

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A01	Common Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:04 Page: 1
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04/06/2023

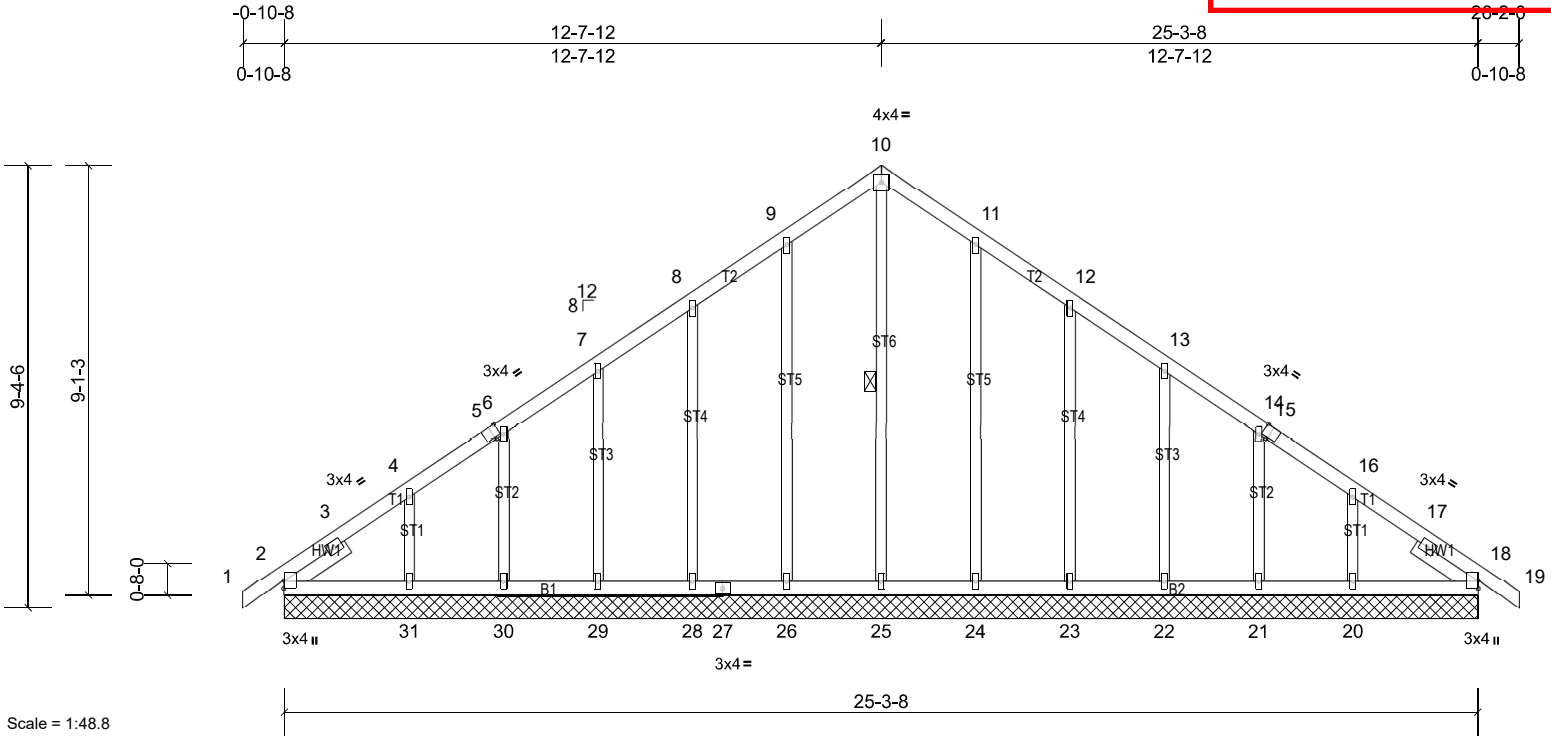


Plate Offsets (X, Y): [5:0-1-12,Edge], [15:0-1-12,Edge]

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	0.10	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	18	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 135 lb FT = 20%											

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x3 SPF No.2	WEBS	1 Row at midpt 10-25
SLIDER	Left 2x4 SP No.2 -- 1-6-8, Right 2x4 SP No.2 -- 1-6-8		

REACTIONS All bearings 25-3-8.
(lb) - Max Horiz 2=-252 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 18, 21, 22, 23, 24, 26, 28, 29, 30 except 20=-133 (LC 13), 31=-142 (LC 12)
Max Grav All reactions 250 (lb) or less at joint(s) 2, 18, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30 except 31=260 (LC 19)

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

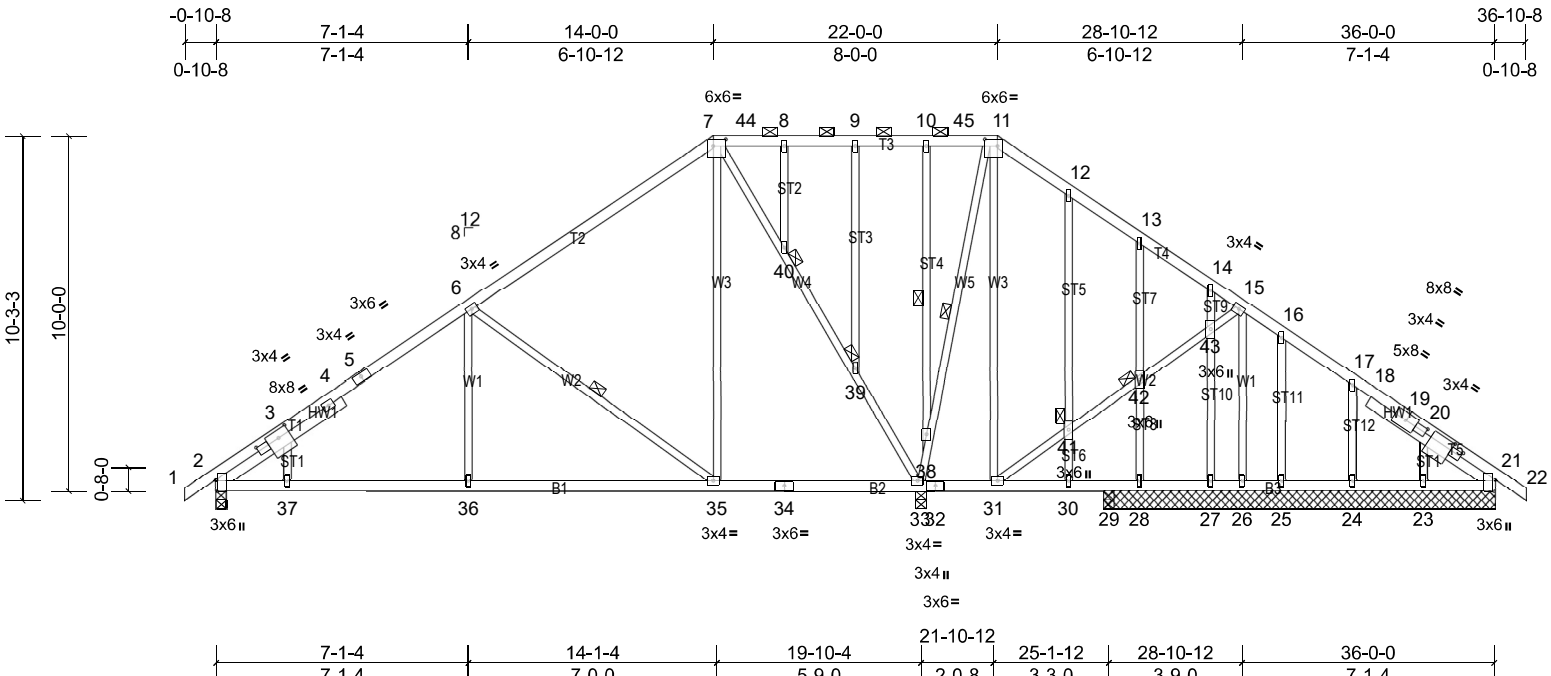
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 12-7-12, Corner(3R) 12-7-12 to 17-7-12, Exterior(2N) 17-7-12 to 26-2-0 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
 - 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.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 26, 28, 29, 30, 24, 23, 22, 21, 18 except (jt=lb) 31=142, 20=132.
 - 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A02	Piggyback Base Structural Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:05 Page: 1
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04/06/2023



Scale = 1:64.9									
Plate Offsets (X, Y): [2:0-3-13,Edge], [2:1-5-4,0-1-8], [3:0-4-0,0-2-8], [7:0-4-4,0-2-4], [11:0-4-4,0-2-4], [20:1-5-14,0-2-8], [21:0-3-13,Edge], [21:1-1-14,0-1-8], [21:2-4-4,0-1-8]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	0.08 36-37	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.11 35-36	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02 33	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 224 lb FT = 20%									

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-4-15 oc purlins, except
BOT CHORD	2x4 SP No.2		2-0-0 oc purlins (10-0-0 max.): 7-11.
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
OTHERS	2x3 SPF No.2		10-0-0 oc bracing: 2-37,36-37,35-36,33-35.
SLIDER	Left 2x4 SP No.2 -- 4-2-10, Right 2x4 SP No.2 -- 4-2-10	WEBS	1 Row at midpt 6-35, 11-33, 10-38
REACTIONS	All bearings 11-0-0. except 2=0-3-8, 33=0-3-8, 29=0-3-8	JOINTS	1 Brace at Jt(s): 39, 40, 41, 42
(lb) - Max Horiz	2=278 (LC 11)	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	
Max Uplift	All uplift 100 (lb) or less at joint(s) 21, 23, 24, 25, 26, 27, 28, 29 except 2=158 (LC 12), 33=200 (LC 9)		
Max Grav	All reactions 250 (lb) or less at joint(s) 21, 23, 24, 25, 26, 27, 28, 29 except 2=874 (LC 1), 33=1382 (LC 1)		
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-1052/95, 3-4=-971/162, 4-5=-918/164, 5-6=-800/189, 6-7=-480/189		
BOT CHORD	2-37=-203/863, 36-37=-199/862, 35-36=-199/862, 34-35=-74/353, 33-34=-74/353		
WEBS	6-36=0/281, 6-35=-648/290, 7-35=-83/500, 7-40=-813/171, 39-40=-850/172, 33-39=-874/180, 33-38=-529/152, 10-38=-327/170		

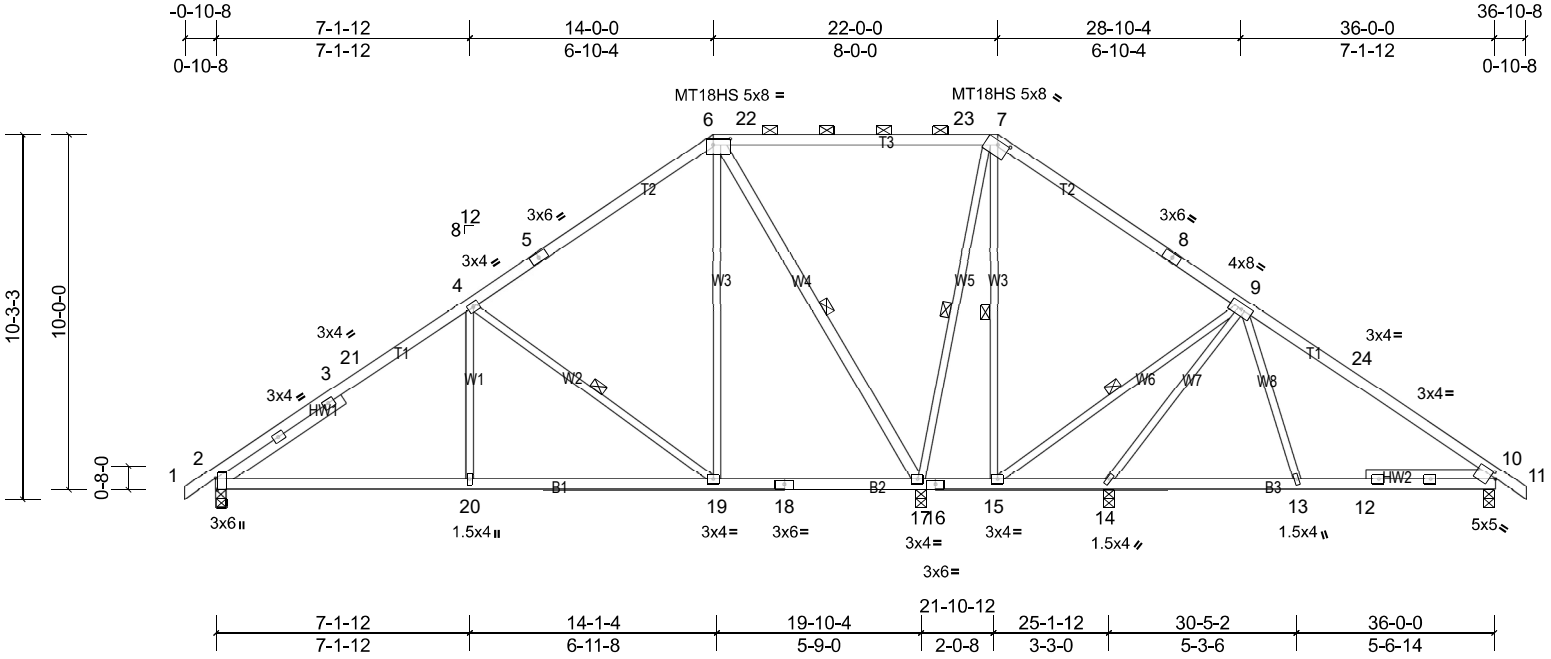
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 28-10-12, Interior (1) 28-10-12 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 21, 28, 27, 25, 24, 23, 29 except (jt=lb) 2=158, 33=199.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A03	Piggyback Base	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:05 Page: 1
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04/06/2023



Scale = 1:64.9									
Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-5-12,0-2-0], [7:0-4-0,0-1-9], [10:0-1-9,0-2-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.06	2-20	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.13	2-20	>999
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.02	10	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
					PLATES				
					GRIP				
					Weight: 197 lb FT = 20%				

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2 *Except* T3:2x4 SP 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied or 5-3-2 oc purlins, except
BOT CHORD	2x4 SP No.2		2-0-0 oc purlins (10-0-0 max.): 6-7.
WEBS	2x3 SPF No.2 *Except* W4:2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER	Left 2x4 SP No.2 -- 4-2-15, Right 2x4 SP No.2 -- 3-7-11		6-0-0 oc bracing: 15-17,14-15.
REACTIONS	All bearings 0-3-8.	WEBS	1 Row at midpt 4-19, 6-17, 7-17, 7-15, 9-15
(lb) - Max Horiz	2=278 (LC 11)	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	
Max Uplift	All uplift 100 (lb) or less at joint(s) except 2=-164 (LC 12), 10=-135 (LC 13), 14=-124 (LC 13), 17=-133 (LC 12)		
Max Grav	All reactions 250 (lb) or less at joint(s) except 2=879 (LC 25), 10=517 (LC 26), 14=557 (LC 26), 17=1491 (LC 1)		
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-1040/156, 3-21=-919/162, 4-21=-898/186, 4-5=-489/162, 5-6=-350/203, 6-22=0/283, 22-23=0/283, 7-23=0/284, 7-8=0/290, 10-24=-504/117		
BOT CHORD	2-20=-210/804, 19-20=-210/804, 18-19=-143/337, 17-18=-143/337, 13-14=-12/252, 12-13=0/300, 10-12=0/300		
WEBS	4-20=0/308, 4-19=-647/288, 6-19=-90/501, 6-17=-949/173, 7-17=-563/121, 9-14=-567/232, 9-13=0/261		

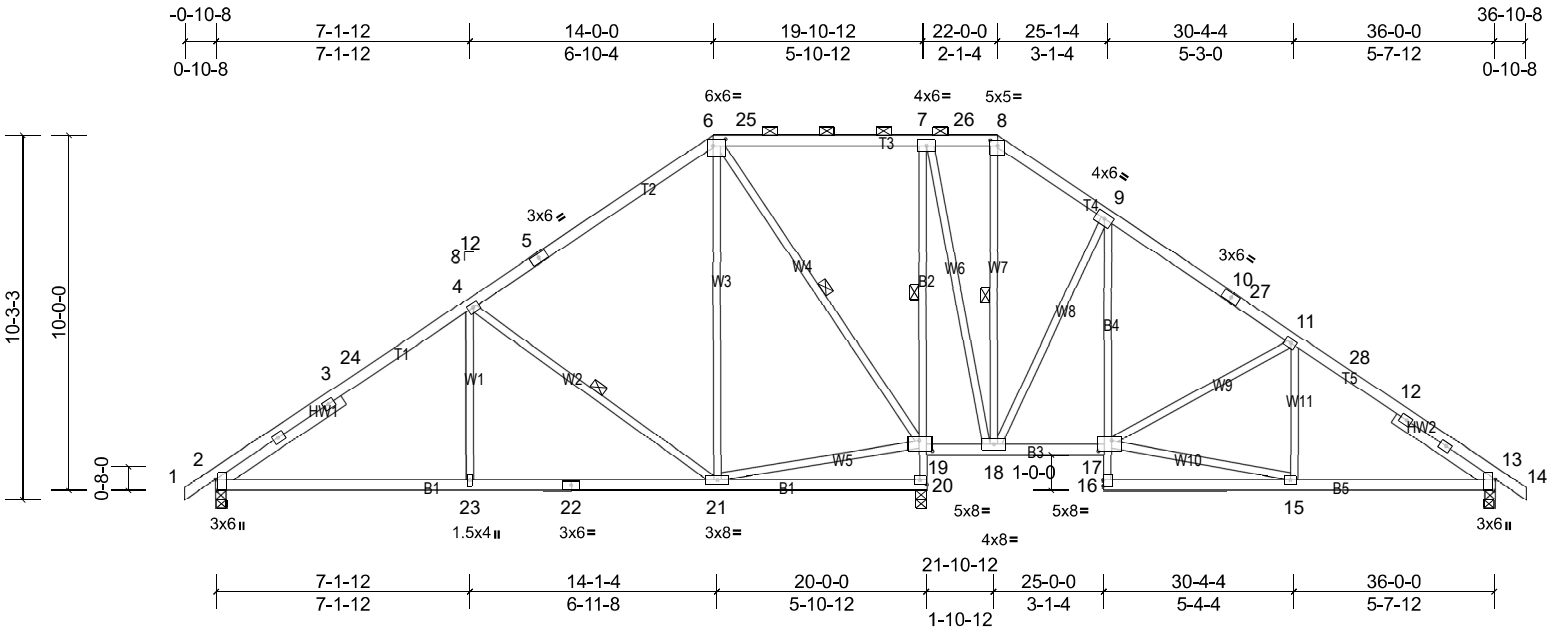
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 28-11-5, Interior (1) 28-11-5 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint 2, 133 lb uplift at joint 17, 123 lb uplift at joint 14 and 135 lb uplift at joint 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A04	Piggyback Base	5	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

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04/06/2023



Scale = 1:64.9

Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-4-4,0-2-4], [8:0-2-8,0-1-13], [13:0-3-13,Edge], [17:0-4-8,0-3-8], [19:0-4-8,0-3-8], [20:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.06	2-23	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.14	2-23	>999	180	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	13	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 207 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B2,B4:2x3 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-2-15, Right 2x4 SP No.2 -- 3-4-2

REACTIONS (lb/size) 2=905/0-3-8, (min. 0-1-8), 13=722/0-3-8, (min. 0-1-8),
20=1736/0-3-8, (min. 0-2-1)
Max Horiz 2=-277 (LC 10)
Max Uplift 2=-175 (LC 12), 13=-195 (LC 13), 20=-110 (LC 12)
Max Grav 2=920 (LC 25), 13=738 (LC 26), 20=1736 (LC 1)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1112/176, 3-24=-992/182, 4-24=-881/206, 4-5=-560/168, 5-6=-413/209, 8-9=-160/256, 9-10=-395/240,
10-27=-431/217, 11-27=-500/209, 11-28=-675/244, 12-28=-755/225, 12-13=-860/220
BOT CHORD 2-23=-222/880, 22-23=-222/880, 21-22=-222/880, 19-20=-1687/206, 7-19=-970/193, 17-18=0/330, 9-17=-67/398,
13-15=-86/628
WEBS 4-23=0/304, 4-21=-645/288, 6-21=-87/463, 19-21=-117/386, 6-19=-745/153, 7-18=-101/619, 9-18=-625/248,
15-17=-91/614, 11-17=-385/194

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 2, 110 lb uplift at joint 20 and 195 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 6-8.

BOT CHORD Rigid ceiling directly applied or 3-8-2 oc bracing. Except:
7-19

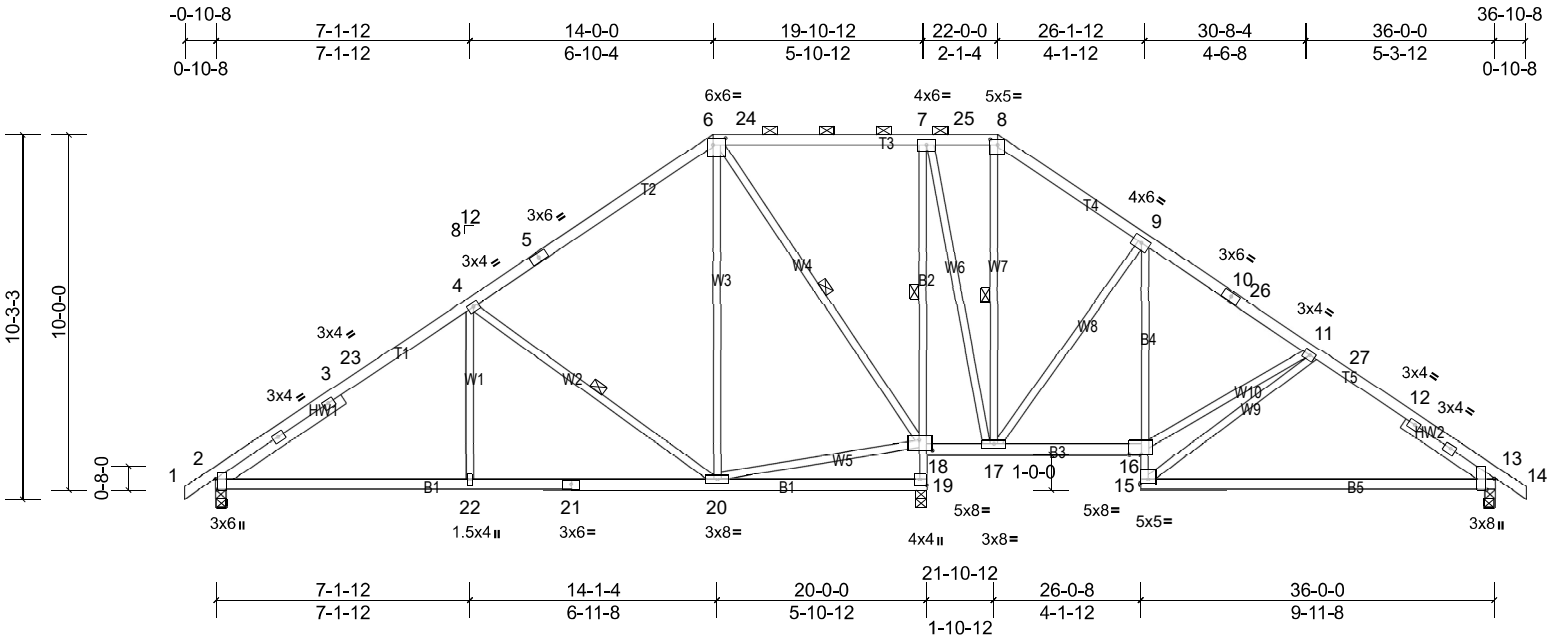
WEBS 1 Row at midpt 4-21, 6-19, 8-18

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A05	Piggyback Base	3	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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04/06/2023



Scale = 1:64.9

Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-4-4,0-2-4], [8:0-2-8,0-1-13], [13:0-3-13,Edge], [15:Edge,0-1-8], [18:0-4-8,0-3-8], [19:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.30	13-15	>636	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.62	13-15	>314	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 203 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* B2,B4:2x3 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-2-15, Right 2x4 SP No.2 -- 3-0-7

REACTIONS (lb/size) 2=882/0-3-8, (min. 0-1-8), 13=694/0-3-8, (min. 0-1-8),
19=1786/0-3-8, (min. 0-2-2)
Max Horiz 2=-277 (LC 10)
Max Uplift 2=-167 (LC 12), 13=-179 (LC 13), 19=-128 (LC 12)
Max Grav 2=921 (LC 25), 13=708 (LC 26), 19=1786 (LC 1)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1114/162, 3-23=-994/168, 4-23=-883/192, 4-5=-562/147, 5-6=-415/189, 9-10=-420/219, 10-26=-425/203,
11-26=-513/190, 11-27=-588/258, 12-27=-669/241, 12-13=-756/238
BOT CHORD 2-22=-210/861, 21-22=-210/861, 20-21=-210/861, 18-19=-1736/222, 7-18=-1010/200, 16-17=0/354, 15-16=-57/439,
9-16=-54/357, 13-15=-99/556
WEBS 4-22=0/304, 4-20=-646/289, 6-20=-89/460, 18-20=-117/371, 6-18=-779/165, 7-17=-122/669, 9-17=-594/247,
11-16=-10/253, 11-15=-544/181

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 2, 128 lb uplift at joint 19 and 179 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

BRACING

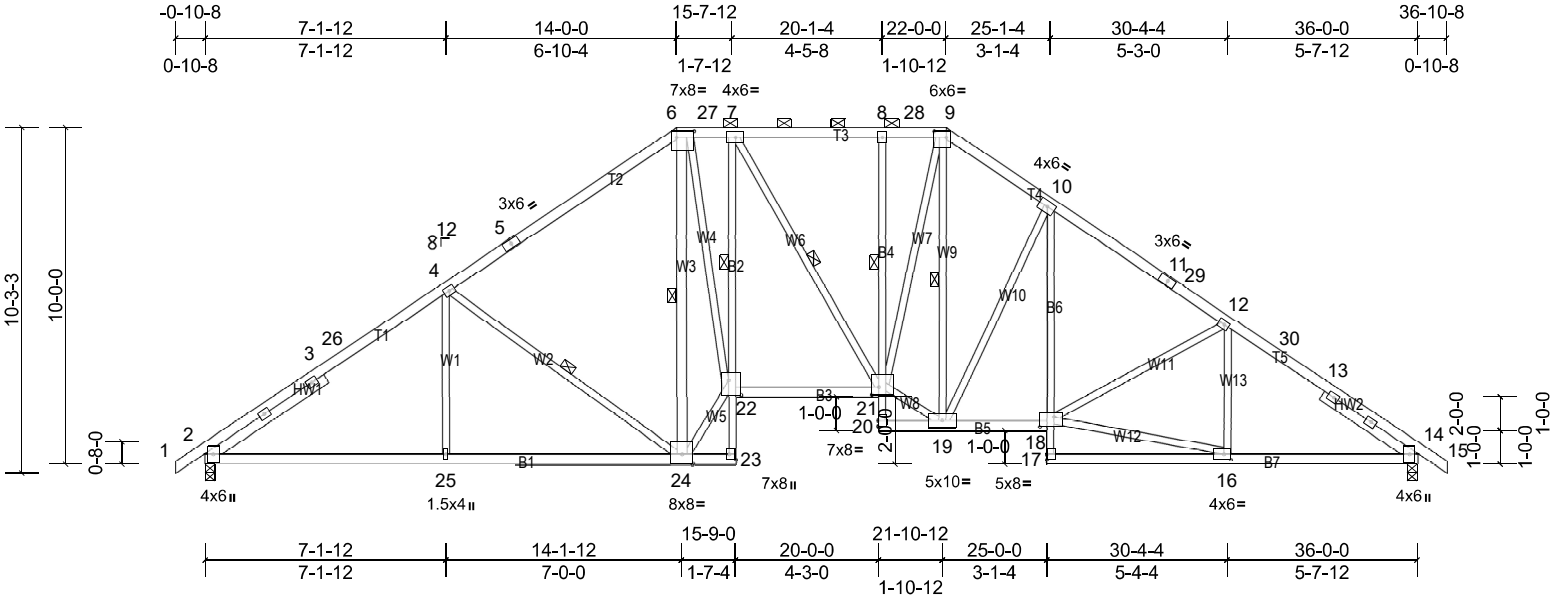
TOP CHORD Structural wood sheathing directly applied or 5-2-3 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 3-7-7 oc bracing. Except:
1 Row at midpt
WEBS 1 Row at midpt 4-20, 6-18, 8-17

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A06	Piggyback Base	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:07 Page: 1
ID:2AebgM32j9Vi5jniWv8Jp8zaORK-yNdyd2yW0HQRsICD5tIgEXM1kbWqMxhN1C3za0t

04/06/2023



Scale = 1:68.4

Plate Offsets (X, Y): [2:0-3-5,0-0-15], [6:0-6-4,0-2-4], [9:0-4-4,0-2-4], [14:0-3-5,0-0-15], [16:0-2-8,0-2-0], [18:0-5-0,0-3-8], [21:0-2-8,0-2-12], [22:0-5-4,0-4-8], [23:Edge,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	0.92	Vert(LL)	-0.19	21-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.36	21-22	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.26	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 223 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SP No.2 *Except* B2,B4,B6:2x3 SPF No.2		2-0-0 oc purlins (3-10-3 max.): 6-9.
WEBS	2x3 SPF No.2 *Except* W3:2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER	Left 2x4 SP No.2 -- 4-2-15, Right 2x4 SP No.2 -- 3-4-2		6-0-0 oc bracing: 22-23,20-21,19-20.
REACTIONS (lb/size)	2=1681/0-3-8, (min. 0-2-0), 14=1681/0-3-8, (min. 0-2-0)	1 Row at midpt	7-22, 8-21
Max Horiz	2=-278 (LC 10)	WEBS	1 Row at midpt
Max Uplift	2=-225 (LC 12), 14=-225 (LC 13)		4-24, 6-24, 7-21, 9-19

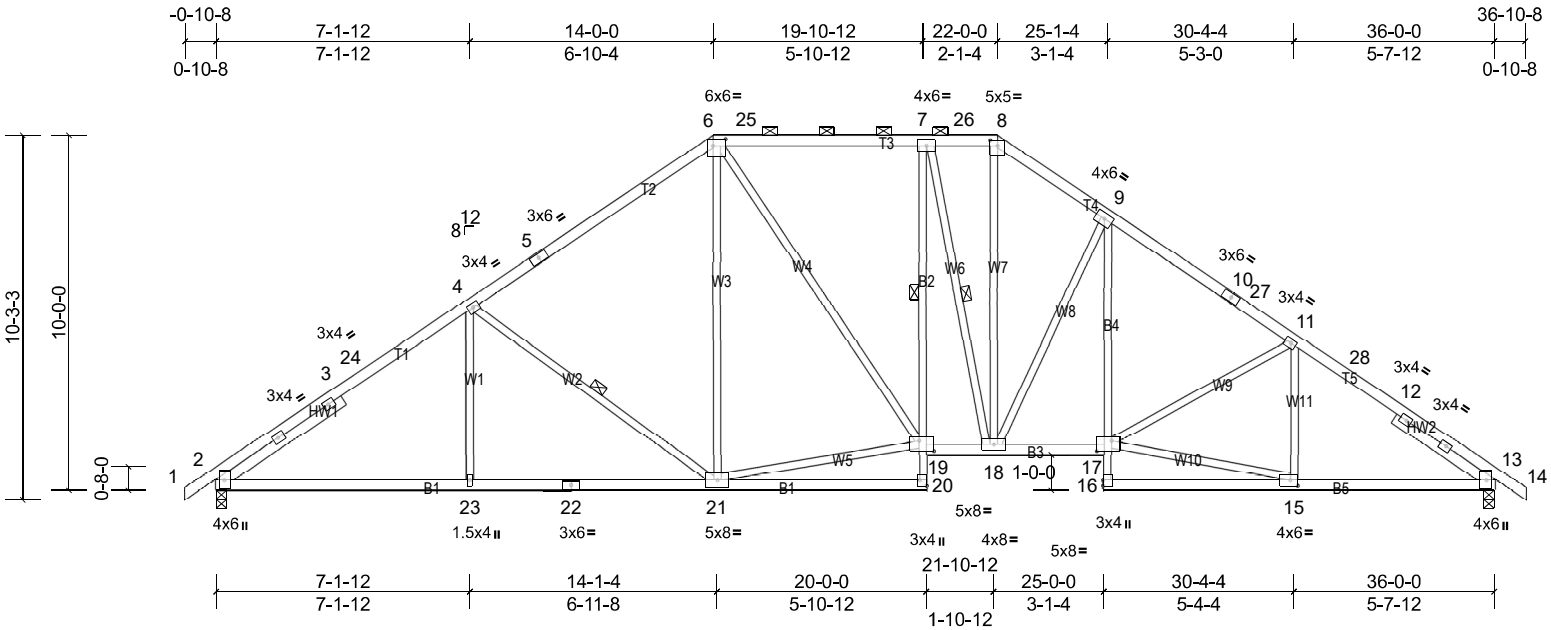
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2402/258, 3-26=-2260/264, 4-26=-2171/289, 4-5=-1883/291, 5-6=-1743/325, 6-27=-1850/351, 7-27=-1850/351, 7-8=-1873/345, 8-28=-1868/345, 9-28=-1869/344, 9-10=-2002/377, 10-11=-2305/341, 11-29=-2331/318, 12-29=-2400/309, 12-30=-2249/294, 13-30=-2341/274, 13-14=-2433/269
BOT CHORD	2-25=-289/1874, 24-25=-289/1874, 7-22=-345/256, 21-22=-127/1857, 8-21=-252/122, 18-19=-100/1919, 10-18=-73/531, 14-16=-149/1898
WEBS	4-25=0/295, 4-24=-586/281, 6-24=-1385/147, 22-24=-158/2316, 6-22=-106/2034, 19-21=-3/1784, 9-21=-202/1152, 9-19=-302/209, 10-19=-738/253, 16-18=-151/1849, 12-16=-296/108

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 14.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A07	Piggyback Base	3	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES
Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:07 Page: 1						LEE'S SUMMIT, MISSOURI
ID:hUM8BTCZvr??XZi?DRM7IfzaOR8-QZBKqOz9WlPH2?sm52NDStHkayEfiguAR6gIVzaG?os						04/06/2023



Scale = 1:64.9

Plate Offsets (X, Y): [2:0-3-5,0-0-15], [6:0-4-4,0-2-4], [8:0-2-8,0-1-13], [13:0-3-5,0-0-15], [15:0-2-8,0-2-0], [17:0-5-0,0-3-8], [19:0-5-0,0-3-8], [20:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.13	19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.24	20-21	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.14	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 207 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* B2,B4:2x3 SPF No.2
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 4-2-15, Right 2x4 SP No.2 -- 3-4-2

REACTIONS (lb/size) 2=1681/0-3-8, (min. 0-2-0), 13=1681/0-3-8, (min. 0-2-0)
 Max Horiz 2=-277 (LC 10)
 Max Uplift 2=-225 (LC 12), 13=-225 (LC 13)

BRACING

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (3-6-12 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 1 Row at midpt 7-19
 WEBS 1 Row at midpt 4-21, 7-18

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2404/259, 3-24=-2262/265, 4-24=-2173/290, 4-5=-1880/290, 5-6=-1740/325, 6-25=-1695/349, 7-25=-1694/349,
 7-26=-1605/338, 8-26=-1606/338, 8-9=-1998/375, 9-10=-2303/341, 10-27=-2331/318, 11-27=-2400/309,
 11-28=-2249/294, 12-28=-2341/274, 12-13=-2434/269
 BOT CHORD 2-23=-290/1875, 22-23=-290/1875, 21-22=-290/1875, 18-19=-68/1695, 17-18=-100/1918, 9-17=-72/536,
 13-15=-149/1899
 WEBS 4-23=0/296, 4-21=-592/284, 6-21=-71/297, 19-21=-111/1388, 6-19=-131/543, 7-18=-514/223, 8-18=-185/960,
 9-18=-735/252, 15-17=-151/1851, 11-15=-296/108

NOTES

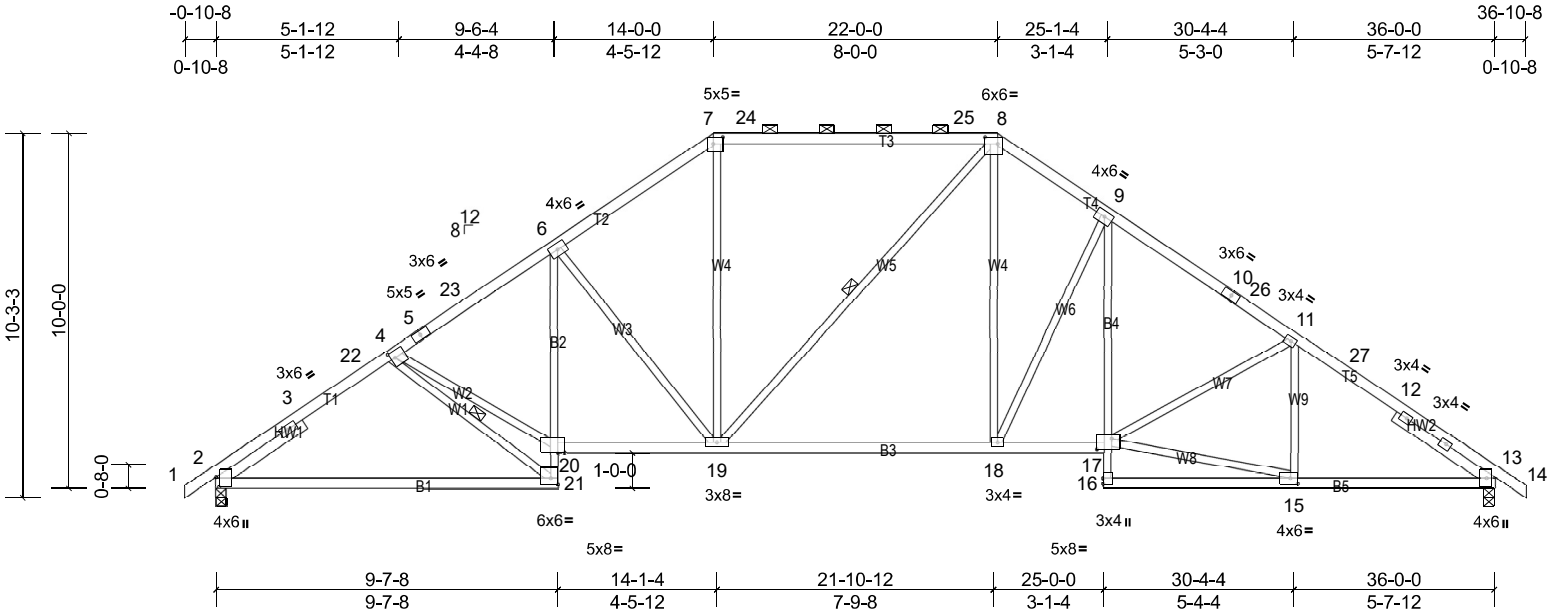
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A08	Piggyback Base	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:07 Page: 1
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04/06/2023



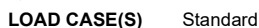
Scale = 1:64.9											
Plate Offsets (X, Y): [2:0-3-5,0-1-3], [4:0-1-8,0-2-4], [7:0-3-4,0-2-4], [8:0-4-4,0-2-4], [13:0-3-5,0-0-15], [15:0-2-8,0-2-0], [17:0-5-0,0-3-8], [20:0-2-4,0-0-4], [21:Edge,0-2-4]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.28 2-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.58 2-21	>740	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.21 13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 195 lb FT = 20%	

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2 *Except* T3:2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 3-1-9 oc purlins, except
BOT CHORD	2x4 SP No.2 *Except* B2,B4:2x3 SPF No.2		2-0-0 oc purlins (4-7-14 max.): 7-8.
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER	Left 2x4 SP No.2 -- 2-11-4, Right 2x4 SP No.2 -- 3-4-2		2-2-0 oc bracing: 2-21,20-21.
REACTIONS (lb/size)	2=1681/0-3-8, (min. 0-2-0), 13=1681/0-3-8, (min. 0-2-0)	WEBS	1 Row at midpt 4-21, 8-19
Max Horiz	2=277 (LC 11)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
Max Uplift	2=-225 (LC 12), 13=-225 (LC 13)		

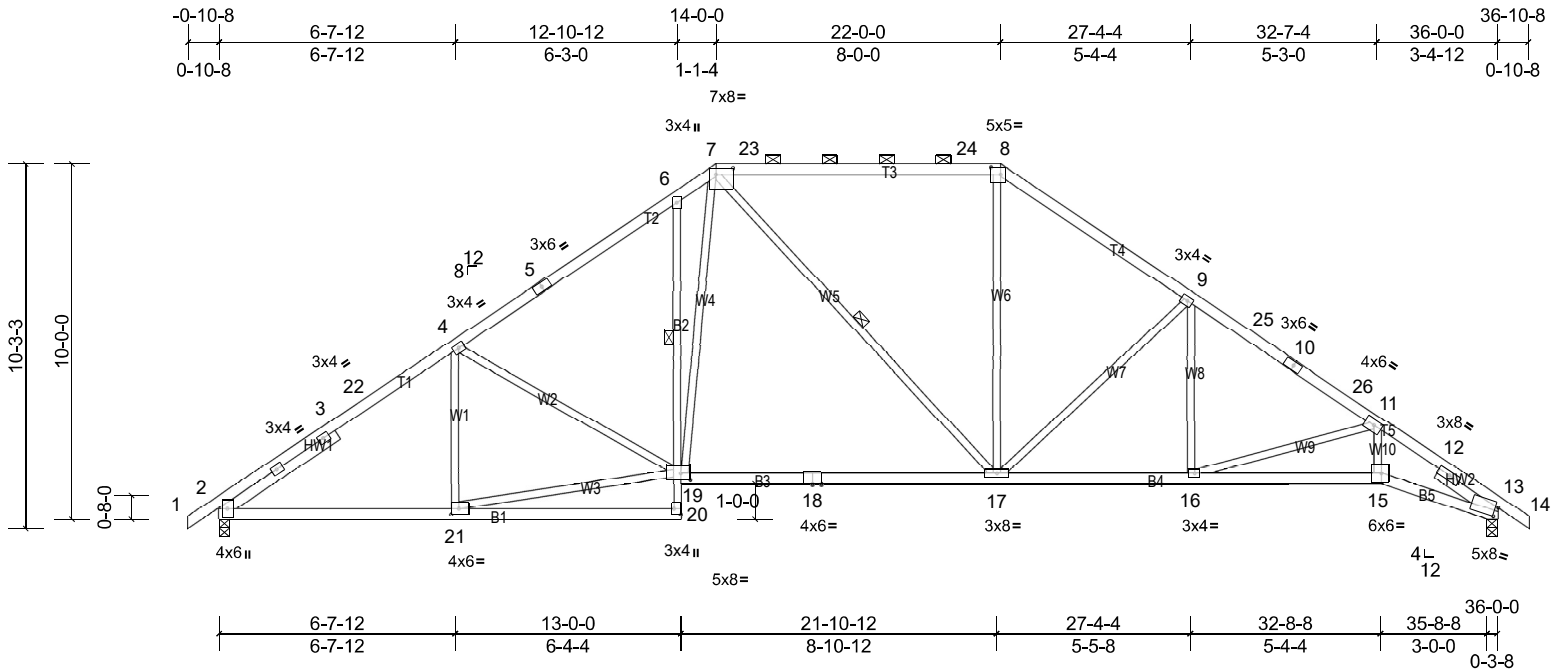
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2405/314, 3-22=-2309/318, 4-22=-2227/333, 4-5=-2459/321, 5-23=-2383/331, 6-23=-2380/348, 6-7=-2025/355, 7-24=-1624/344, 24-25=-1624/344, 8-25=-1624/344, 8-9=-1990/366, 9-10=-2299/341, 10-26=-2330/318, 11-26=-2399/310, 11-27=-2250/294, 12-27=-2342/274, 12-13=-2435/269
BOT CHORD	2-21=-349/1866, 20-21=-240/1381, 6-20=-76/395, 19-20=-232/1989, 18-19=-20/1622, 17-18=-100/1912, 9-17=-86/532, 13-15=-149/1900
WEBS	4-21=-2046/467, 4-20=-285/1978, 6-19=-638/268, 7-19=-49/632, 8-18=-151/698, 9-18=-691/255, 15-17=-159/1852, 11-15=-297/110

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



04/06/2023



Scale = 1:64.9

Plate Offsets (X, Y): [2:0-3-5,0-0-15], [7:0-5-12,0-2-0], [8:0-3-4,0-2-4], [13:0-0-11,0-3-3], [19:0-3-4,0-2-4], [20:Edge,0-2-8], [21:0-2-8,0-2-0]

[illegible]

LUMBER

TOP CHORD 2x4 SP No.2 *Except* T3:2x4 SP 1650F 1.5E, T5:2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP No.2 *Except* B2:2x3 SPF No.2, B5:2x4 SP 1650F 1.5E
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 3-11-5, Right 2x4 SP No.2 -- 2-0-7

REACTIONS (lb/size) 2=1677/0-3-8, (min. 0-2-0), 13=1684/0-3-8, (min. 0-1-13)
 Max Horiz 2=-278 (LC 10)
 Max Uplift 2=-224 (LC 12), 13=-226 (LC 13)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 7-8.
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BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21.
1 Row at midpt	6-19
WEBS	1 Row at midpt 7-17

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

FORCES

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

TOP CHORD 2-3=-2408/260, 3-22=-2300/265, 4-22=-2193/288, 4-5=-2167/317, 5-6=-2044/342, 6-7=-2045/460, 7-23=-1616/337,
23-24=-1617/337, 8-24=-1617/337, 8-9=-2045/337, 9-25=-2456/328, 10-25=-2501/309, 10-26=-2528/307,
11-26=-2573/298, 11-12=-3787/427, 12-13=-3860/412

BOT CHORD 2-21=-294/1878, 6-19=-336/233, 18-19=-133/1605, 17-18=-133/1605, 16-17=-147/2104, 15-16=-259/2885, 13-15=-277/3100

WEBS 19-21=-267/1877, 4-19=-282/213, 7-19=-305/902, 8-17=-48/622, 9-17=-695/269, 9-16=-10/351, 11-16=-817/221,
11-15=-27/997

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 2 and 226 lb uplift at joint 13.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A11	Piggyback Base	5	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Run: 8.62 S Nov 16 2022 Print: 8.620 S Nov 16 2022 MiTek Industries, Inc. Thu Mar 16 10:12:08 Page: 1
ID:TP6aCgySlupCz5RwrSTfpkzaOQA-umli11_nH0X8g9R2*Ho0Jlft1_Bczlf20ps0Hyza6Or

04/06/2023

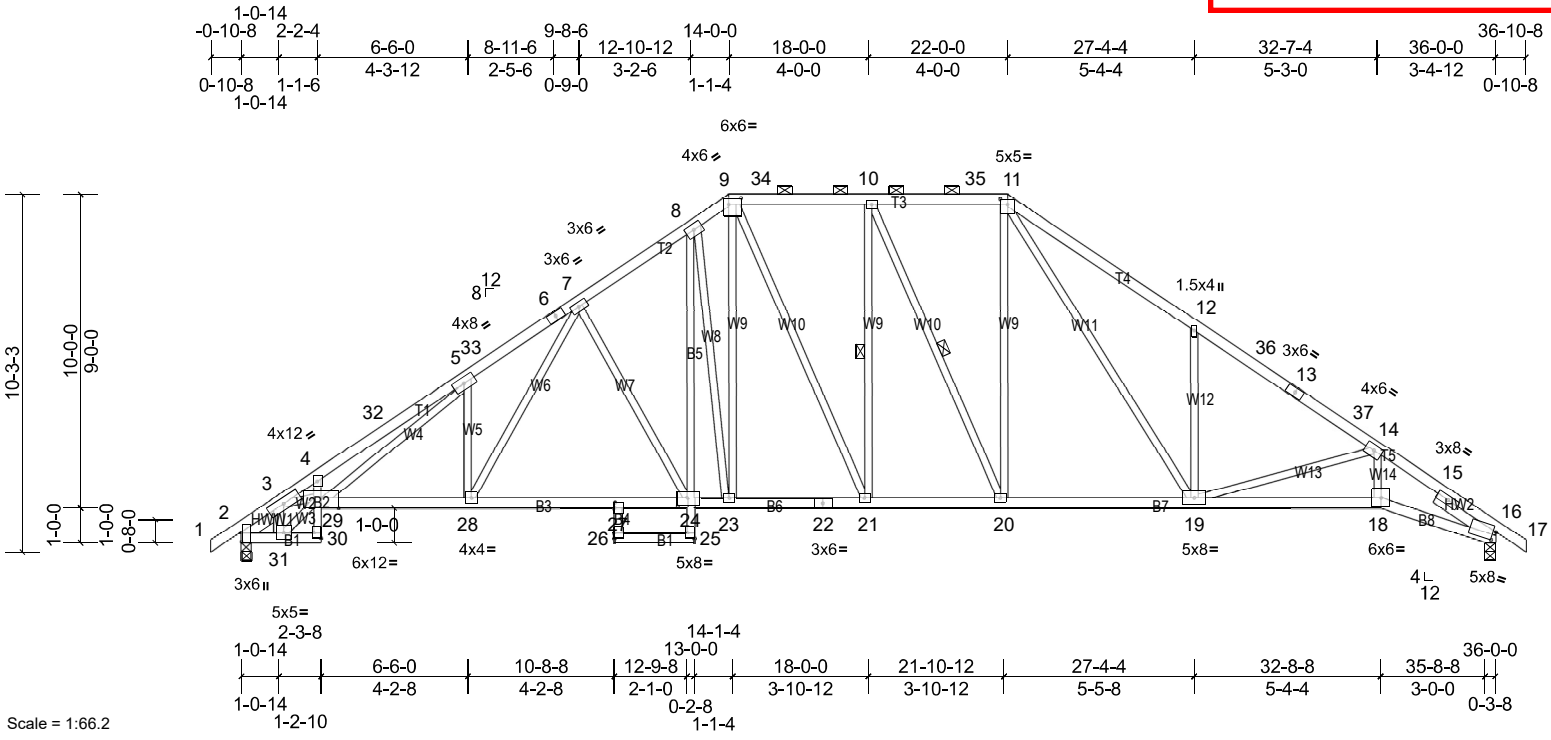


Plate Offsets (X, Y): [2:0-3-4,0-0-3], [9:0-4-4,0-2-4], [11:0-2-8,0-1-13], [16:0-0-11,0-3-3], [24:0-3-8,0-2-12], [25:Edge,0-2-8], [27:0-2-0,Edge], [29:0-6-0,Edge], [30:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.22	24-27	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.42	27-28	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.34	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 216 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2 *Except* T5:2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 1-8-5 oc purlins, except
BOT CHORD 2x4 SP No.2 *Except* B2,B4,B5:2x3 SPF No.2, B8:2x4 SP 1650F 1.5E	2-0-0 oc purlins (4-4-13 max.): 9-11.
WEBS 2x3 SPF No.2 *Except* W1:2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER Left 2x4 SP No.2 -- 1-1-9, Right 2x4 SP No.2 -- 2-0-7	2-2-0 oc bracing: 28-29.
REACTIONS (lb/size) 2=1677/0-3-8, (min. 0-2-0), 16=1684/0-3-8, (min. 0-1-13)	WEBS 1 Row at midpt 10-20, 10-21
Max Horiz 2=278 (LC 11)	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
Max Uplift 2=-224 (LC 12), 16=-226 (LC 13)	

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2148/247, 3-4=-4521/756, 4-32=-4476/850, 5-32=-4418/866, 5-33=-2962/509, 6-33=-2946/510, 6-7=-2851/528, 7-8=-2085/365, 8-9=-1917/396, 9-34=-1675/341, 10-34=-1674/341, 10-35=-1597/340, 11-35=-1597/340, 11-12=-2660/507, 12-36=-2416/324, 13-36=-2507/305, 13-37=-2536/304, 14-37=-2579/294, 14-15=-3783/431, 15-16=-3856/416
BOT CHORD	2-31=-317/1487, 28-29=-352/2398, 27-28=-222/1962, 24-27=-210/1928, 8-24=-134/516, 23-24=-131/1679, 22-23=-122/1599, 21-22=-122/1599, 20-21=-92/1674, 19-20=-20/1593, 18-19=-262/2882, 16-18=-281/3096
WEBS	11-20=-113/421, 11-19=-352/990, 12-19=-494/306, 14-19=-807/229, 14-18=-33/991, 5-28=-624/294, 5-29=-526/1739, 10-20=-353/185, 9-23=-232/709, 8-23=-577/219, 9-21=-181/341, 7-24=-610/255, 7-28=-270/922, 3-31=-1258/280, 29-31=-358/1701, 3-29=-435/2216

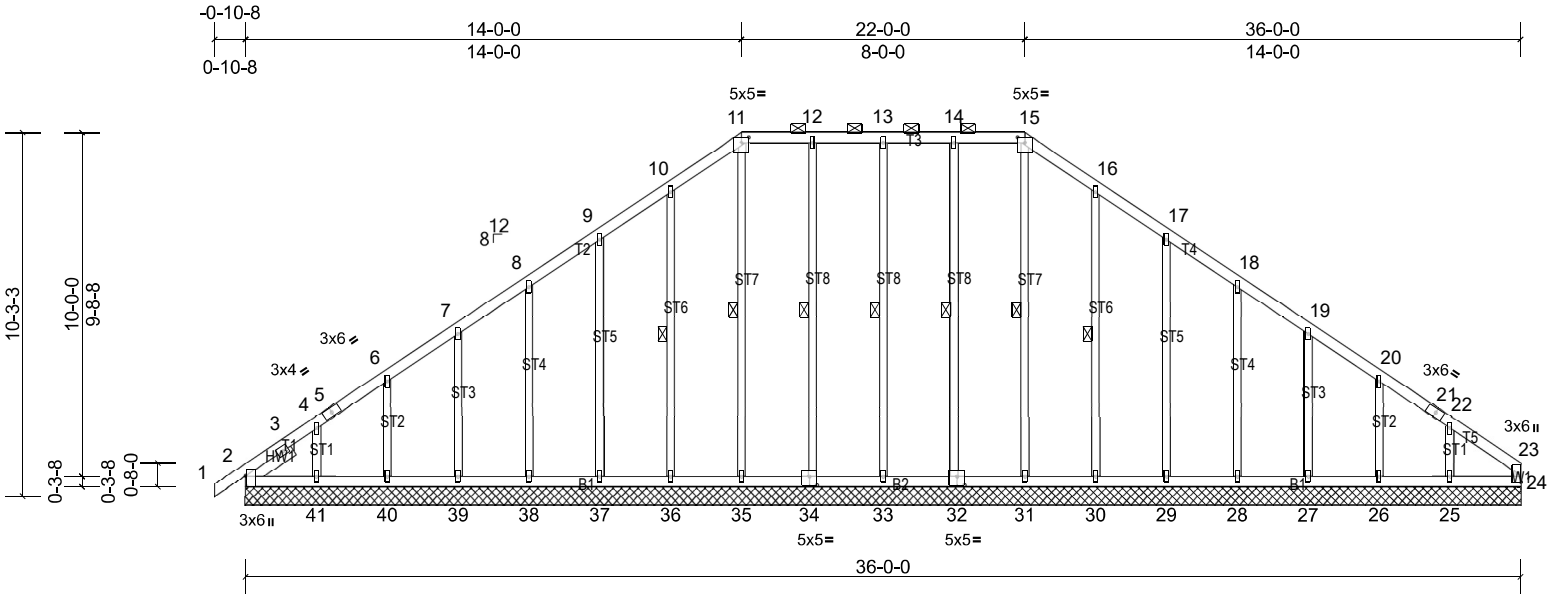
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-0-0, Exterior(2R) 22-0-0 to 29-0-14, Interior (1) 29-0-14 to 36-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 2 and 226 lb uplift at joint 16.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	A12	Piggyback Base Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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04/06/2023



Scale = 1:65.1

Plate Offsets (X, Y): [2:0-3-13,Edge], [11:0-2-8,0-1-13], [15:0-2-8,0-1-13], [32:0-2-8,0-3-0], [34:0-2-8,0-3-0]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	24	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 205 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 15-31, 14-32, 13-33, 12-34, 11-35, 10-36, 16-30

REACTIONS

All bearings 36-0-0.
(lb) - Max Horiz 2=281 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 24, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40 except 2=-116 (LC 8), 25=-136 (LC 13), 41=-131 (LC 12)
Max Grav All reactions 250 (lb) or less at joint(s) 2, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-282/244, 3-4=-270/250, 9-10=-154/252, 10-11=-193/294, 11-12=-167/268, 12-13=-167/268, 13-14=-167/268, 14-15=-167/268, 15-16=-193/294

NOTES

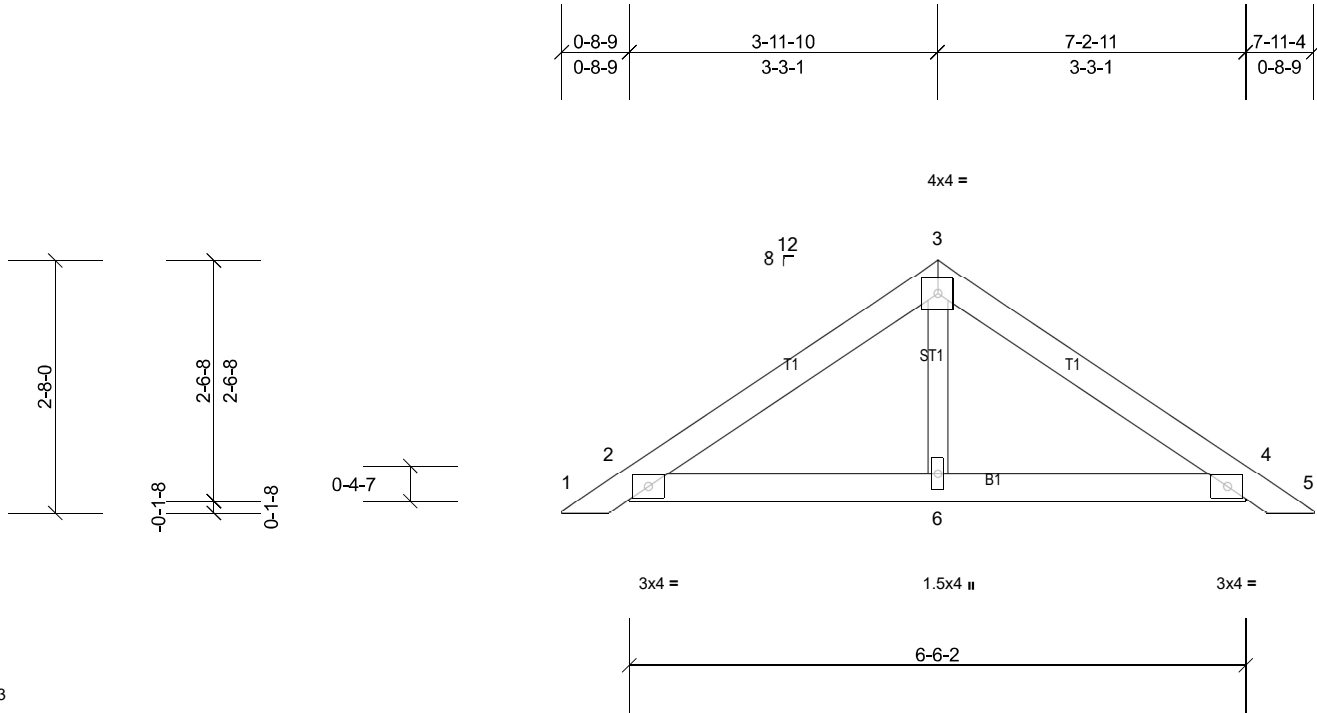
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 14-0-0, Corner(3R) 14-0-0 to 19-0-0, Exterior(2N) 19-0-0 to 22-0-0, Corner(3R) 22-0-0 to 27-0-0, Exterior(2N) 27-0-0 to 35-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 32, 33, 34, 35, 36, 37, 38, 39, 40, 30, 29, 28, 27, 26 except (jt=lb) 2=115, 41=131, 25=136.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	PB01	Piggyback	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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04/06/2023



Scale = 1:24.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a	Weight: 25 lb
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=200/6-6-2, (min. 0-1-8), 4=200/6-6-2, (min. 0-1-8),
6=251/6-6-2, (min. 0-1-8)
Max Horiz 2=-69 (LC 10)
Max Uplift 2=-55 (LC 12), 4=-64 (LC 13)

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

NOTES

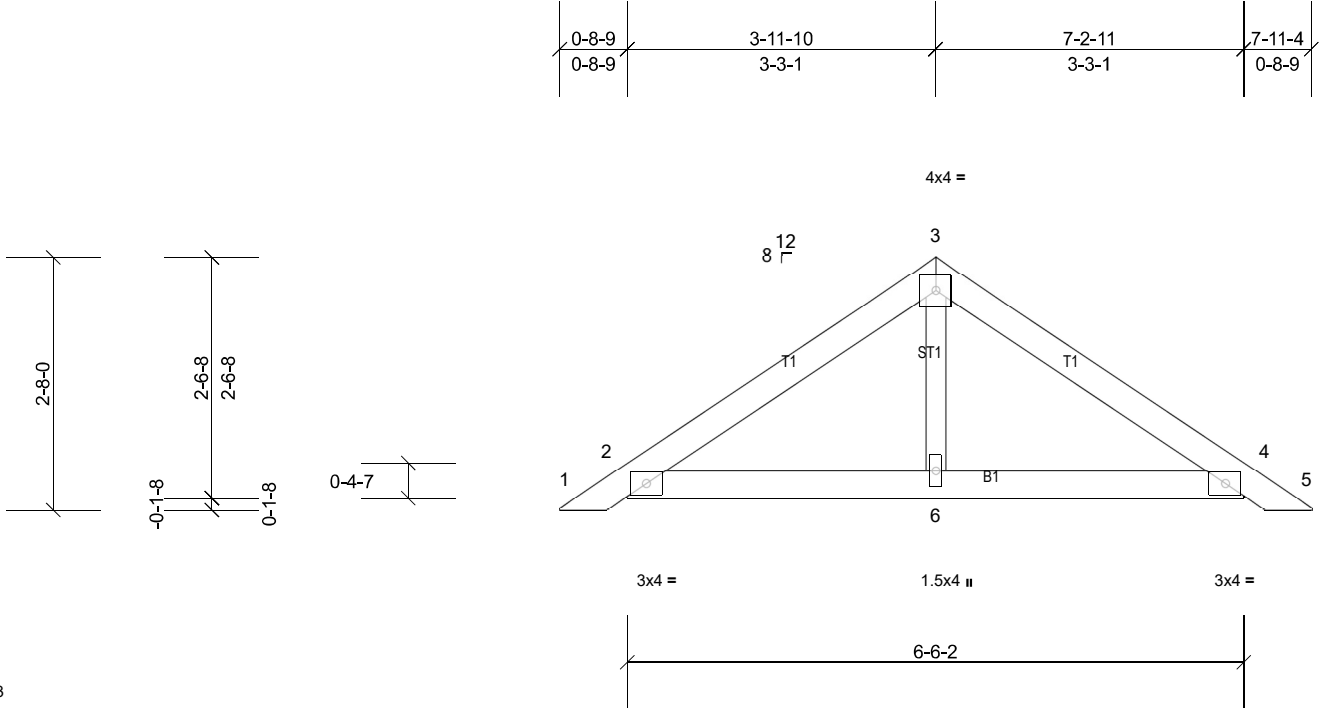
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2 and 64 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 73	RELEASE FOR CONSTRUCTION
P220320-P220320-02	PB02	Piggyback	28	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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04/06/2023



Scale = 1:24.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a	Weight: 25 lb
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=200/6-6-2, (min. 0-1-8), 4=200/6-6-2, (min. 0-1-8),
6=251/6-6-2, (min. 0-1-8)
Max Horiz 2=-69 (LC 10)
Max Uplift 2=-55 (LC 12), 4=-64 (LC 13)

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2 and 64 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard