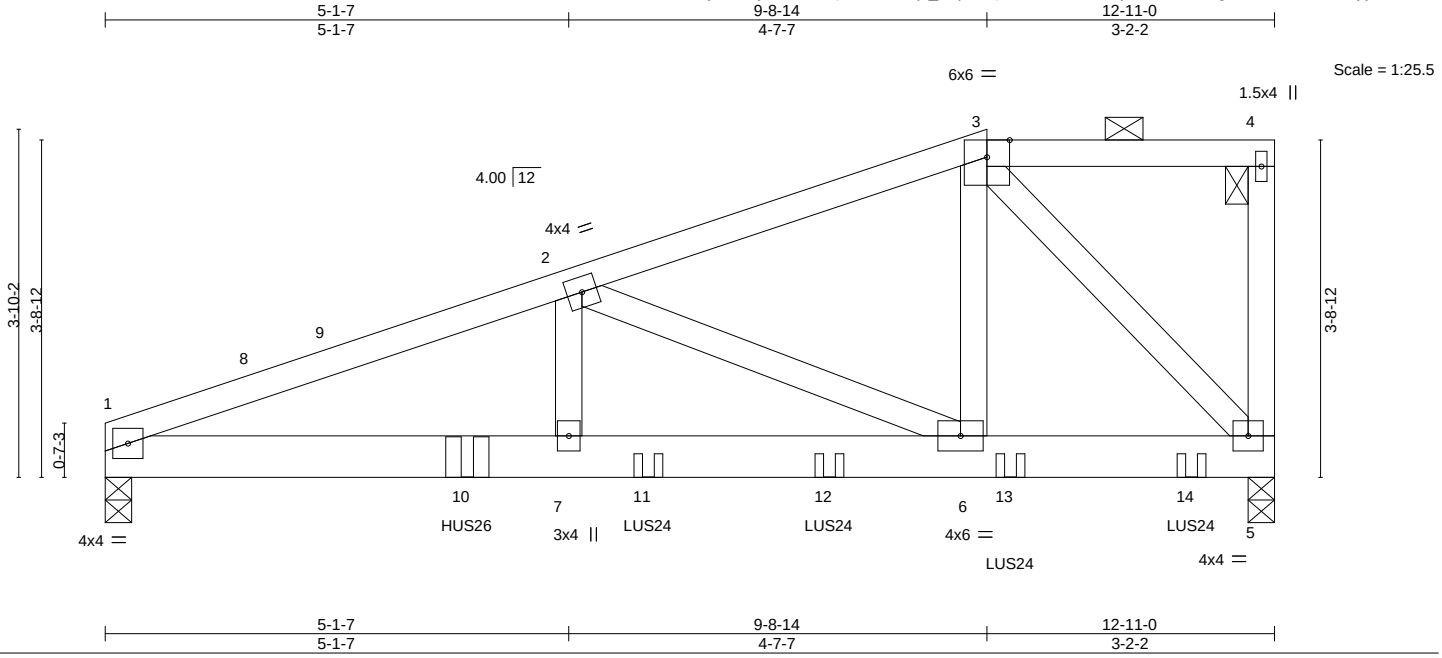

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.07	1-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.10	1-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 114 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x6 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Sheathed or 5-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=149(LC 61)
Max Uplift 1=-352(LC 12), 5=-481(LC 12)
Max Grav 1=2000(LC 37), 5=2415(LC 37)

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

TOP CHORD	1-2=-4520/1026, 2-3=-2011/493
BOT CHORD	1-7=-1133/4132, 6-7=-1133/4132, 5-6=-507/1740
WEBS	2-7=-232/1441, 2-6=-2499/661, 3-6=-445/2237, 3-5=-2585/691

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-7, Interior(1) 5-1-7 to 9-8-14, Exterior(2E) 9-8-14 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
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.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 4-0-0 from the left end to connect truss(es) to front face of bottom chord.
13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 6-0-0 from the left end to 8-0-0 to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-0-0 from the left end to 12-0-0 to connect truss(es) to front face of bottom chord.

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-68, 3-4=-68, 1-5=-19
   Concentrated Loads (lb)
   Vert: 10=-884(F) 11=-491(F) 12=-501(F) 13=-583(F) 14=-585(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	C2	Half Hip	2	1	I53048653
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:56 2022 Page 1
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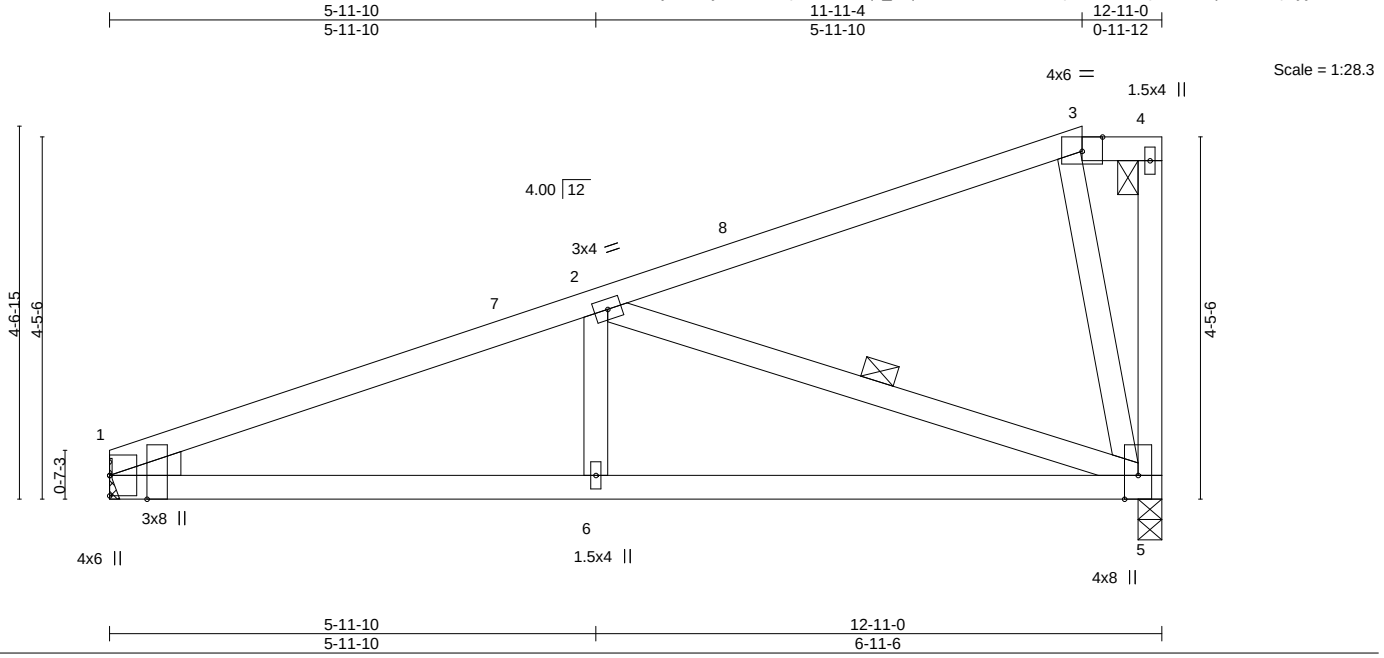

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [3:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.09	1-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.14	1-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 50 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 3-10-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 8-1-5 oc bracing.
WEBS 1 Row at midpt 2-5

REACTIONS. (size) 1=Mechanical, 5=0-3-8
Max Horz 1=191(LC 13)
Max Uplift 1=-103(LC 12), 5=-130(LC 12)
Max Grav 1=829(LC 37), 5=770(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1562/368
BOT CHORD 1-6=-516/1363, 5-6=-516/1363
WEBS 2-6=0/300, 2-5=-1338/434, 3-5=-445/325

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 11-11-4, Exterior(2E) 11-11-4 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Provide adequate drainage to prevent water ponding.
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) 1=103.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	C3	Jack-Closed	2	1	I53048654
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:10:57 2022 Page 1
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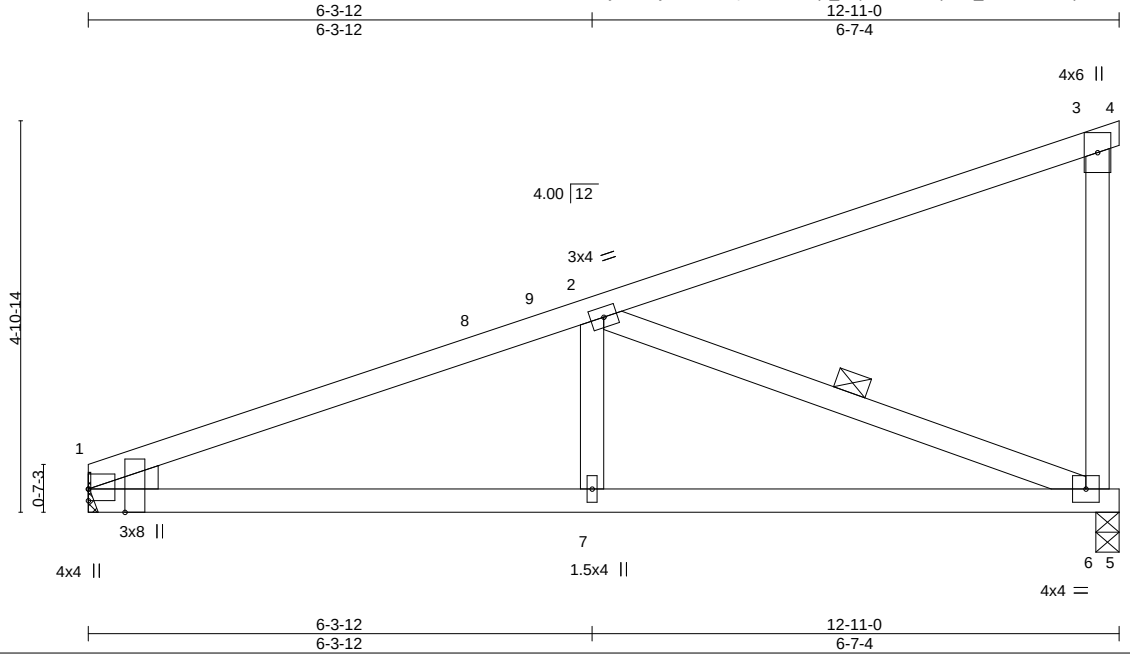

Plate Offsets (X,Y)-- [1:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.06	1-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.12	1-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 46 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 4-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.
WEBS 1 Row at midpt 2-6

REACTIONS. (size) 1=Mechanical, 6=0-3-8
Max Horz 1=210(LC 13)
Max Uplift 1=-98(LC 12), 6=-137(LC 16)
Max Grav 1=630(LC 22), 6=769(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1229/349, 3-6=-307/195
BOT CHORD 1-7=-489/1091, 6-7=-489/1091
WEBS 2-7=0/292, 2-6=-1118/447

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 12-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	CJ1	Diagonal Hip Girder	4	1	I53048655
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:09 2022 Page 1
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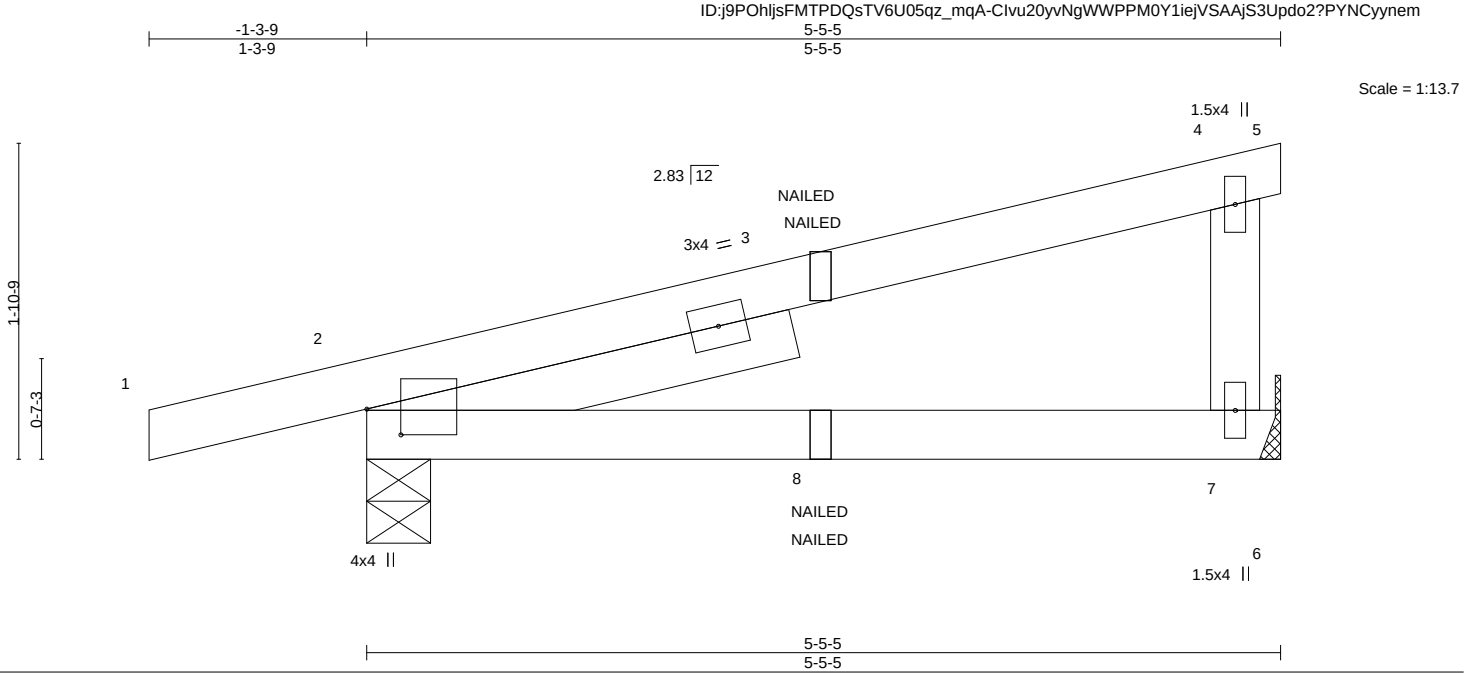

Plate Offsets (X,Y)-- [2:0-1-13,0-2-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.04	2-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.09	2-7	>728	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SPF No.2 2-7-0

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

REACTIONS. (size) 7=Mechanical, 2=0-4-9
Max Horz 2=69(LC 13)
Max Uplift 7=-52(LC 16), 2=-107(LC 12)
Max Grav 7=322(LC 23), 2=447(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-7=-265/227

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) 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) 7.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 2-6=-20

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	D1	Common Supported Gable	2	1	I53048656
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:11 2022 Page 1
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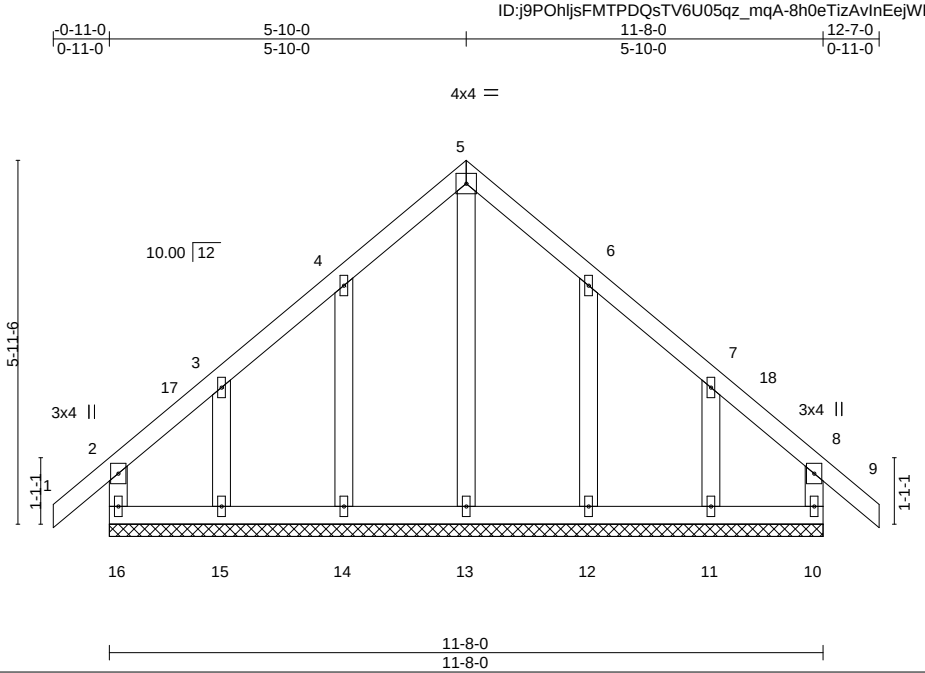

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	9	n/r	120	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	9	n/r	90		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 55 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-8-0.
(lb) - Max Horz 16=181(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-130(LC 16), 11=-127(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 15, 11 except 14=305(LC 23), 12=305(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-140/298, 5-6=-140/299
WEBS 5-13=-286/74, 4-14=-266/179, 6-12=-266/179

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 3-10-0, Exterior(2N) 3-10-0 to 5-10-0, Corner(3R) 5-10-0 to 10-10-0, Exterior(2N) 10-10-0 to 12-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 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 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) N/A

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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	D2	Common	4	1	I53048657
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:13 2022 Page 1
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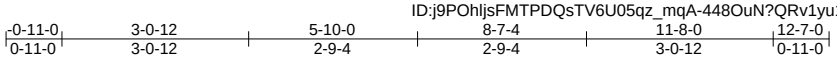

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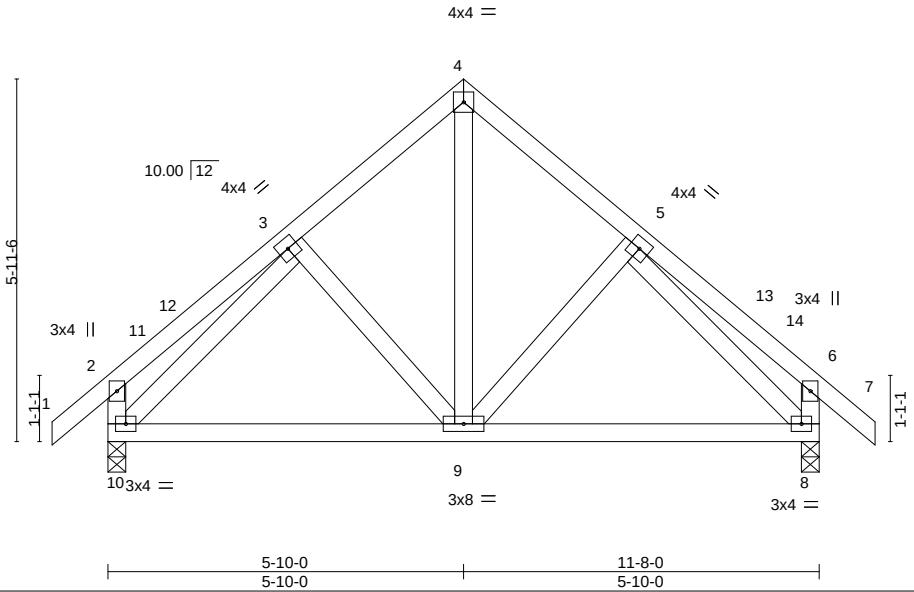

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.02	8-9	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 59 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 10=0-3-8, 8=0-3-8
Max Horz 10=187(LC 15)
Max Uplift 10=-80(LC 16), 8=-80(LC 17)
Max Grav 10=703(LC 23), 8=703(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-504/202, 4-5=-504/202, 2-10=-252/162, 6-8=-252/162
BOT CHORD 9-10=-65/419, 8-9=-35/419
WEBS 4-9=-146/295, 3-10=-531/82, 5-8=-531/82

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 5-10-0, Exterior(2R) 5-10-0 to 10-10-0, Interior(1) 10-10-0 to 12-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 8. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	D3	Common Girder	2	2	I53048658
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:15 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-1SG9J30gzWHf7LpAvHp2ymiIh8U6uQXgQxstbsyyneg

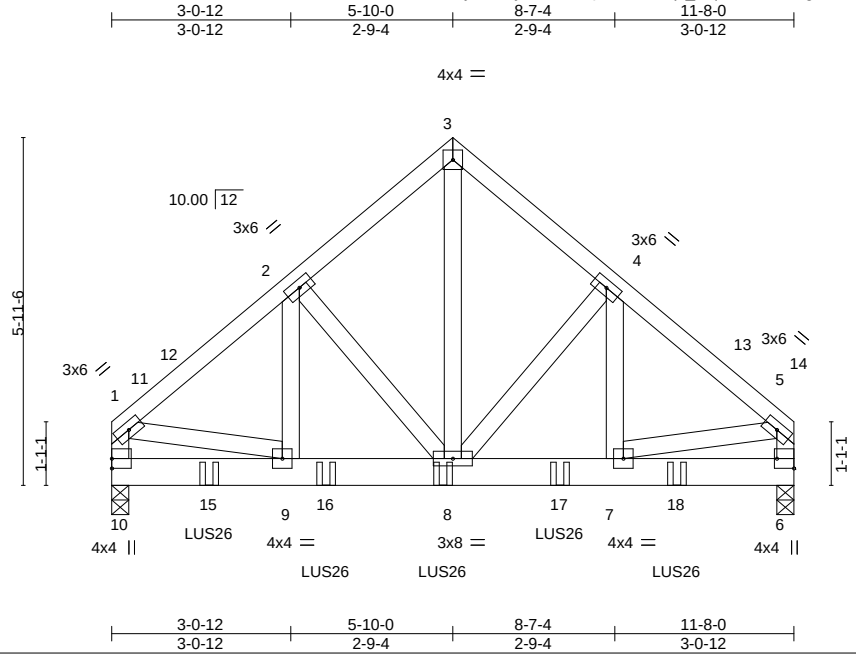

Plate Offsets (X,Y)-- [6:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	7-8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.04	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 134 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-159(LC 14)
Max Uplift 10=-303(LC 16), 6=-292(LC 17)
Max Grav 10=2603(LC 22), 6=2512(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2619/406, 2-3=-2018/404, 3-4=-2018/404, 4-5=-2631/407, 1-10=-2207/351, 5-6=-2224/354
BOT CHORD 9-10=-173/304, 8-9=-294/1947, 7-8=-272/1957
WEBS 3-8=-410/2199, 4-8=-751/211, 4-7=-111/682, 2-8=-736/209, 2-9=-108/663, 1-9=-212/1733, 5-7=-219/1768

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior(1) 5-1-12 to 5-10-0, Exterior(2R) 5-10-0 to 10-10-0, Interior(1) 10-10-0 to 11-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 6. This connection is for uplift only and does not consider lateral forces.
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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-8-0 from the left end to 9-8-0 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

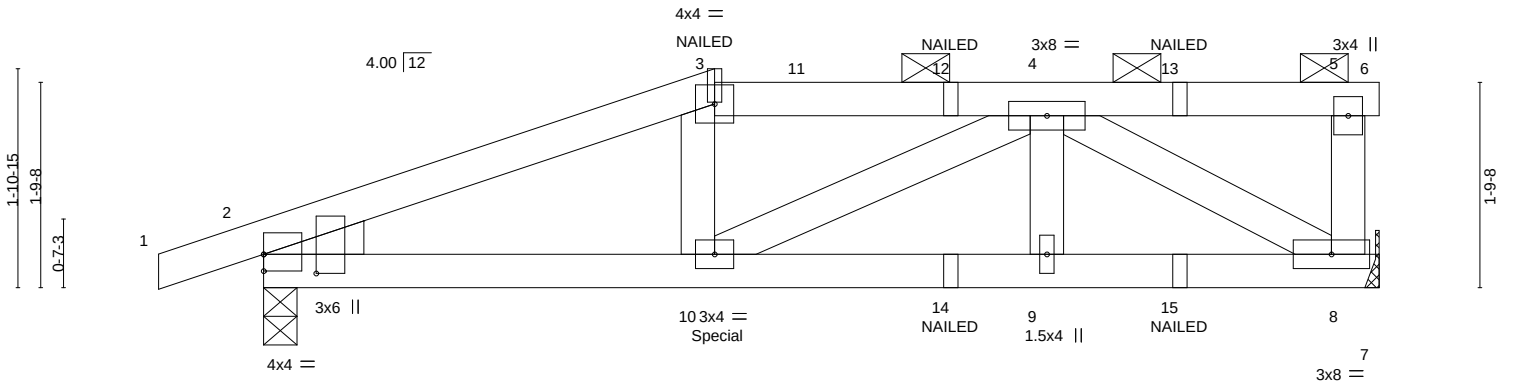
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 6-10=-20
   Concentrated Loads (lb)
   Vert: 8=-772(B) 15=-772(B) 16=-772(B) 17=-772(B) 18=-772(B)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	E1	Half Hip Girder	2	1	I53048659
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:21 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-rcdQZ75RYM1prGHKFYwSC1yGQZSOIAxZotJBoWyynea

-0-11-0 / 0-11-0 | 3-11-4 / 3-11-4 | 6-10-1 / 2-10-13 | 9-8-14 / 2-10-13

Scale = 1:20.1



3-11-4 / 3-11-4 | 6-10-1 / 2-10-13 | 9-8-14 / 2-10-13

Plate Offsets (X,Y)-- [2:0-0-0,0-1-12], [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	9-10	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.06	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 35 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 4-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-2 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 8-2-3 oc bracing.

REACTIONS. (size) 8=Mechanical, 2=0-3-8
Max Horz 2=69(LC 13)
Max Uplift 8=-168(LC 13), 2=-199(LC 12)
Max Grav 8=904(LC 37), 2=946(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1701/503, 3-4=-1487/517
BOT CHORD 2-10=-509/1503, 9-10=-388/1205, 8-9=-388/1205
WEBS 3-10=-9/269, 4-10=-138/444, 4-8=-1320/404

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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) 8=168.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 312 lb down and 77 lb up at 3-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 5-6=-70, 2-7=-20
   Concentrated Loads (lb)
   Vert: 3=-118(F) 10=-312(F) 12=-118(F) 13=-118(F) 14=-19(F) 15=-19(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	E2	Half Hip	2	1	I53048660
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:23 2022 Page 1
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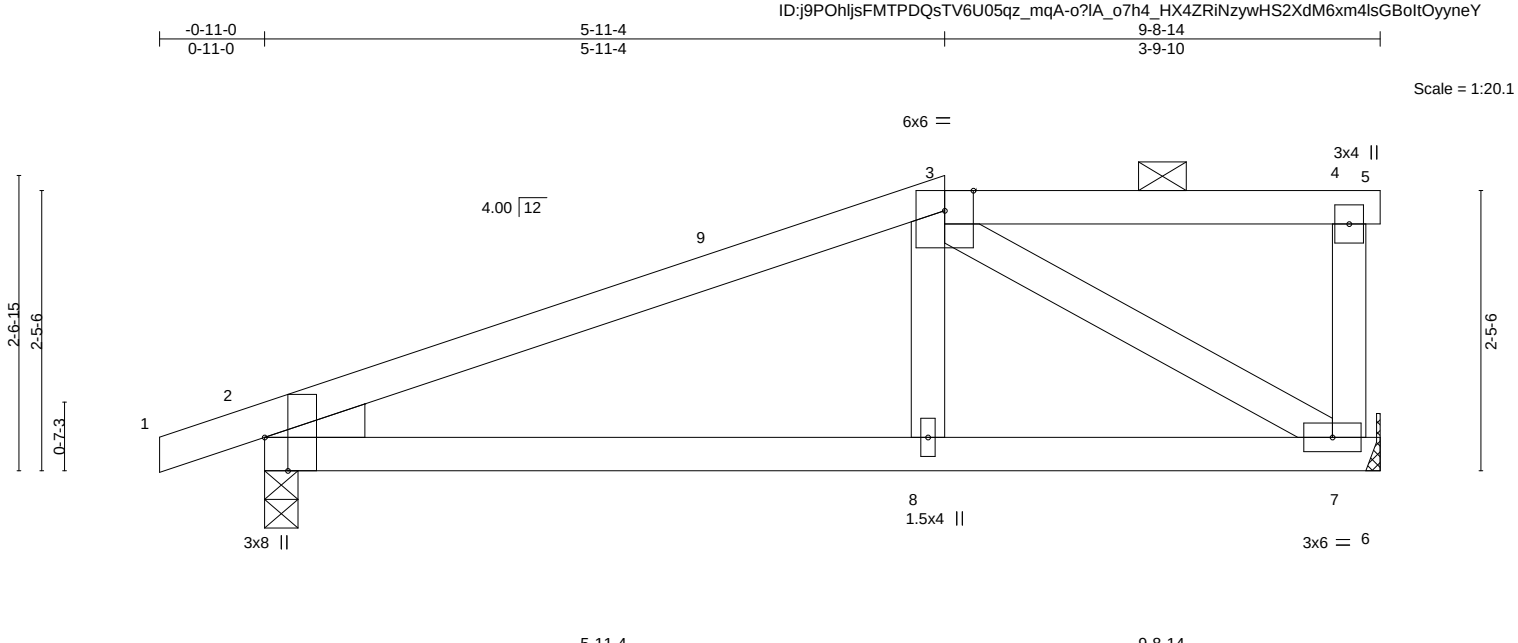

Plate Offsets (X,Y)-- [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.07	2-8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.12	2-8	>977	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 34 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 4-0-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-6-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=99(LC 13)
Max Uplift 7=-88(LC 12), 2=-124(LC 12)
Max Grav 7=510(LC 37), 2=672(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-751/281
BOT CHORD 2-8=-346/592, 7-8=-348/581
WEBS 3-7=-690/367

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 5-11-4, Exterior(2E) 5-11-4 to 9-8-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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) 7.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	E3	Half Hip	2	1	I53048661
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:25 2022 Page 1
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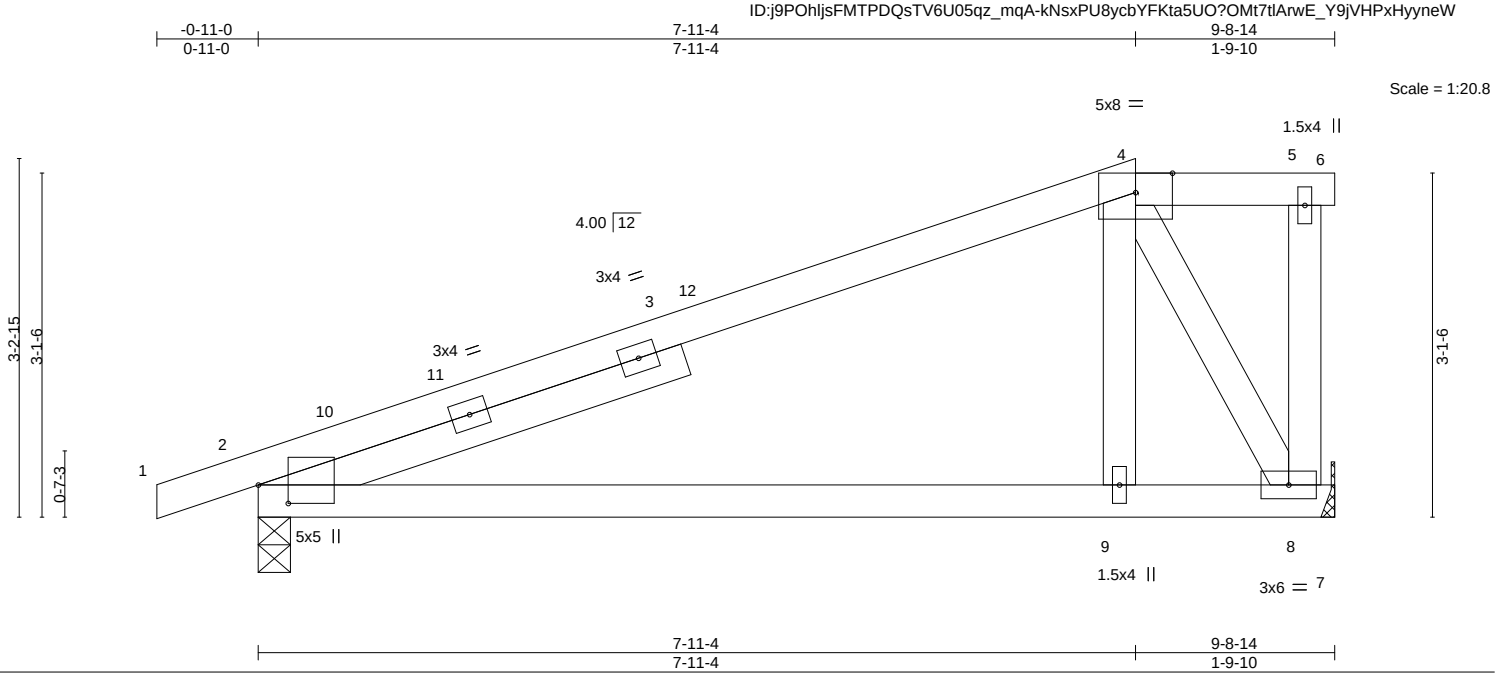

Plate Offsets (X,Y)-- [2:0-2-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.10	2-9	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.18	2-9	>625	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 41 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E *Except* 4-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SPF No.2 4-0-6

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 2=0-3-8
Max Horz 2=129(LC 13)
Max Uplift 8=-91(LC 12), 2=-121(LC 12)
Max Grav 8=520(LC 38), 2=712(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-603/151
BOT CHORD 2-9=-226/415, 8-9=-227/401
WEBS 4-9=0/320, 4-8=-886/418

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 7-11-4, Exterior(2E) 7-11-4 to 9-8-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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) 8.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	E4	Jack-Closed	4	1	I53048662
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:27 2022 Page 1
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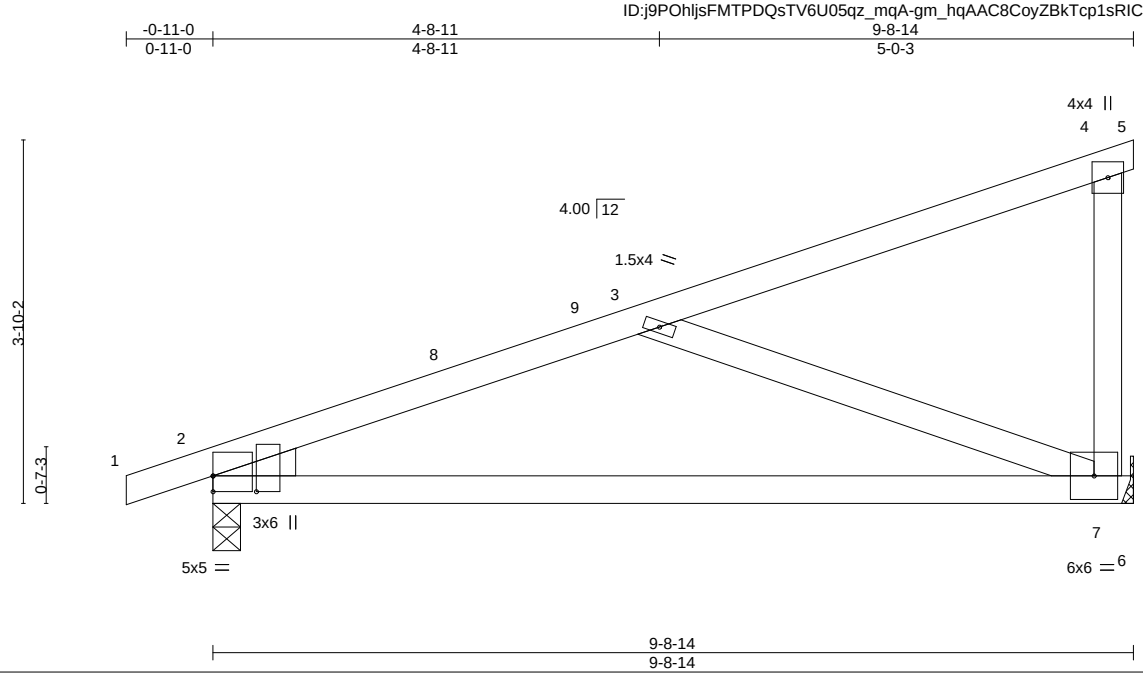

Plate Offsets (X,Y)-- [2:0-0-0,0-2-0], [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.20	2-7	>557	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.41	2-7	>274	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 34 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-10-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-0-10 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=161(LC 13)
Max Uplift 7=-103(LC 16), 2=-115(LC 12)
Max Grav 7=602(LC 23), 2=575(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-872/352
BOT CHORD 2-7=-511/784
WEBS 3-7=-767/495

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 9-8-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) 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) 7=103.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	E5	Monopitch Supported Gable	2	1	I53048663
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:29 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-c96RFsBSgp2goUusjE3KWjHjPnKAAr7ke7Fc52yyneS

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0-11-0 9-8-14

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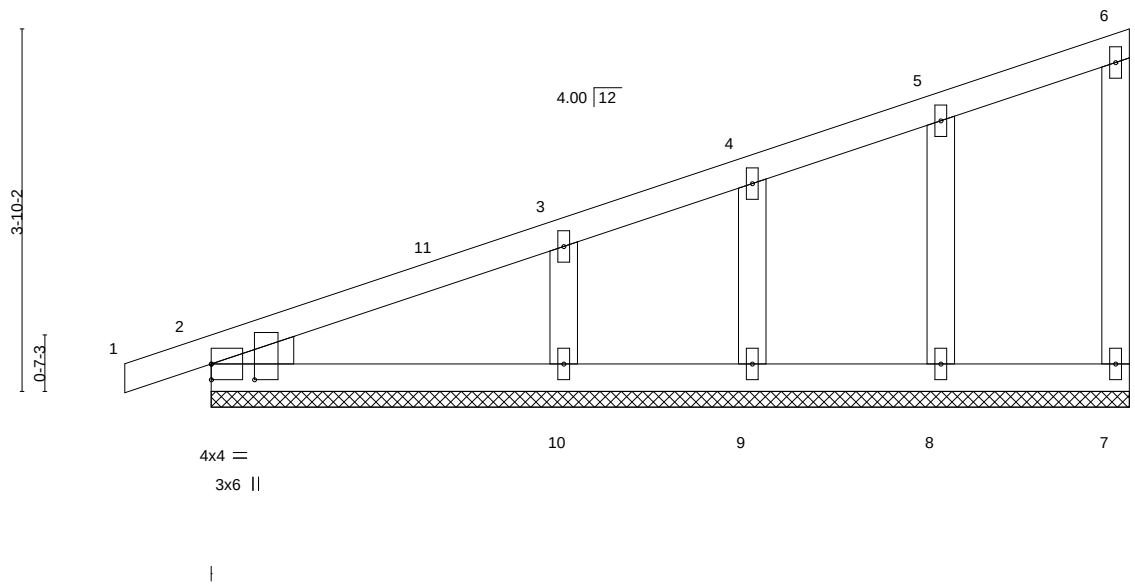

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	1	n/r	90		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 35 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. All bearings 9-8-14.
(lb) - Max Horz 2=161(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10
Max Grav All reactions 250 lb or less at joint(s) 7, 2, 9 except 8=274(LC 23), 10=402(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-299/150
WEBS 3-10=-312/292

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 9-7-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 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) N/A
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J1	Monopitch Structural Gable	2	1	I53048664
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:33 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-VwLy5DEzj2Y6H6Cdy38GhZSM?OaO6bzKZkDqEpyyneO

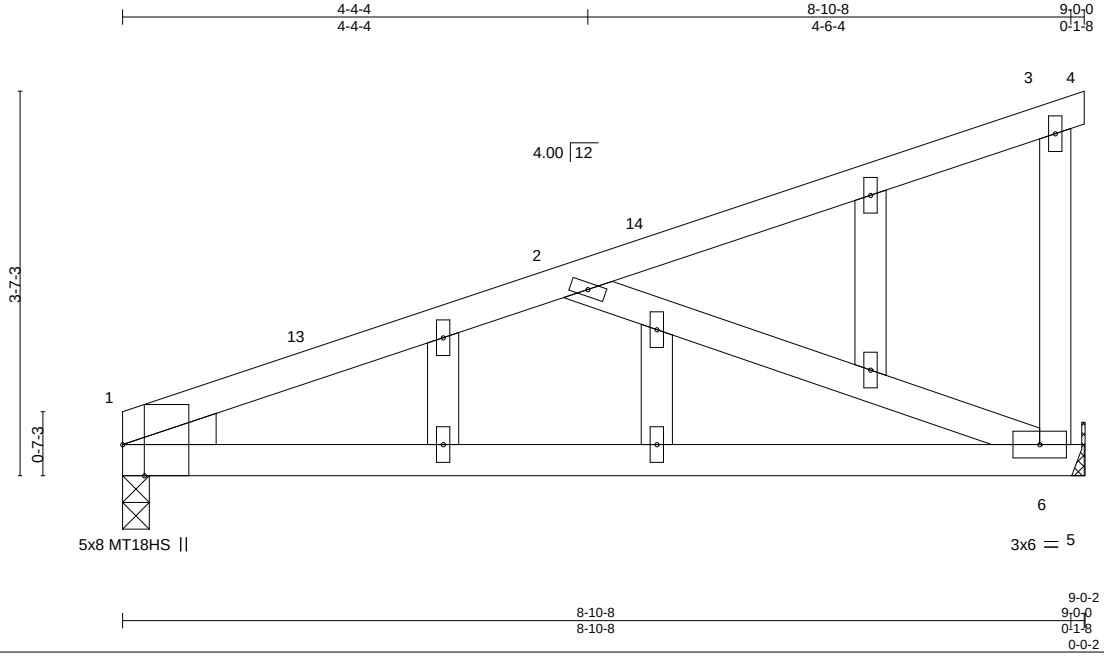

Plate Offsets (X,Y)-- [1:0-3-8,Edge]

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.24	1-6	>445	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.47	1-6	>222	180	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 42 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-0, 6=Mechanical
Max Horz 1=134(LC 12)
Max Uplift 1=-52(LC 12), 6=-106(LC 12)
Max Grav 1=467(LC 22), 6=547(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-758/359
BOT CHORD 1-6=-502/674
WEBS 2-6=-717/535

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 9-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) All plates are MT20 plates unless otherwise indicated.
6) All plates are 1.5x4 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=106.
11) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J2	Monopitch	4	1	I53048665
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:41 2022 Page 1
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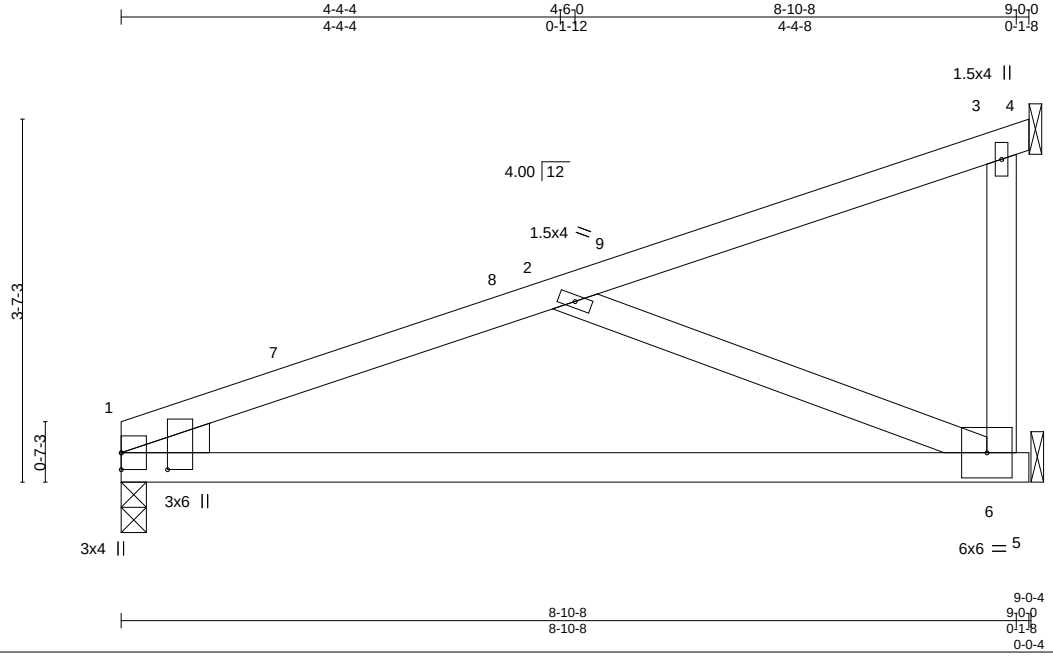

Plate Offsets (X,Y)-- [1:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.24	1-6	>431	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.49	1-6	>215	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 37 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-0, 4=Mechanical, 6=Mechanical
Max Horz 1=-399(LC 22), 4=399(LC 22)
Max Uplift 1=-24(LC 12), 6=-139(LC 12)
Max Grav 1=333(LC 22), 6=709(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-363/196, 2-3=-269/466, 3-4=-183/378
BOT CHORD 1-6=-512/703
WEBS 3-6=-343/221, 2-6=-754/549

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 8-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 is not designed to support a ceiling and is not intended for use where aesthetics are a consideration.
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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J3	Monopitch	2	1	I53048666
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:46 2022 Page 1
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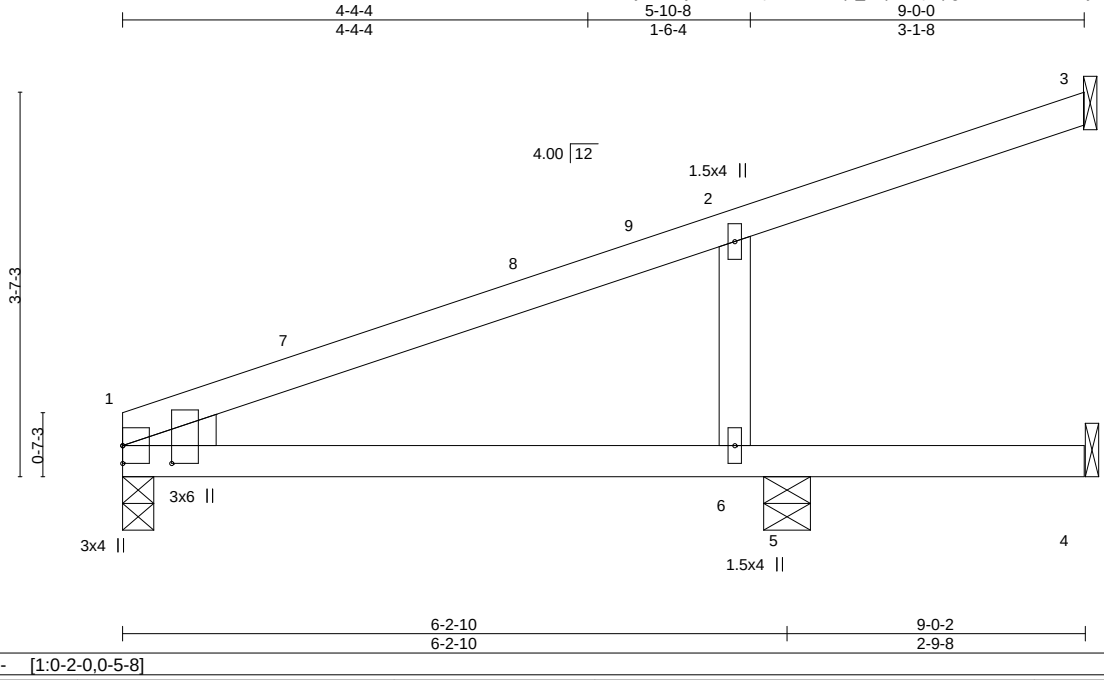

Plate Offsets (X,Y)-- [1:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.05	1-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.10	1-6	>723	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=Mechanical, 4=Mechanical, 5=0-5-4
Max Horz 1=228(LC 22), 3=-228(LC 22)
Max Uplift 1=-34(LC 12), 4=-64(LC 22), 5=-153(LC 12)
Max Grav 1=350(LC 22), 4=24(LC 12), 5=755(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-299/15, 2-3=-321/170
WEBS 2-6=-580/424

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior(1) 5-0-0 to 8-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Refer to girder(s) for truss to truss connections.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 4, and 5. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J4	Monopitch	8	1	I53048667
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:47 2022 Page 1
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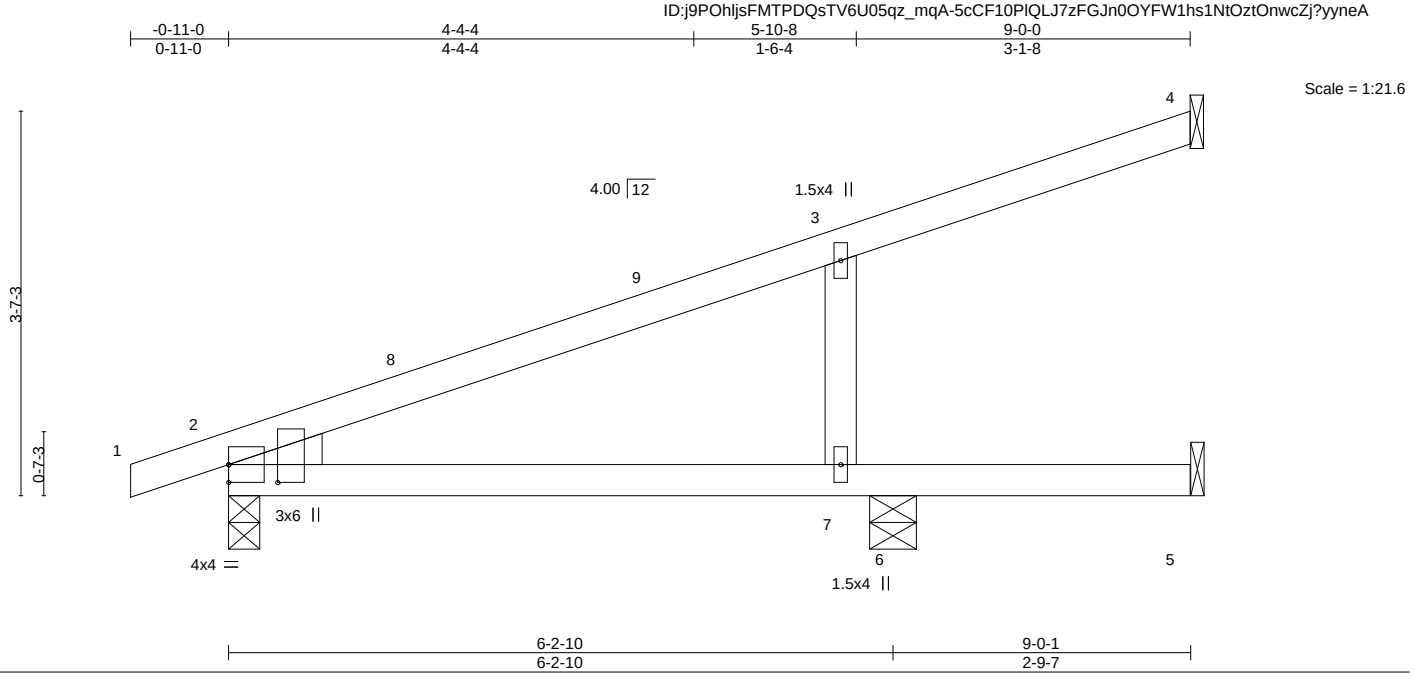

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.05	2-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.10	2-7	>725	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 29 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical, 6=0-5-4
Max Horz 4=-236(LC 23), 2=236(LC 23)
Max Uplift 2=-80(LC 12), 5=-63(LC 23), 6=-150(LC 16)
Max Grav 2=424(LC 23), 5=23(LC 16), 6=744(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-311/25, 3-4=-329/177
WEBS 3-7=-570/415

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 8-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) Refer to girder(s) for truss to truss connections.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 5, and 6. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J5	Monopitch	10	1	I53048668
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:52 2022 Page 1
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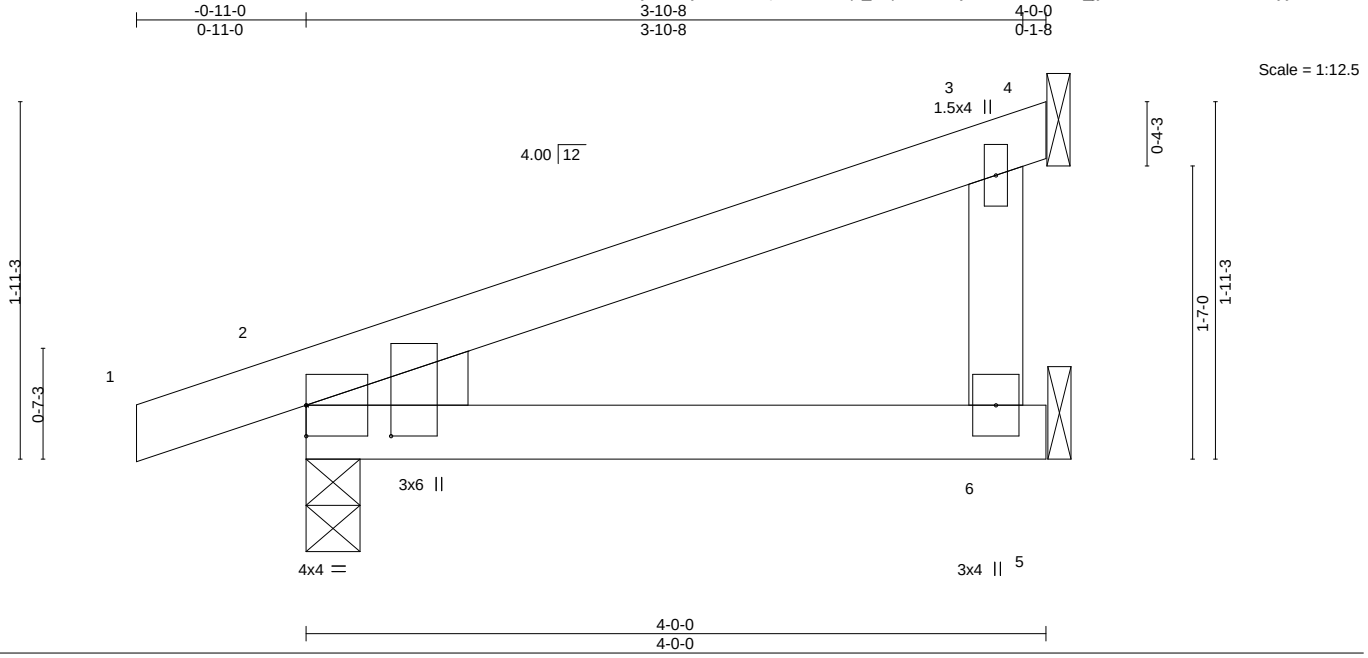

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.01	2-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.02	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 4=303(LC 23), 2=-303(LC 23)
Max Uplift 2=-30(LC 12), 6=-87(LC 16)
Max Grav 2=204(LC 23), 6=376(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-350/385, 3-4=-226/287
WEBS 3-6=-334/297

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) Refer to girder(s) for truss to truss connections.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J6	Monopitch Supported Gable	2	1	I53048669
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:53 2022 Page 1
ID:j9POhljsFMTPDQsTV6U05qz_mqA-vmZWH3UW0B3GhAjT7GVyVnHpJSXBoi9G9r3txfyyne4

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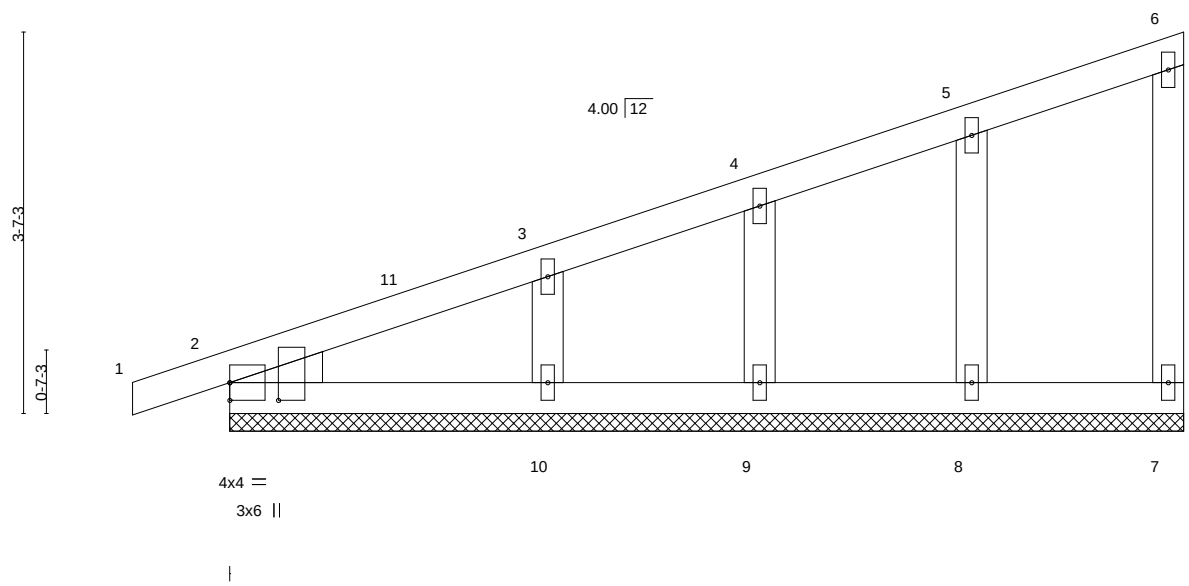

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	1	n/r	90		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 33 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. All bearings 9-0-0.
(lb) - Max Horz 2=150(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10
Max Grav All reactions 250 lb or less at joint(s) 7, 2, 9 except 8=272(LC 23), 10=333(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-302/146
WEBS 3-10=-271/277

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 8-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 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) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J7	Jack-Open	8	1	I53048670
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:56 2022 Page 1
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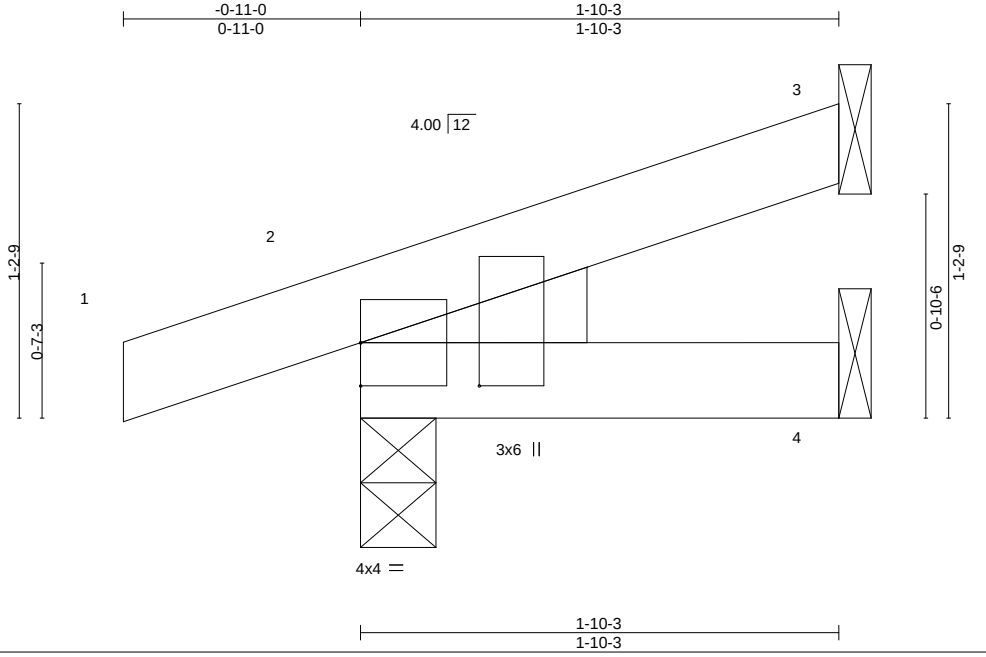

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	2	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 1-10-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=39(LC 12)
Max Uplift 3=-32(LC 16), 2=-58(LC 12)
Max Grav 3=65(LC 23), 2=214(LC 23), 4=37(LC 7)

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=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) 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) 3.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J8	Jack-Open	8	1	I53048671
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:58 2022 Page 1
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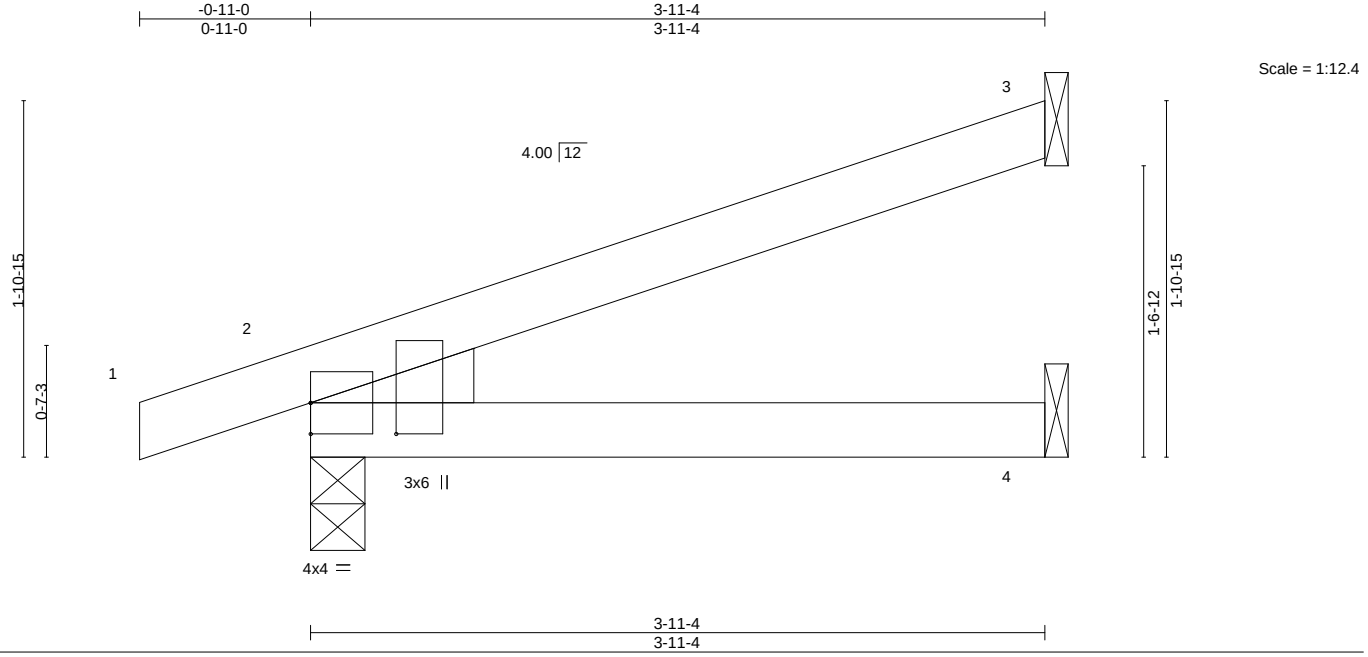

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.03	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=68(LC 12)
Max Uplift 3=-70(LC 16), 2=-67(LC 12)
Max Grav 3=188(LC 23), 2=343(LC 23), 4=77(LC 7)

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=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) 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) 3.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J9	Half Hip Girder	2	1	I53048672
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:00 2022 Page 1
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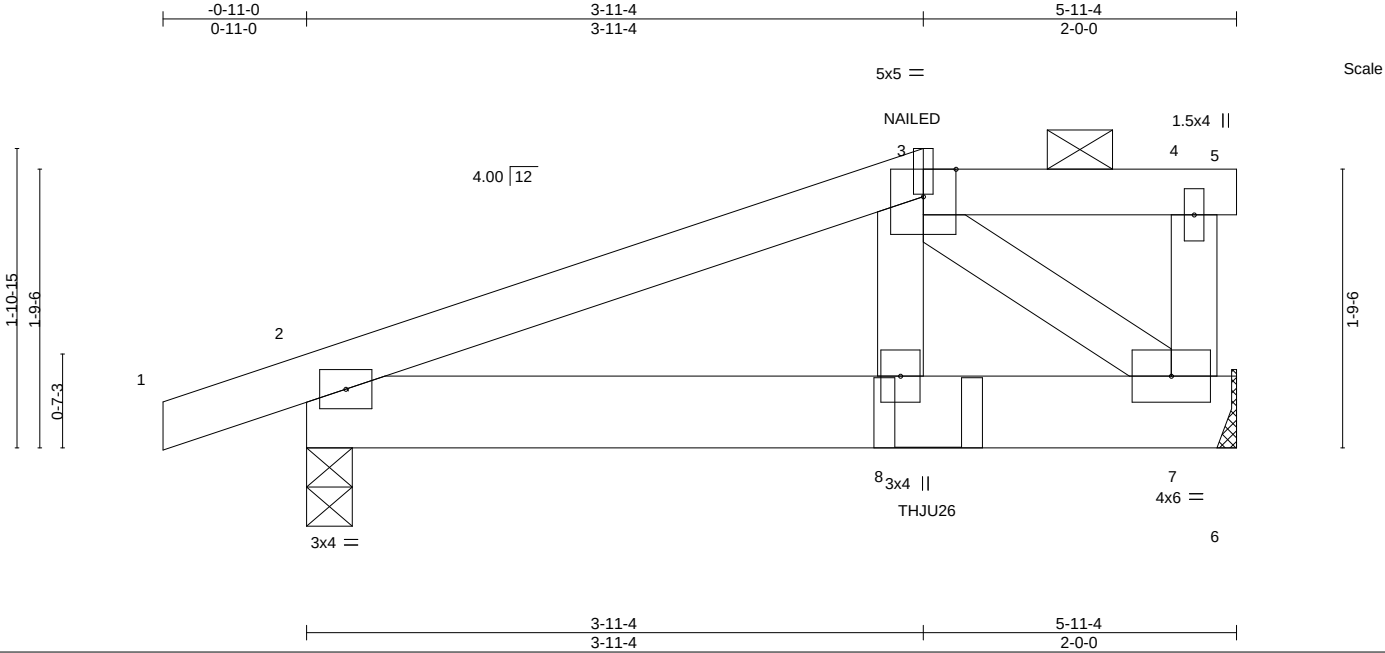

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.01	8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.01	2-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=66(LC 60)
Max Uplift 7=-113(LC 12), 2=-130(LC 12)
Max Grav 7=578(LC 37), 2=610(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-682/160
BOT CHORD 2-8=-199/560, 7-8=-199/528
WEBS 3-8=-5/335, 3-7=-692/236

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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) 7=113.
10) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) Use Simpson Strong-Tie THJU26 (SGL & SGL SHORT RC 1-PLY) or equivalent at 3-11-10 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.
16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

July 13,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 4-5=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 3=-118(B) 8=-312(B)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J10	Jack-Closed	8	1	I53048673
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:34 2022 Page 1
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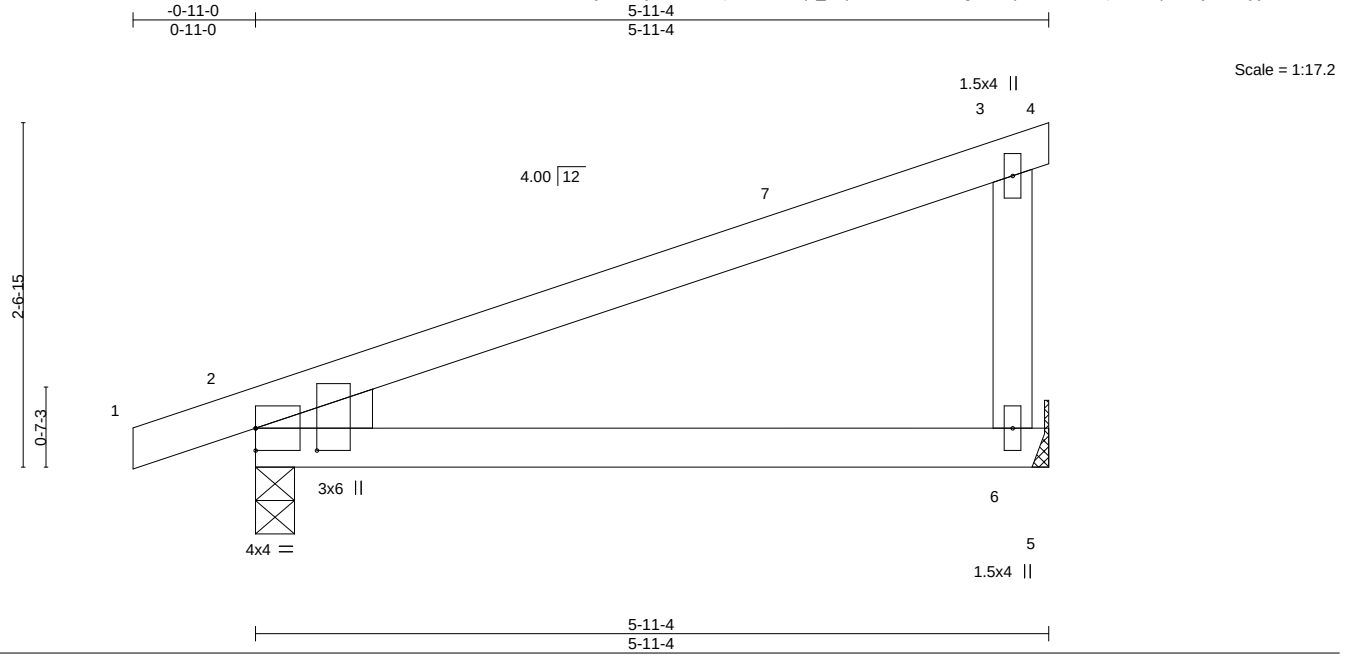

Plate Offsets (X,Y)-- [2:0-2-0,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.06	2-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.12	2-6	>553	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=103(LC 13)
Max Uplift 6=-64(LC 16), 2=-86(LC 12)
Max Grav 6=376(LC 23), 2=451(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-314/271

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 12.0 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) 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) 6.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	J11	Jack-Closed Girder	2	1	I53048674
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:11:36 2022 Page 1
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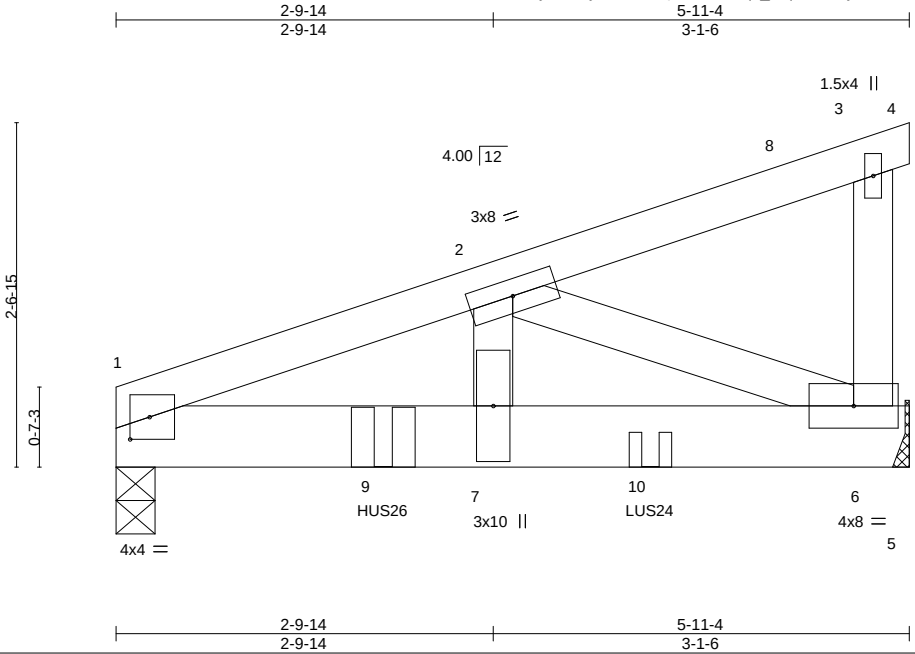

Plate Offsets (X,Y)-- [1:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.03	7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.04	7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 4-2-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 6=Mechanical
Max Horz 1=99(LC 40)
Max Uplift 1=-151(LC 12), 6=-179(LC 16)
Max Grav 1=1061(LC 22), 6=1072(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1830/430
BOT CHORD 1-7=-499/1646, 6-7=-499/1646
WEBS 2-7=-134/1090, 2-6=-1777/528

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior(1) 5-1-12 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=179.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 2-0-0 from the left end to connect truss(es) to back face of bottom chord.
10) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 4-0-0 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 1-5=-20
   Concentrated Loads (lb)
   Vert: 9=-809(B) 10=-610(B)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	PG1	GABLE	2	1	I53048675
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:04 2022 Page 1
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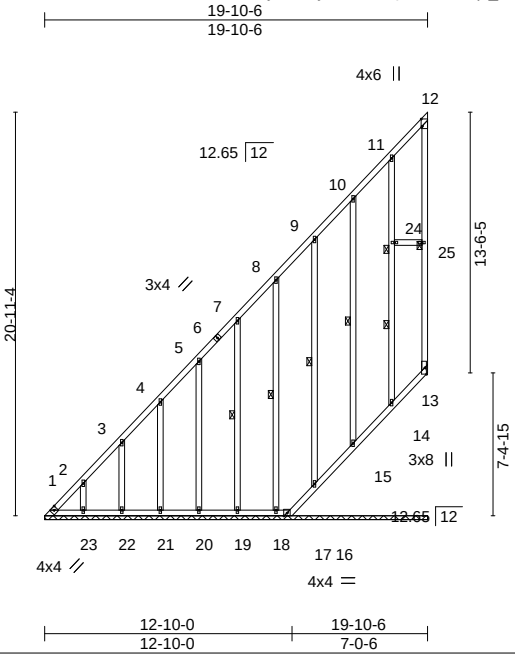

Plate Offsets (X,Y)-- [12:Edge,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.67	Horz(CT)	-0.01	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 167 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3 *Except* 9-16,10-15,11-14: 2x4 SPF No.2

BRACING-

TOP CHORD	Sheathed or 5-3-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14.
WEBS	1 Row at midpt 12-13, 7-19, 8-18, 9-16, 10-15, 14-24
JOINTS	1 Brace at Jt(s): 24

REACTIONS. All bearings 19-10-6.
(lb) - Max Horz 1=715(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 14 except 13=-314(LC 15), 1=-366(LC 14), 17=-132(LC 12), 23=-133(LC 16), 22=-130(LC 16), 21=-131(LC 16), 20=-130(LC 16), 19=-130(LC 16), 18=-136(LC 16), 16=-143(LC 16), 15=-118(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 17, 23, 22, 21, 20, 19, 18, 16, 15 except 13=267(LC 12), 1=717(LC 16), 14=304(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1258/1205, 2-3=-1159/1112, 3-4=-1045/1009, 4-5=-933/907, 5-7=-821/806, 7-8=-709/703, 8-9=-598/603, 9-10=-484/500, 10-11=-381/408
BOT CHORD 16-17=-295/327, 15-16=-316/342, 14-15=-285/307, 13-14=-372/400
WEBS 14-24=-351/278, 11-24=-351/278

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior(1) 5-4-1 to 19-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 1.5x4 MT20 unless otherwise indicated.
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) Bearing at joint(s) 13, 1, 17, 23, 22, 21, 20, 19, 18, 16, 15, 14 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 100 lb uplift at joint(s) 14 except (jt=lb) 13=314, 16=143, 15=118.
9) N/A
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 13, 16, 15, 14.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	PG2	GABLE	2	1	I53048676
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:05 2022 Page 1
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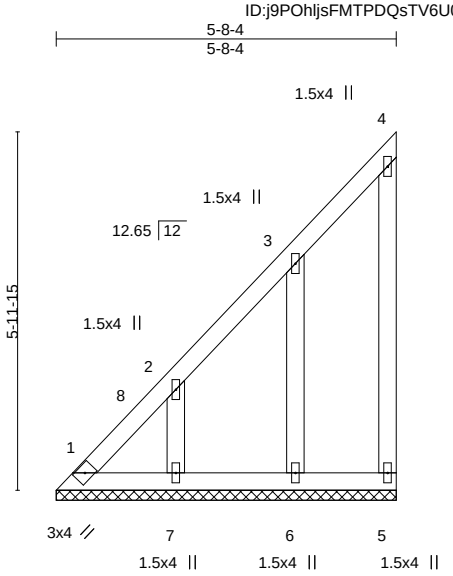

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 5-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-8-4.
(lb) - Max Horz 1=226(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-124(LC 16), 7=-136(LC 16)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=294(LC 22), 7=274(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-414/415, 2-3=-284/289
WEBS 3-6=-255/189

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) N/A

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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	PG3	GABLE	2	1	I53048677
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:06 2022 Page 1
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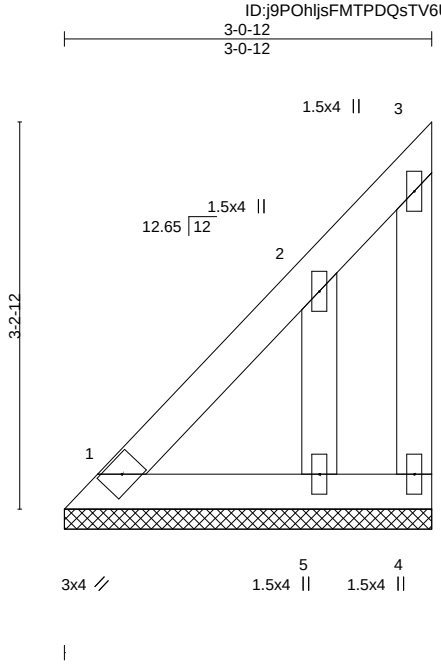

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Sheathed or 3-0-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-0-12, 4=3-0-12, 5=3-0-12
Max Horz 1=112(LC 13)
Max Uplift 1=-19(LC 12), 4=-41(LC 15), 5=-112(LC 16)
Max Grav 1=101(LC 26), 4=33(LC 12), 5=235(LC 22)

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=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V1	GABLE	2	1	I53048678
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:07 2022 Page 1
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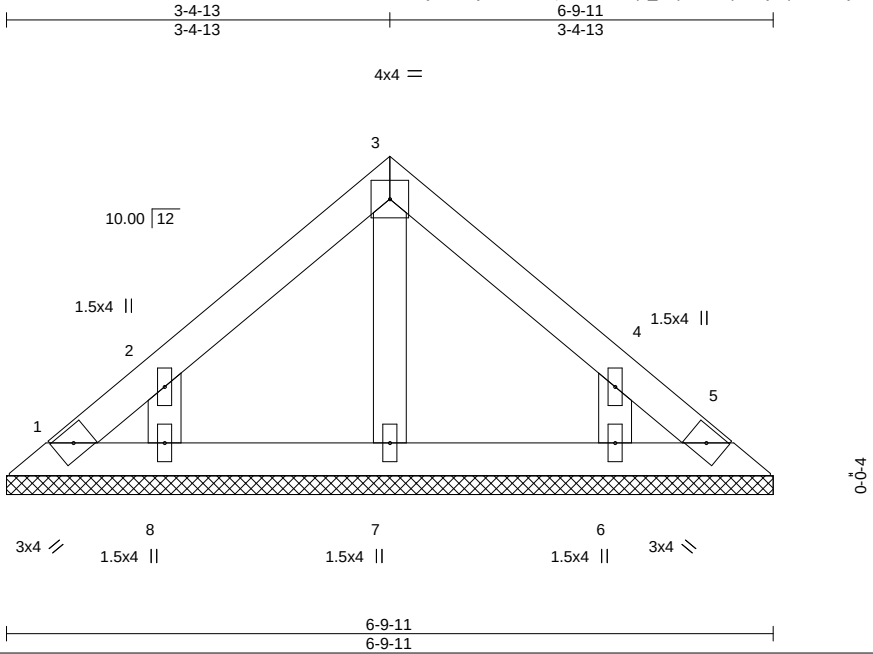

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 6-9-11.
(lb) - Max Horz 1=-65(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=253(LC 22), 6=253(LC 23)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V2	Valley	2	1	I53048679
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:09 2022 Page 1
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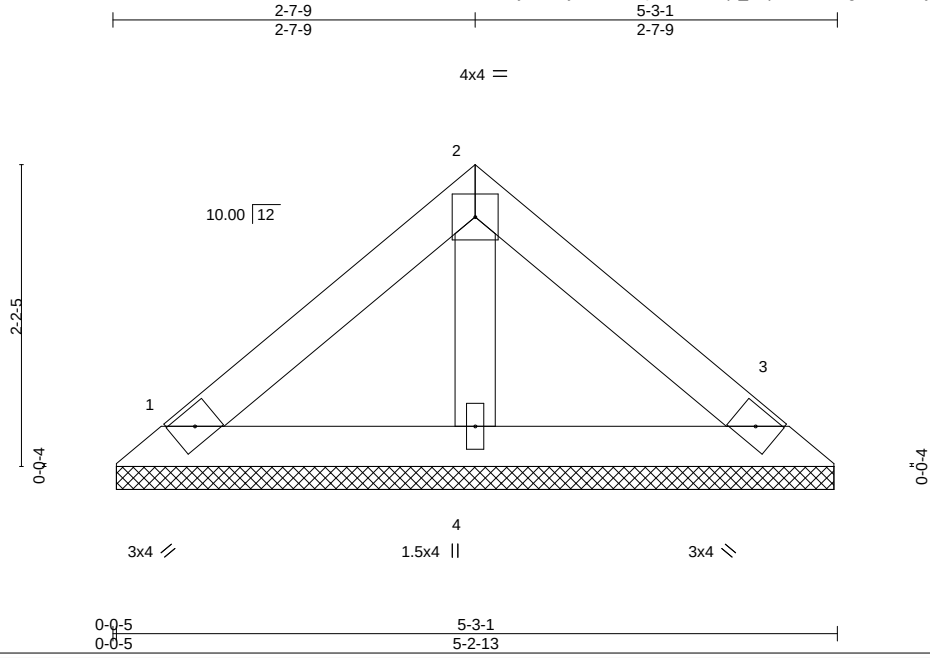

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 5-3-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-8, 3=5-2-8, 4=5-2-8
Max Horz 1=50(LC 13)
Max Uplift 1=-26(LC 16), 3=-32(LC 17)
Max Grav 1=157(LC 22), 3=157(LC 23), 4=166(LC 22)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V3	Valley	2	1	I53048680
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:10 2022 Page 1
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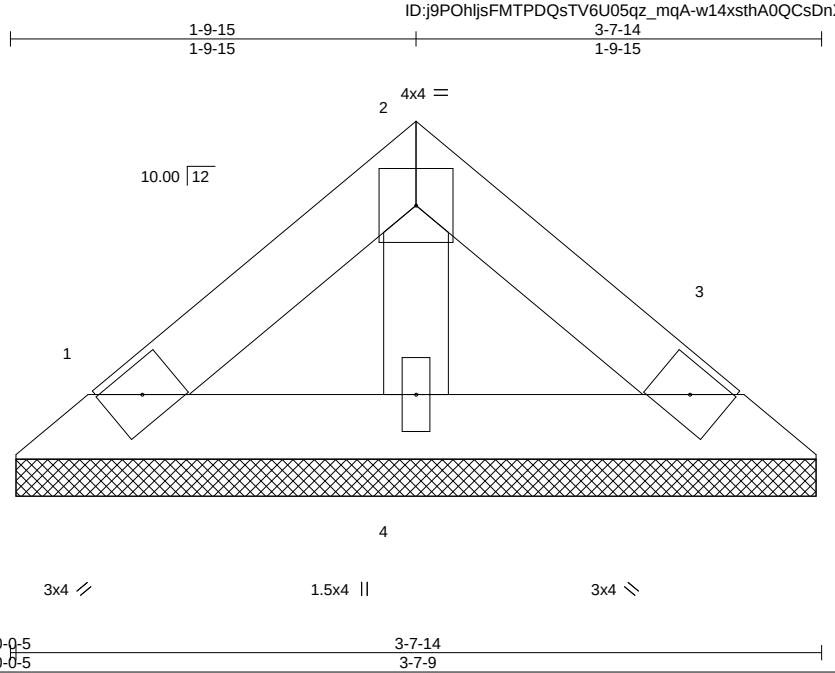

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 3-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-7-5, 3=3-7-5, 4=3-7-5
Max Horz 1=32(LC 13)
Max Uplift 1=-17(LC 16), 3=-21(LC 17)
Max Grav 1=95(LC 22), 3=95(LC 23), 4=106(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V4	Valley	2	1	I53048681
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:11 2022 Page 1
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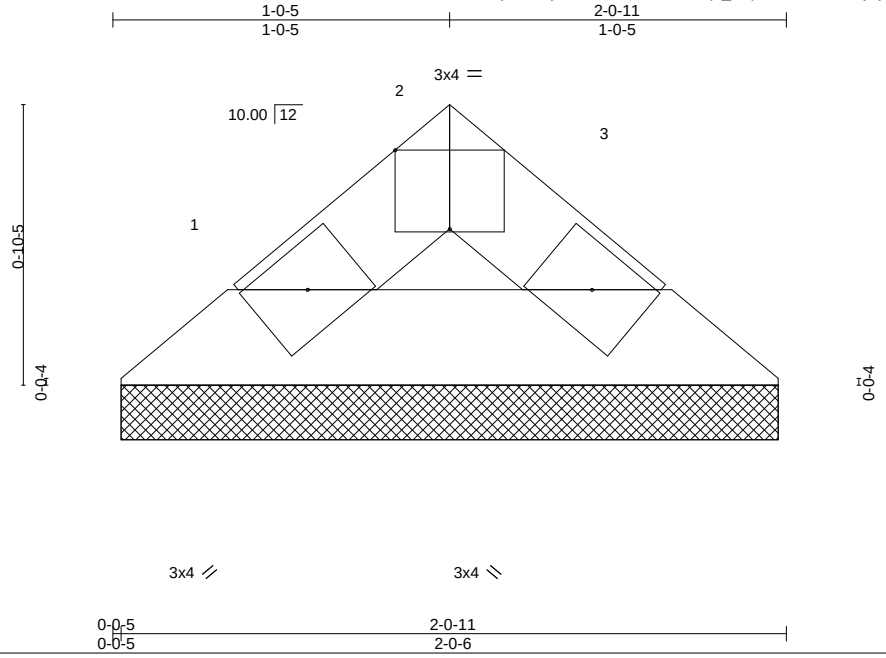

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 4 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 2-0-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-0-1, 3=2-0-1
Max Horz 1=-14(LC 12)
Max Uplift 1=-7(LC 16), 3=-7(LC 17)
Max Grav 1=60(LC 22), 3=60(LC 23)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V5	Valley	2	1	I53048682
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:12 2022 Page 1
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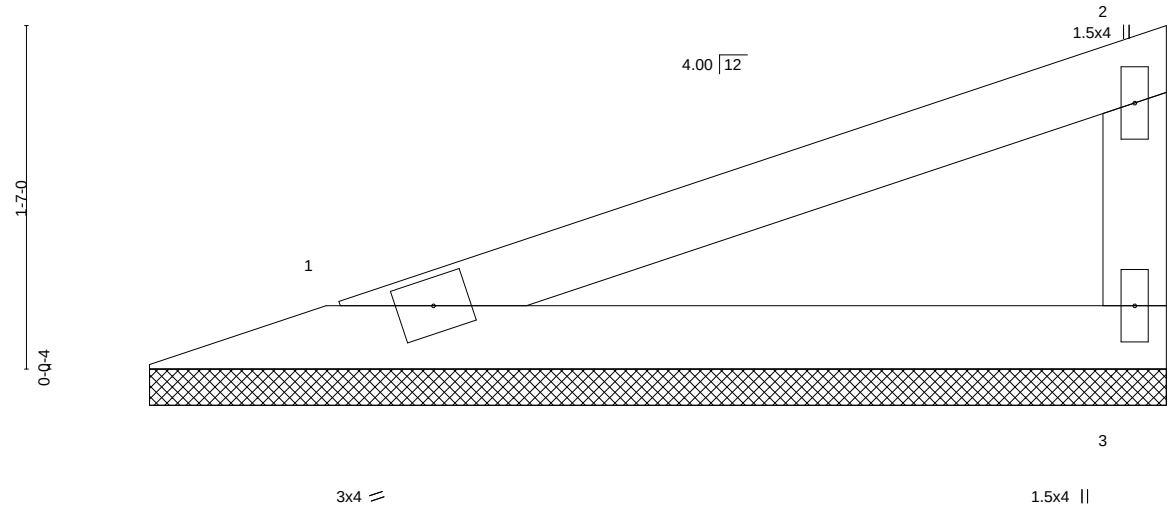
4-8-15
4-8-15

Scale = 1:10.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 4-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-3, 3=4-8-3
Max Horz 1=57(LC 13)
Max Uplift 1=-29(LC 12), 3=-38(LC 16)
Max Grav 1=217(LC 22), 3=217(LC 22)

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=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V6	Valley	2	1	I53048683
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:13 2022 Page 1
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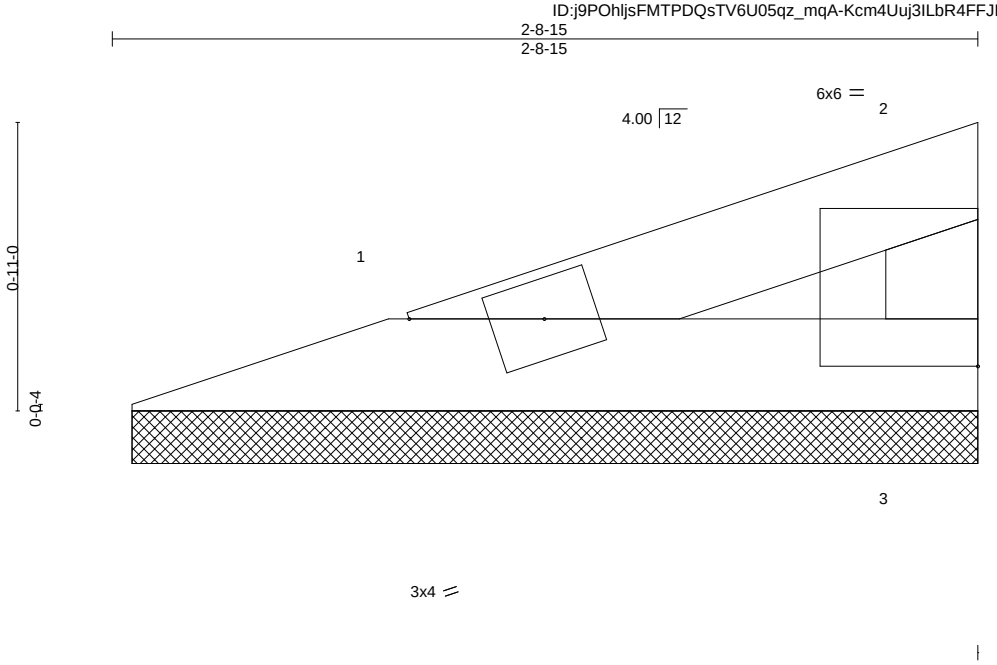

Plate Offsets (X,Y)-- [2:Edge,0-1-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 6 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Sheathed or 2-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-8-3, 3=2-8-3
Max Horz 1=26(LC 13)
Max Uplift 1=-13(LC 12), 3=-17(LC 16)
Max Grav 1=91(LC 22), 3=91(LC 22)

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=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V7	Valley	2	1	I53048684
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:14 2022 Page 1
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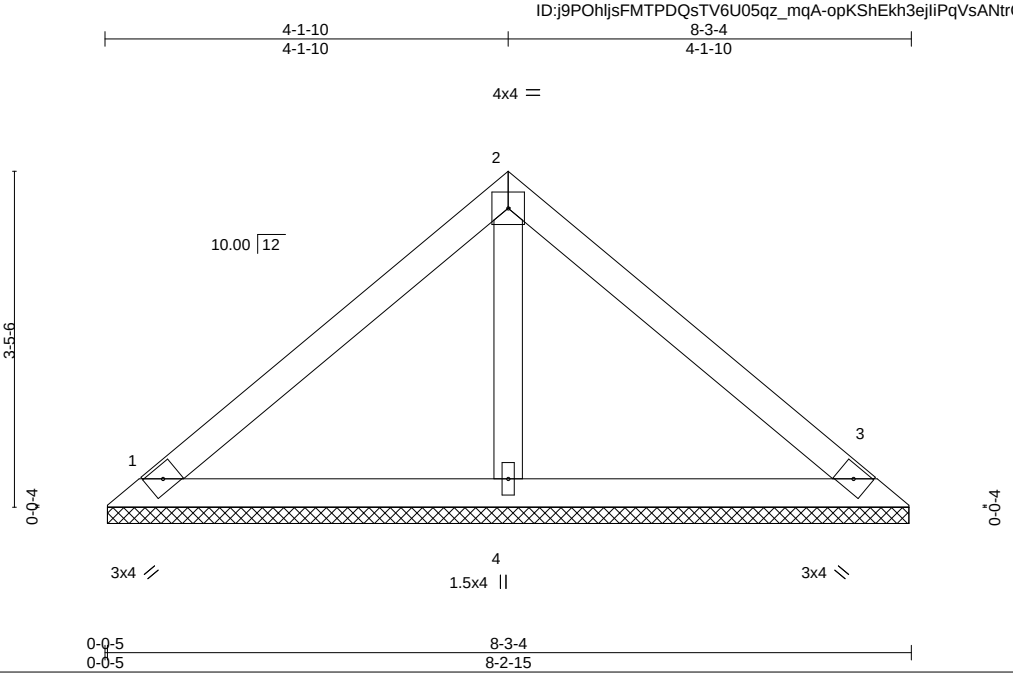

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-2-11, 3=8-2-11, 4=8-2-11
Max Horz 1=-84(LC 12)
Max Uplift 1=-44(LC 16), 3=-54(LC 17)
Max Grav 1=286(LC 22), 3=286(LC 23), 4=291(LC 22)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

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.

July 13,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 50
P220321-P220321-02	V8	Valley	2	1	I53048685
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.610 s May 20 2022 MiTek Industries, Inc. Tue Jul 12 14:12:15 2022 Page 1
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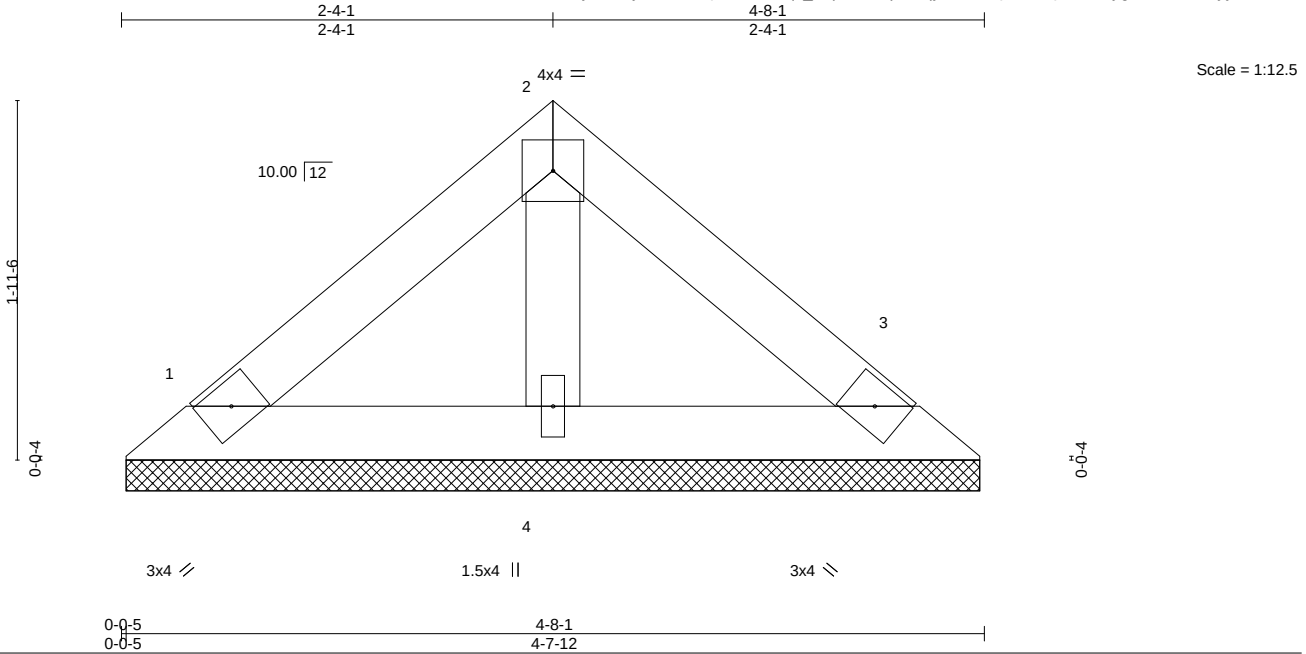


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 4-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-7-7, 3=4-7-7, 4=4-7-7
Max Horz 1=-44(LC 12)
Max Uplift 1=-23(LC 16), 3=-28(LC 17)
Max Grav 1=134(LC 22), 3=134(LC 23), 4=144(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 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) N/A

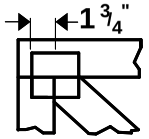
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 13,2022

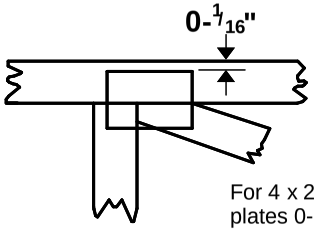
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

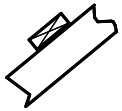
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

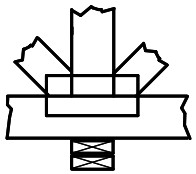
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

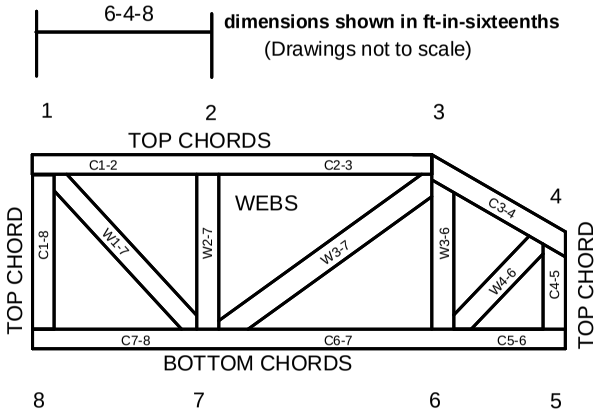


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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