RE: P230177-01 - Roof - Osage 70

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

Site Information:

Project Customer: Clover & Hive Project Name: Tupelo - Farmhouse
Lot/Block: 70 Subdivision: Osage
Model:
Address: 2125 SW Rutherford Dr
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 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 25
Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57761075	A1	4/14/23	35	I57761109	J7	4/14/23
2	I57761076	A2	4/14/23	36	I57761110	J8	4/14/23
3	I57761077	A3	4/14/23	37	I57761111	J9	4/14/23
4	I57761078	A4	4/14/23	38	I57761112	J10	4/14/23
5	I57761079	A5	4/14/23	39	I57761113	J11	4/14/23
6	I57761080	B1	4/14/23	40	I57761114	J12	4/14/23
7	I57761081	B2	4/14/23	41	I57761115	J12A	4/14/23
8	I57761082	B3	4/14/23	42	I57761116	J13	4/14/23
9	I57761083	B4	4/14/23	43	I57761117	J14	4/14/23
10	I57761084	B5	4/14/23	44	I57761118	J15	4/14/23
11	I57761085	B6	4/14/23	45	I57761119	J16	4/14/23
12	I57761086	B7	4/14/23	46	I57761120	LAY1	4/14/23
13	I57761087	B8	4/14/23	47	I57761121	LAY2	4/14/23
14	I57761088	C1	4/14/23	48	I57761122	LAY3	4/14/23
15	I57761089	C2	4/14/23	49	I57761123	V1	4/14/23
16	I57761090	C3	4/14/23	50	I57761124	V2	4/14/23
17	I57761091	C4	4/14/23	51	I57761125	V3	4/14/23
18	I57761092	C5	4/14/23	52	I57761126	V4	4/14/23
19	I57761093	D1	4/14/23	53	I57761127	V5	4/14/23
20	I57761094	D2	4/14/23	54	I57761128	V6	4/14/23
21	I57761095	D3	4/14/23	55	I57761129	V7	4/14/23
22	I57761096	E1	4/14/23	56	I57761130	V8	4/14/23
23	I57761097	E2	4/14/23	57	I57761131	V9	4/14/23
24	I57761098	E3	4/14/23	58	I57761132	V10	4/14/23
25	I57761099	G1	4/14/23	59	I57761133	VG1	4/14/23
26	I57761100	G2	4/14/23	60	I57761134	VG2	4/14/23
27	I57761101	G3	4/14/23				
28	I57761102	G4	4/14/23				
29	I57761103	J1	4/14/23				
30	I57761104	J2	4/14/23				
31	I57761105	J3	4/14/23				
32	I57761106	J4	4/14/23				
33	I57761107	J5	4/14/23				
34	I57761108	J6	4/14/23				

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

Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Kansas is April 30, 2024.

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

April 14,2023
Garcia, Juan

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

RE: P230177-01 - Roof - Osage 70

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

Site Information:

Project Customer: Clover & Hive Project Name: Tupelo - Farmhouse - 3 car
Lot/Block: 70 Subdivision: Osage
Model:
Address: 2125 SW Rutherford Dr
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 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 25
Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57761075	A1	4/14/23	35	I57761109	J7	4/14/23
2	I57761076	A2	4/14/23	36	I57761110	J8	4/14/23
3	I57761077	A3	4/14/23	37	I57761111	J9	4/14/23
4	I57761078	A4	4/14/23	38	I57761112	J10	4/14/23
5	I57761079	A5	4/14/23	39	I57761113	J11	4/14/23
6	I57761080	B1	4/14/23	40	I57761114	J12	4/14/23
7	I57761081	B2	4/14/23	41	I57761115	J12A	4/14/23
8	I57761082	B3	4/14/23	42	I57761116	J13	4/14/23
9	I57761083	B4	4/14/23	43	I57761117	J14	4/14/23
10	I57761084	B5	4/14/23	44	I57761118	J15	4/14/23
11	I57761085	B6	4/14/23	45	I57761119	J16	4/14/23
12	I57761086	B7	4/14/23	46	I57761120	LAY1	4/14/23
13	I57761087	B8	4/14/23	47	I57761121	LAY2	4/14/23
14	I57761088	C1	4/14/23	48	I57761122	LAY3	4/14/23
15	I57761089	C2	4/14/23	49	I57761123	V1	4/14/23
16	I57761090	C3	4/14/23	50	I57761124	V2	4/14/23
17	I57761091	C4	4/14/23	51	I57761125	V3	4/14/23
18	I57761092	C5	4/14/23	52	I57761126	V4	4/14/23
19	I57761093	D1	4/14/23	53	I57761127	V5	4/14/23
20	I57761094	D2	4/14/23	54	I57761128	V6	4/14/23
21	I57761095	D3	4/14/23	55	I57761129	V7	4/14/23
22	I57761096	E1	4/14/23	56	I57761130	V8	4/14/23
23	I57761097	E2	4/14/23	57	I57761131	V9	4/14/23
24	I57761098	E3	4/14/23	58	I57761132	V10	4/14/23
25	I57761099	G1	4/14/23	59	I57761133	VG1	4/14/23
26	I57761100	G2	4/14/23	60	I57761134	VG2	4/14/23
27	I57761101	G3	4/14/23				
28	I57761102	G4	4/14/23				
29	I57761103	J1	4/14/23				
30	I57761104	J2	4/14/23				
31	I57761105	J3	4/14/23				
32	I57761106	J4	4/14/23				
33	I57761107	J5	4/14/23				
34	I57761108	J6	4/14/23				

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

Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Missouri is December 31, 2024.

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

April 14,2023

Garcia, Juan

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	A1	COMMON SUPPORTED GAB	1	1	I57761075
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:29 2023 Page 1
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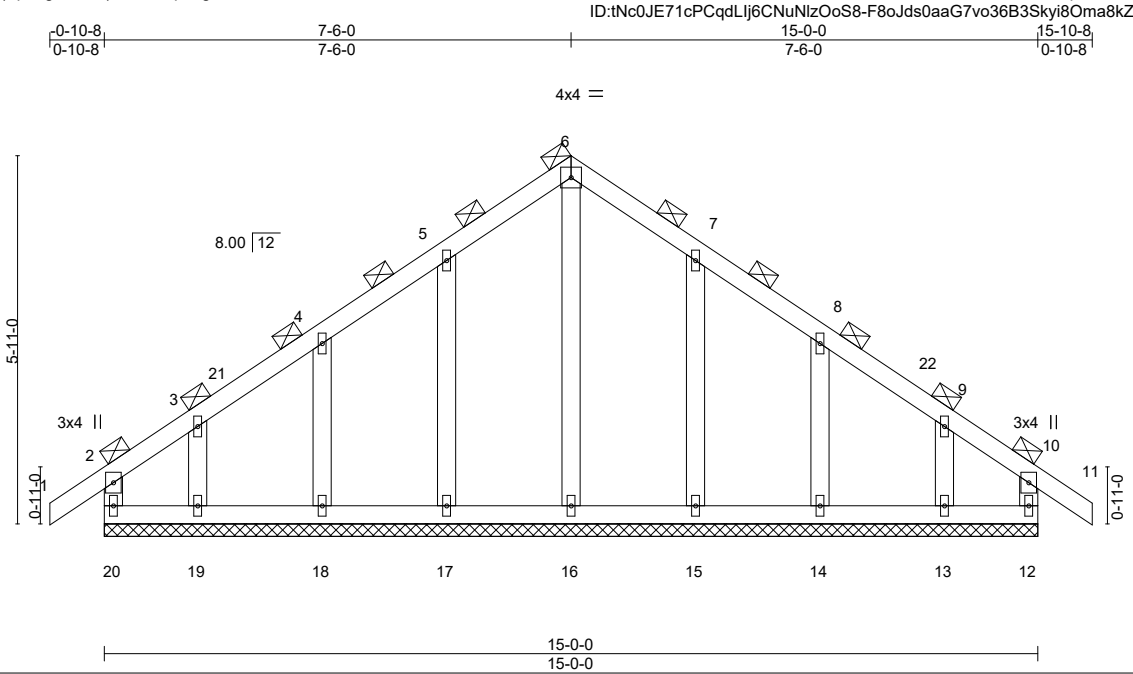

LOADING (psf)		SPACING-	3-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	11	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 79 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2 *Except* 10-12: 2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 15-0-0.
(lb) - Max Horz 20=-249(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 12, 18, 14 except 20=-109(LC 6), 17=-102(LC 10), 19=-151(LC 10), 15=-100(LC 11), 13=-140(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 12 except 20=253(LC 18), 16=290(LC 20), 17=294(LC 17), 18=280(LC 1), 19=280(LC 17), 15=292(LC 18), 14=280(LC 18), 13=262(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-153/350, 6-7=-153/350
WEBS 6-16=-269/28

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-6-0, Corner(3R) 4-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 12-10-8, Corner(3E) 12-10-8 to 15-10-8 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) 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 18, 14 except (jt=lb) 20=109, 17=102, 19=151, 15=100, 13=140.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	A2	Common	1	1	I57761076
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:31 2023 Page 1
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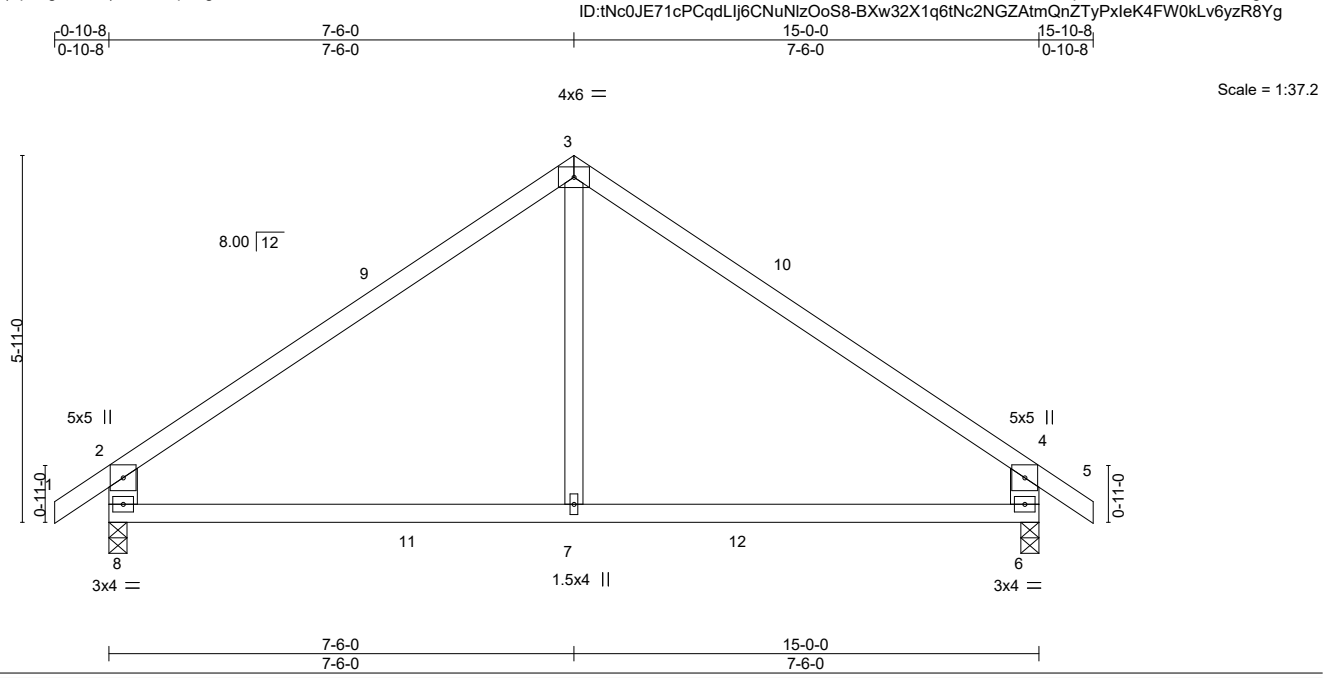

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.09	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.15	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 61 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SPF No.2 *Except*
3-7: 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 4-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=168(LC 9)
Max Uplift 8=-88(LC 10), 6=-88(LC 11)
Max Grav 8=806(LC 17), 6=806(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-806/138, 3-4=-806/138, 2-8=-693/195, 4-6=-693/193
BOT CHORD 7-8=0/596, 6-7=0/596
WEBS 3-7=0/404

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 12-10-8, Exterior(2E) 12-10-8 to 15-10-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	A3	Roof Special	3	1	I57761077
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:32 2023 Page 1
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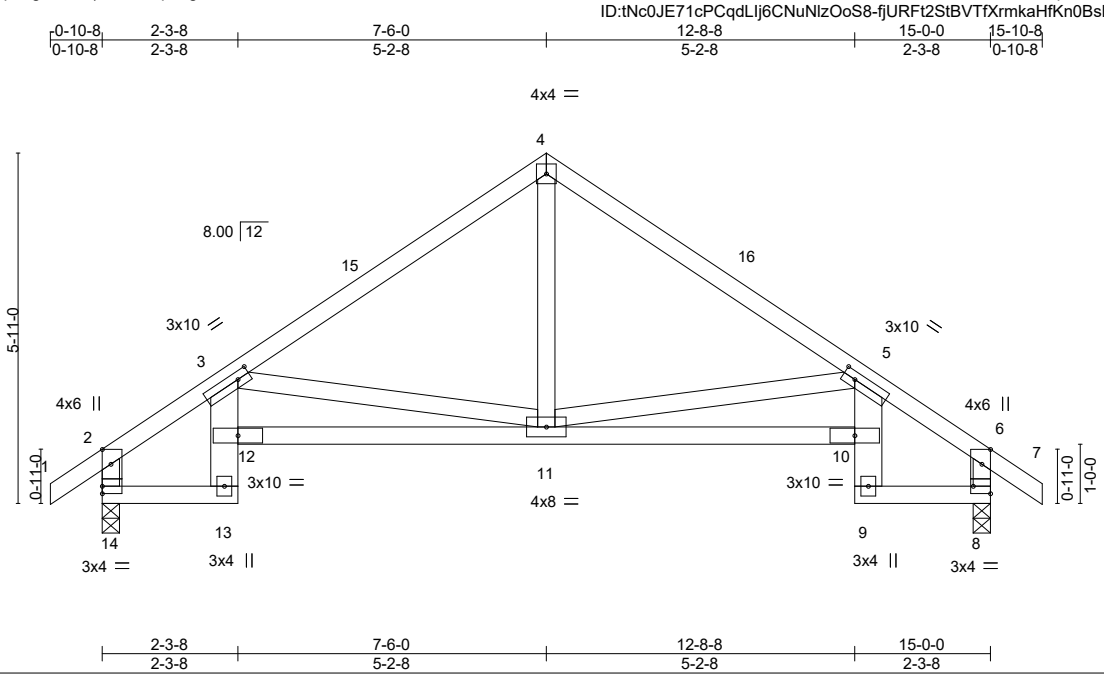

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [3:0-2-8,0-1-8], [5:0-2-8,0-1-8], [6:0-3-0,Edge], [8:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.05	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.11	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 77 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-13,5-9: 2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except*
2-14,6-8: 2x4 SP No.2

BRACING-
TOP CHORD Sheathed or 5-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-166(LC 8)
Max Uplift 14=-87(LC 10), 8=-87(LC 11)
Max Grav 14=733(LC 1), 8=733(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-680/111, 3-4=-786/129, 4-5=-786/129, 5-6=-680/119, 2-14=-634/133, 6-8=-634/135
BOT CHORD 13-14=-94/500, 11-12=-282/1339, 10-11=-144/1243, 8-9=-23/442
WEBS 4-11=0/405, 5-11=-701/254, 3-11=-788/304

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-12, Interior(1) 2-0-12 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 12-10-8, Exterior(2E) 12-10-8 to 15-10-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	A4	Roof Special	1	1	I57761078
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:33 2023 Page 1
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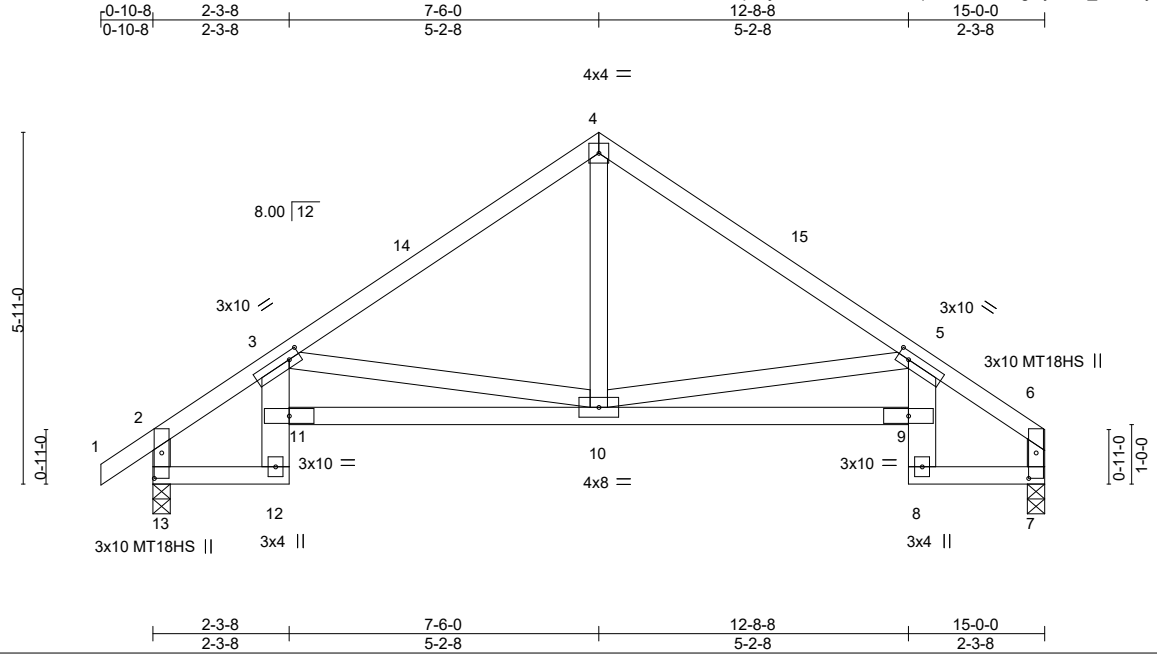


Plate Offsets (X,Y)-- [3:0-2-4,0-1-8], [5:0-2-4,0-1-8], [6:0-5-2,0-1-8], [13:0-5-2,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.06	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11	9-10	>999	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 76 lb	FT = 20%

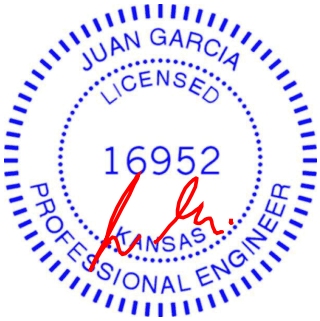
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-12,5-8: 2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except*
2-13,6-7: 2x4 SP No.2

BRACING-
TOP CHORD Sheathed or 5-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 13=0-3-8, 7=0-3-8
Max Horz 13=160(LC 7)
Max Uplift 13=-87(LC 10), 7=-64(LC 11)
Max Grav 13=736(LC 1), 7=659(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-682/112, 3-4=-790/141, 4-5=-790/141, 5-6=-675/119, 2-13=-636/136, 6-7=-537/88
BOT CHORD 12-13=-105/493, 10-11=-304/1326, 9-10=-191/1273, 7-8=-46/453
WEBS 4-10=-4/406, 5-10=-728/273, 3-10=-782/312

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-12, Interior(1) 2-0-12 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 11-10-4, Exterior(2E) 11-10-4 to 14-10-4 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 7.
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.



April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	A5	Common Girder	1	2	I57761079
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:36 2023 Page 1
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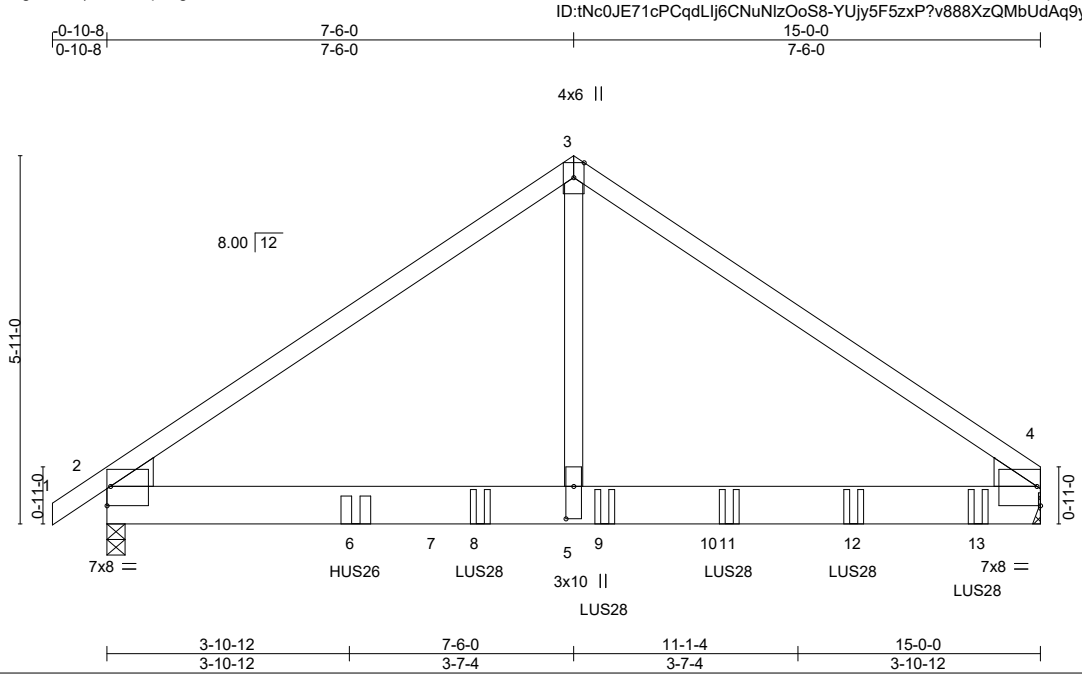

Plate Offsets (X,Y)-- [2:Edge,0-3-12], [4:Edge,0-3-12], [5:0-6-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.09	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.16	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 170 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-6-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=Mechanical
Max Horz 2=139(LC 7)
Max Uplift 2=-720(LC 8), 4=-722(LC 9)
Max Grav 2=3765(LC 1), 4=4829(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4998/870, 3-4=-4974/865
BOT CHORD 2-5=-616/3892, 4-5=-616/3892
WEBS 3-5=-846/5212

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 2=720, 4=722.
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 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.
11) Use Simpson Strong-Tie LUS28 (6-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-0 from the left end to 14-0-0 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

April 14,2023

Continued on page 2

LOAD CASE(S) Standard

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 2-4=-20
   Concentrated Loads (lb)
   Vert: 6=-1541(F) 8=-1130(F) 9=-1130(F) 11=-1130(F) 12=-1130(F) 13=-1130(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	B1	Flat Girder	1	1	I57761080
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:38 2023 Page 1
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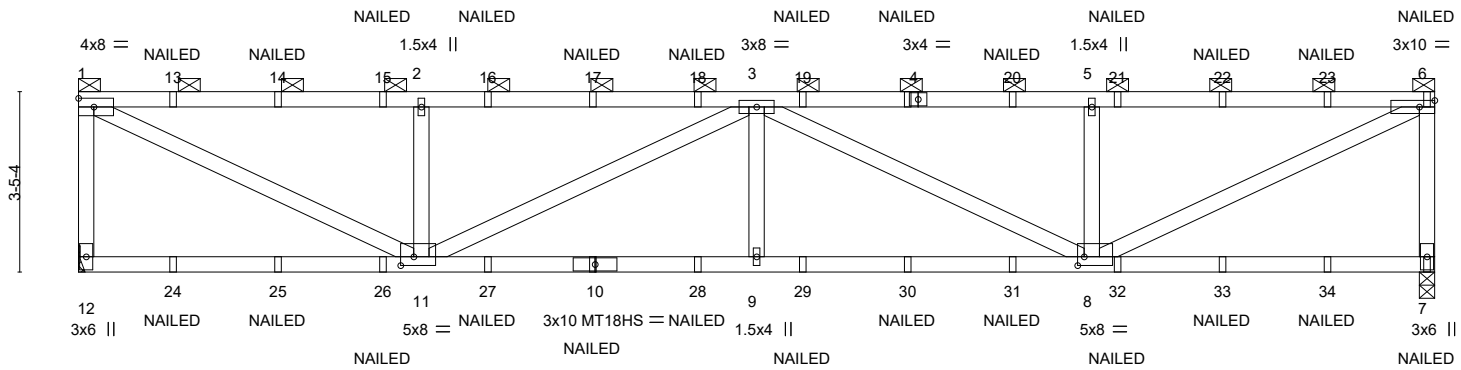
6-6-6	12-11-1	19-3-11	25-10-2
6-6-6	6-4-10	6-4-10	6-6-7

Scale = 1:43.9



6-6-6	12-11-1	19-3-11	25-10-2
6-6-6	6-4-10	6-4-10	6-6-7

Plate Offsets (X,Y)-- [8:0-1-8,0-2-0], [11:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.22	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.53	9-11	>581	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 130 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E *Except*
4-6: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except*
1-12,6-7,1-11,6-8: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (3-3-3 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-11-4 oc bracing.

REACTIONS. (size) 12=Mechanical, 7=0-3-8
Max Horz 12=116(LC 7)
Max Uplift 12=-458(LC 4), 7=-505(LC 5)
Max Grav 12=1561(LC 1), 7=1671(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-1486/494, 1-2=-2563/754, 2-3=-2563/754, 3-5=-2609/806, 5-6=-2609/806, 6-7=-1548/562
BOT CHORD 9-11=-1050/3399, 8-9=-1050/3399
WEBS 1-11=-813/2791, 2-11=-597/351, 3-11=-932/307, 3-9=0/363, 3-8=-881/248, 5-8=-679/399, 6-8=-885/2856

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 12=458, 7=505.
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.
10) "NAILED" indicates 3-10d Nails (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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Continued on page 2

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-6=-70, 7-12=-20

Concentrated Loads (lb)

Vert: 4=-44(F) 6=-82(F) 7=-35(F) 10=-24(F) 13=-44(F) 14=-44(F) 15=-44(F) 16=-44(F) 17=-44(F) 18=-44(F) 19=-44(F) 20=-44(F) 21=-44(F) 22=-44(F) 23=-44(F) 24=-24(F) 25=-24(F) 26=-24(F) 27=-24(F) 28=-24(F) 29=-24(F) 30=-24(F) 31=-24(F) 32=-24(F) 33=-24(F) 34=-24(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	B2	Flat	1	1	I57761081
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:39 2023 Page 1
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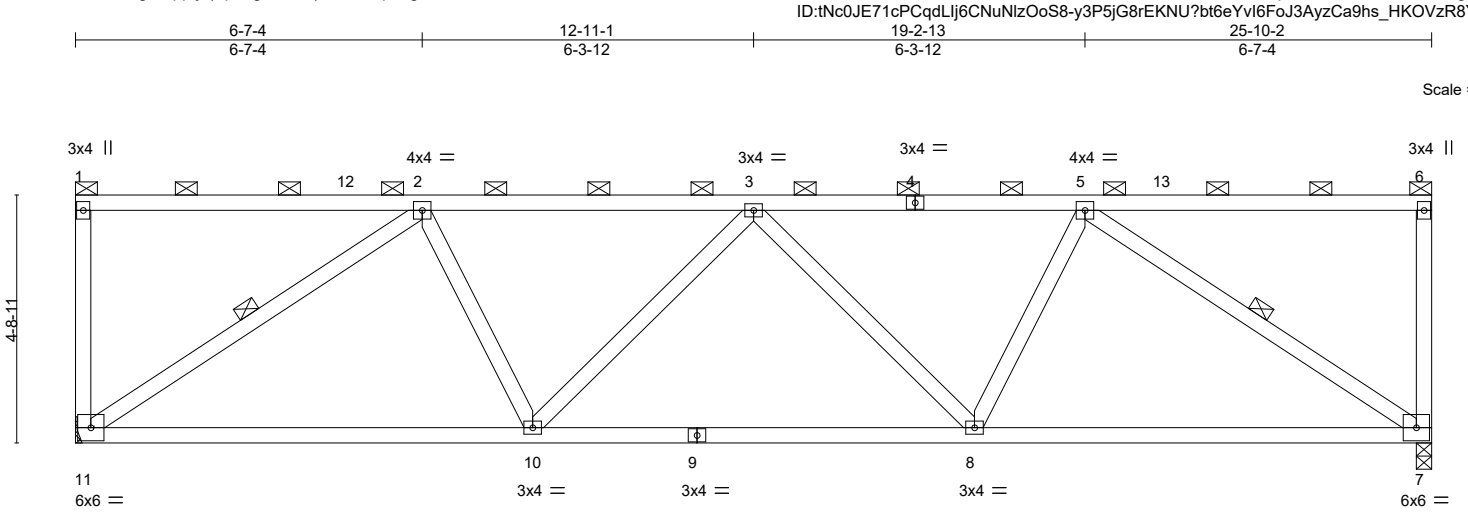

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.17	8-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.37	8-10	>824	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 130 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-6: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except*
9-11: 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except*
1-11,6-7: 2x4 SP No.2

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

REACTIONS. (size) 11=Mechanical, 7=0-3-8
Max Horz 11=-163(LC 6)
Max Uplift 11=-210(LC 6), 7=-210(LC 7)
Max Grav 11=1150(LC 1), 7=1150(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1508/500, 3-5=-1521/564
BOT CHORD 10-11=-332/1310, 8-10=-480/1724, 7-8=-387/1335
WEBS 2-11=-1550/635, 2-10=-56/487, 3-10=-315/231, 3-8=-296/138, 5-8=0/471, 5-7=-1587/571

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 5-1-12, Exterior(2) 5-1-12 to 20-8-6, Corner(3) 20-8-6 to 25-8-6 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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 11=210, 7=210.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	B3	Half Hip	1	1	I57761082
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:41 2023 Page 1
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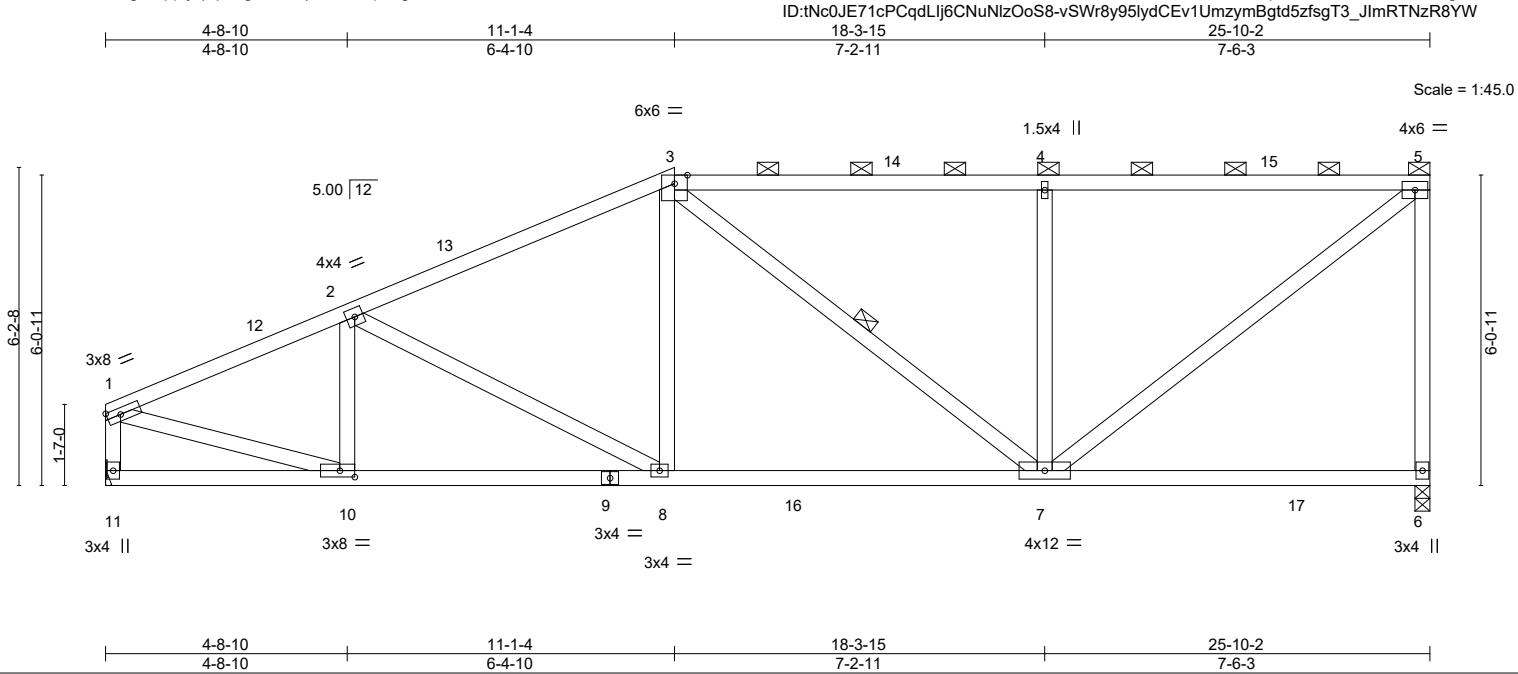

Plate Offsets (X,Y)-- [10:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.12	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.21	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 137 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except*
5-6,1-11: 2x4 SP No.2

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

REACTIONS. (size) 6=0-3-8, 11=Mechanical
Max Horz 11=235(LC 9)
Max Uplift 6=-192(LC 7), 11=-114(LC 10)
Max Grav 6=1234(LC 2), 11=1203(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1635/206, 2-3=-1530/239, 3-4=-1196/233, 4-5=-1194/231, 5-6=-1093/225, 1-11=-1130/162
BOT CHORD 10-11=-222/290, 8-10=-276/1473, 7-8=-250/1342
WEBS 2-10=-292/119, 3-8=0/334, 4-7=-606/237, 1-10=-167/1470, 5-7=-234/1482

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-10-5, Exterior(2R) 6-10-5 to 15-4-2, Interior(1) 15-4-2 to 22-8-6, Exterior(2E) 22-8-6 to 25-8-6 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 6=192, 11=114.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	B4	Half Hip	1	1	I57761083
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:43 2023 Page 1
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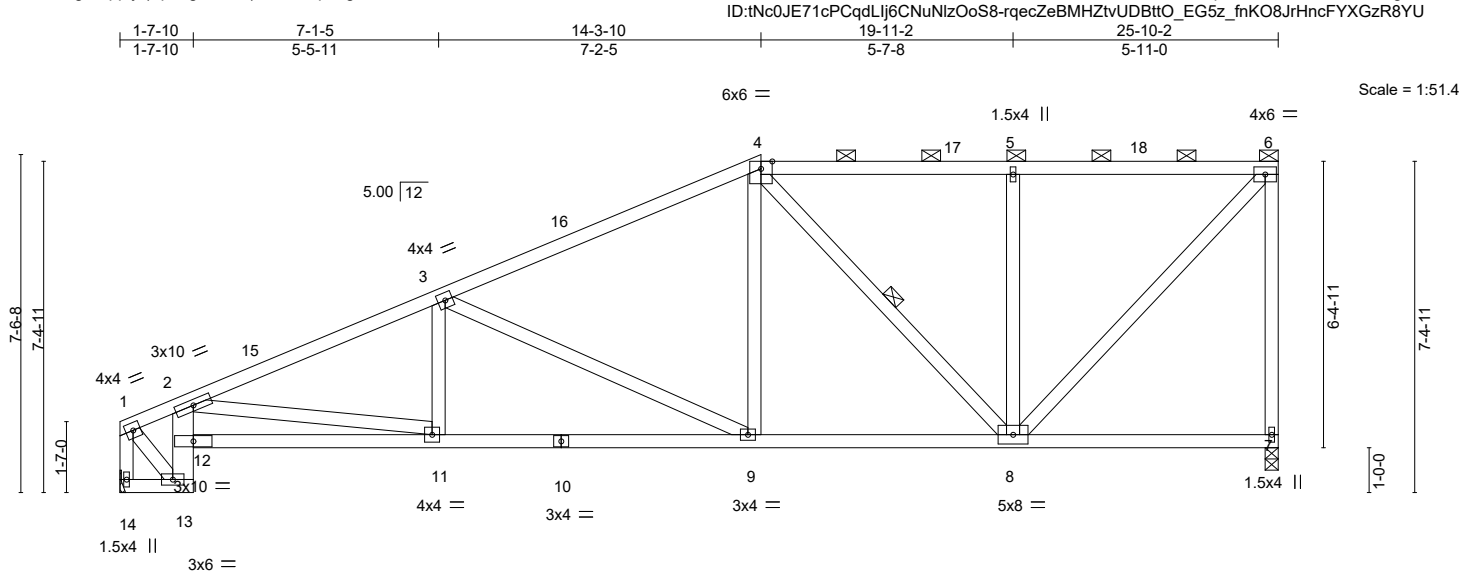


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.18	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.39	9-11	>784	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 144 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-13: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except*
6-7,1-14: 2x4 SP No.2

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

REACTIONS. (size) 7=0-3-8, 14=Mechanical
Max Horz 14=275(LC 7)
Max Uplift 7=-185(LC 7), 14=-134(LC 10)
Max Grav 7=1150(LC 1), 14=1150(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-814/98, 2-3=-2155/270, 3-4=-1425/232, 4-5=-889/219, 5-6=-887/218, 6-7=-1095/210, 1-14=-1147/149
BOT CHORD 13-14=-261/307, 12-13=-676/104, 2-12=-646/126, 11-12=-570/1686, 9-11=-323/1930, 8-9=-228/1213
WEBS 2-11=-93/352, 3-11=0/280, 3-9=-777/230, 4-9=-18/478, 4-8=-485/107, 5-8=-473/185, 6-8=-204/1269, 1-13=-125/959

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-0-11, Exterior(2R) 10-0-11 to 18-6-9, Interior(1) 18-6-9 to 22-8-6, Exterior(2E) 22-8-6 to 25-8-6 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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=185, 14=134.
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.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	B5	Hip	1	1	I57761084
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:45 2023 Page 1
ID:tNc0JE71cPCqdLIj6CNuNlzOoS8-nDmM_KCcpA8djWKG?p0iLW2JCa?3cHEaEwkfc9zR8YS

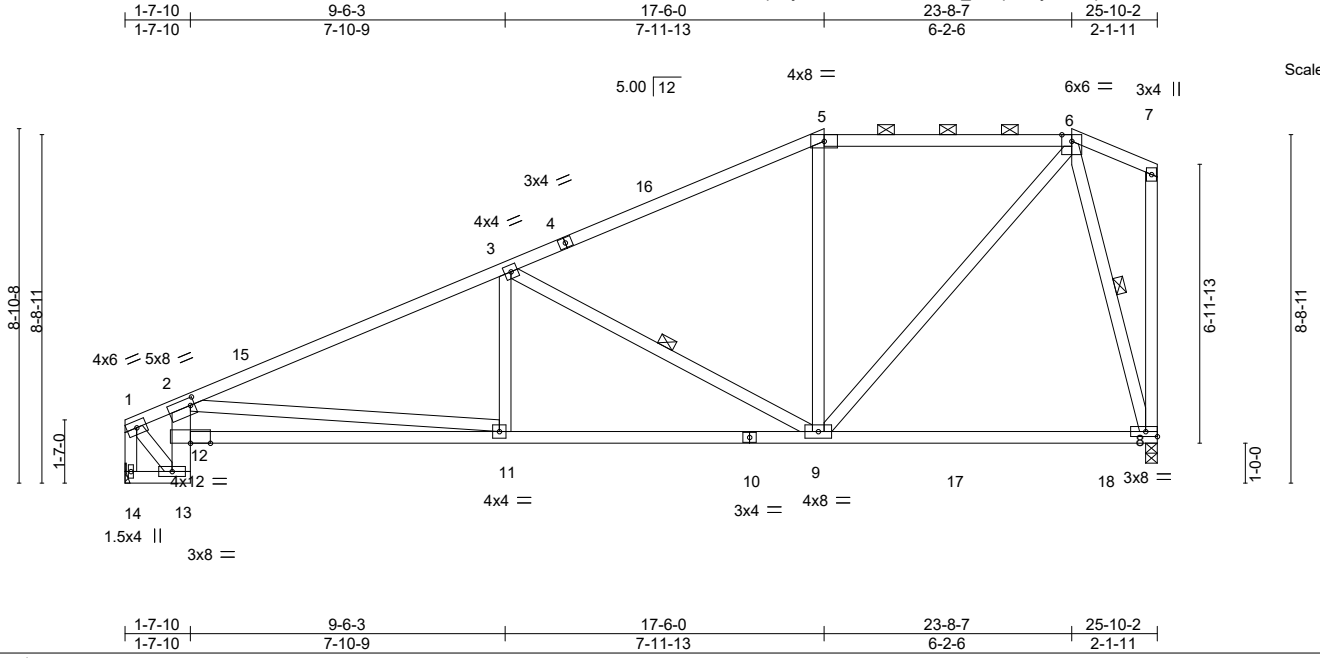


Plate Offsets (X,Y)-- [2:0-1-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.29	8-9	>999	240	MT20	118/123
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.46	8-9	>667	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 147 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except*
2-13: 1 1/2" x 5 1/2" 2.0E Microllam® LVL, 10-12: 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except*
7-8: 2x4 SP No.2

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

REACTIONS. (size) 14=Mechanical, 8=0-3-8
Max Horz 14=301(LC 7)
Max Uplift 14=-148(LC 10), 8=-145(LC 7)
Max Grav 14=1189(LC 2), 8=1232(LC 2)

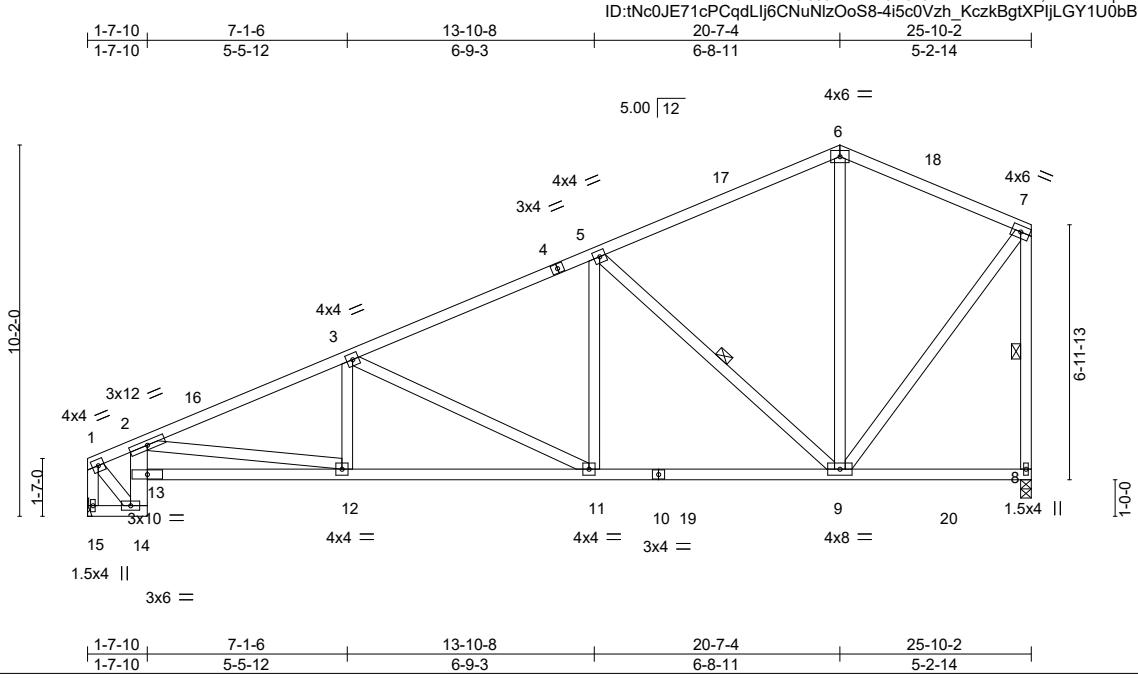
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-843/113, 2-3=-2017/279, 3-5=-1120/219, 5-6=-949/243, 1-14=-1177/163
BOT CHORD 13-14=-285/328, 12-13=-706/115, 2-12=-634/160, 11-12=-625/2041, 9-11=-289/1780, 8-9=-110/291
WEBS 2-11=-483/356, 3-11=0/349, 3-9=-946/270, 1-13=-144/1014, 6-8=-1082/243, 6-9=-144/1022

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 23-8-7, Exterior(2E) 23-8-7 to 25-8-6 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 14=148, 8=145.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	B6	Roof Special	1	1	I57761085
					Job Reference (optional)

8.630 s Feb 23 2023 MiTek Industries, Inc. Fri Apr 14 09:08:59 2023 Page 1
ID:tNc0JE71cPCqdLIj6CNuNlzOoS8-4i5c0Vzh_KczkBgtXPIjLGY1U0bBBaE37yGdndzR092



LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.14	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.23	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 150 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-14: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except*
1-15,7-8: 2x4 SP No.2

BRACING-
TOP CHORD Sheathed, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-9, 7-8

REACTIONS. (size) 15=Mechanical, 8=0-3-8
Max Horz 15=298(LC 7)
Max Uplift 15=-153(LC 10), 8=-153(LC 10)
Max Grav 15=1199(LC 2), 8=1235(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-845/126, 2-3=-2191/333, 3-5=-1524/245, 5-6=-715/216, 6-7=-688/225, 1-15=-1188/172, 7-8=-1141/207
BOT CHORD 14-15=-283/40, 13-14=-693/91, 2-13=-631/124, 12-13=-567/1805, 11-12=-390/1970, 9-11=-190/1337
WEBS 2-12=0/343, 3-11=-704/221, 5-11=-8/595, 5-9=-1012/247, 1-14=-130/998, 7-9=-118/960

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-7-4, Exterior(2R) 17-7-4 to 22-8-6, Exterior(2E) 22-8-6 to 25-8-6 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 15 and 153 lb uplift at joint 8.
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.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	B7	Roof Special Girder	1	3	I57761086
					Job Reference (optional)

8.630 s Nov 21 2022 MiTek Industries, Inc. Fri Apr 14 08:05:47 2023 Page 1
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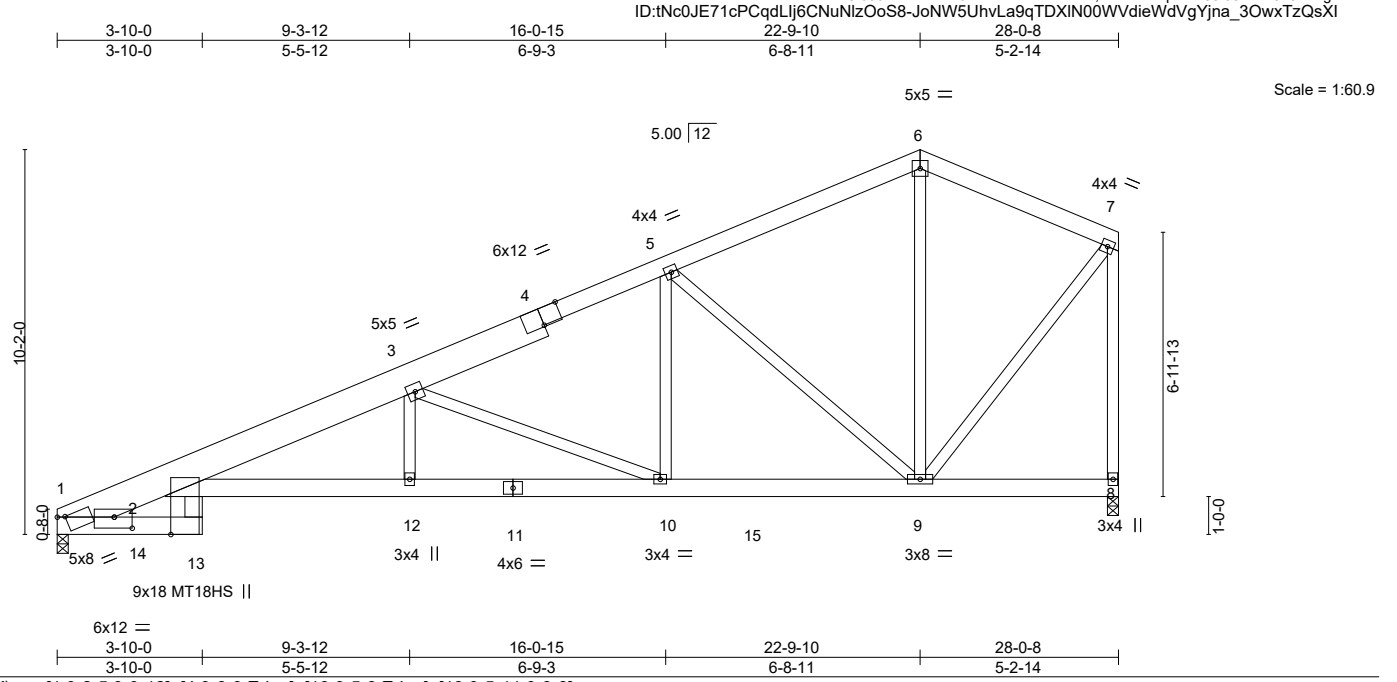

Plate Offsets (X,Y)-- [1:0-2-5,0-0-12], [4:0-6-0,Edge], [13:0-5-8,Edge], [13:0-5-11,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.20	13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.36	13	>919	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.15	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 574 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
1-4: 2x10 SP 2400F 2.0E
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except*
7-8: 2x4 SP 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, Except:
6-0-0 oc bracing: 1-13.

REACTIONS. (lb/size) 1=5741/0-3-8, 8=1584/0-3-8
Max Horz 1=334(LC 8)
Max Uplift 1=-827(LC 8), 8=-236(LC 8)
Max Grav 1=5741(LC 1), 8=1632(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-564/0, 2-3=-5006/729, 3-4=-2474/323, 4-5=-2344/351, 5-6=-973/159, 6-7=-961/183, 7-8=-1570/260
BOT CHORD 1-14=-1106/157, 13-14=-1106/157, 2-13=-386/2661, 2-12=-996/5096, 11-12=-996/5098, 10-11=-996/5098, 10-15=-418/2164, 9-15=-418/2164
WEBS 3-12=0/444, 3-10=-3198/628, 5-10=-154/1456, 5-9=-1743/373, 6-9=0/375, 7-9=-224/1386

NOTES-
1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 827 lb uplift at joint 1 and 236 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4809 lb down and 742 lb up at 2-0-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

April 14,2023

LOAD CASE(S) Standard

Continued on page 2

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-6=-70, 6-7=-70, 1-13=-20, 2-8=-20
   Concentrated Loads (lb)
   Vert: 14=-4809(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	B8	Roof Special	2	1	I57761087
					Job Reference (optional)

8.630 s Feb 23 2023 MiTek Industries, Inc. Fri Apr 14 09:10:27 2023 Page 1
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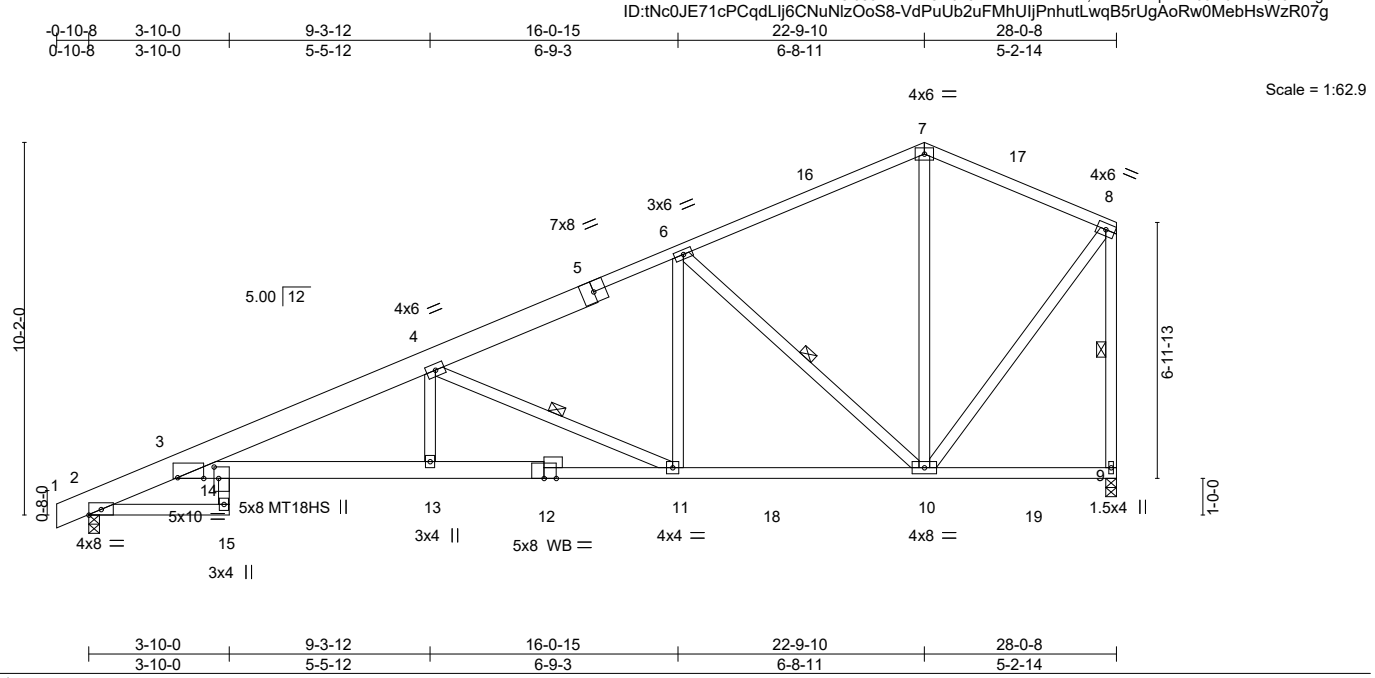

Plate Offsets (X,Y)-- [2:Edge,0-1-13], [3:0-8-9,Edge], [14:0-3-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.28	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.49	13-14	>684	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.20	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 183 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
1-5: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
14-15: 2x4 SP 1650F 1.5E, 3-12: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except*
8-9: 2x4 SP No.2
OTHERS 2x4 SPF No.3

BRACING-

TOP CHORD Sheathed or 4-0-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-1-3 oc bracing: 11-13.
WEBS 1 Row at midpt 8-9, 4-11, 6-10

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=309(LC 7)
Max Uplift 2=-194(LC 10), 9=-167(LC 10)
Max Grav 2=1376(LC 2), 9=1339(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1071/99, 3-4=-3020/434, 4-6=-1749/279, 6-7=-781/216, 7-8=-754/224, 8-9=-1248/206
BOT CHORD 2-15=-102/491, 3-14=-418/2314, 13-14=-520/2805, 11-13=-520/2808, 10-11=-226/1520
WEBS 8-10=-132/1062, 7-10=-19/254, 4-13=0/427, 4-11=-1412/323, 6-11=-51/806, 6-10=-1176/284

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-5-1, Interior(1) 2-5-1 to 19-9-10, Exterior(2R) 19-9-10 to 24-10-12, Exterior(2E) 24-10-12 to 27-10-12 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 2 and 167 lb uplift at joint 9.
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.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	C1	Roof Special	2	1	I57761088
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:51 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-cN7dENHNP0unRRoPL476bnIK2?1b0xXSdsBzpozR8YM

-0-10-8	3-3-8	6-5-7	9-3-12	16-0-15	22-9-10	29-6-5	35-0-0	39-1-12	42-0-0	42-10-8
0-10-8	3-3-8	3-1-15	2-10-5	6-9-3	6-8-11	6-8-11	5-5-11	4-1-12	2-10-4	0-10-8

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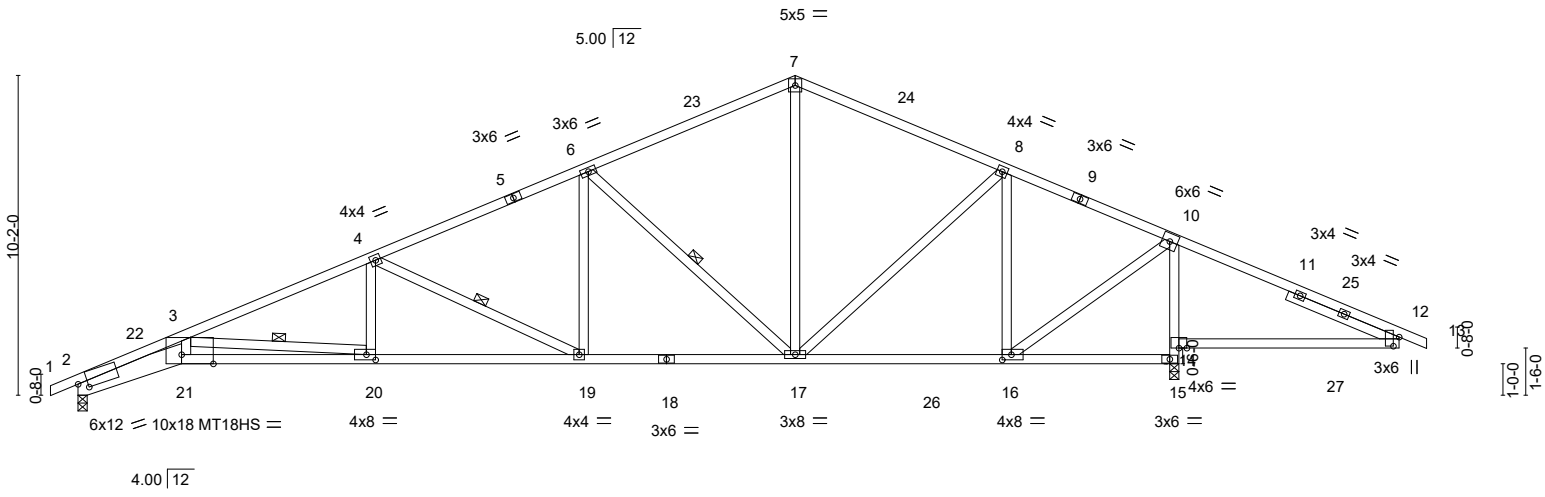


3-3-8	6-5-7	9-3-12	16-0-15	22-9-10	29-6-5	35-0-0	42-0-0
3-3-8	3-1-15	2-10-5	6-9-3	6-8-11	6-8-11	5-5-11	7-0-0

Plate Offsets (X,Y)-- [2:0-3-11,0-2-6], [12:0-3-7,0-2-3], [16:0-3-8,0-2-0], [20:0-3-8,0-2-0], [21:1-0-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.43	20-21	>959	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.76	20-21	>546	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.29	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 219 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP 1650F 1.5E *Except*
	7-9: 2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except*
	2-21: 2x8 SP 2400F 2.0E, 18-21: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.3
SLIDER	Right 2x4 SP No.2 3-9-12

BRACING-

TOP CHORD	Sheathed.
BOT CHORD	Rigid ceiling directly applied or 2-10-1 oc bracing.
WEBS	1 Row at midpt 4-19, 6-17, 3-20

REACTIONS. (size) 2=0-3-8, 15=0-3-8
Max Horz 2=201(LC 10)
Max Uplift 2=-230(LC 10), 15=-269(LC 7)
Max Grav 2=1613(LC 2), 15=2445(LC 2)

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

TOP CHORD	2-3=-7080/1162, 3-4=-3616/529, 4-6=-2492/372, 6-7=-1494/263, 7-8=-1486/281, 8-10=-1043/181, 10-12=-613/857
BOT CHORD	2-21=-1242/6525, 20-21=-1129/5826, 19-20=-565/3317, 17-19=-310/2232, 16-17=-56/902, 15-16=-659/586, 14-15=-2379/791, 10-14=-2229/621, 12-14=-678/588
WEBS	4-20=0/535, 4-19=-1203/283, 6-19=-31/810, 6-17=-1256/297, 7-17=-90/753, 8-17=-171/537, 8-16=-928/311, 10-16=-422/1918, 3-21=-303/2065, 3-20=-2531/568

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 19-9-10, Exterior(2R) 19-9-10 to 25-9-10, Interior(1) 25-9-10 to 39-10-8, Exterior(2E) 39-10-8 to 42-10-8 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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 15=269.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	C2	Hip	1	1	I57761089
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:53 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-YmFOf3Idxe8VglxoTV9agCNhOpmrUsql4Ag4uhzR8YK

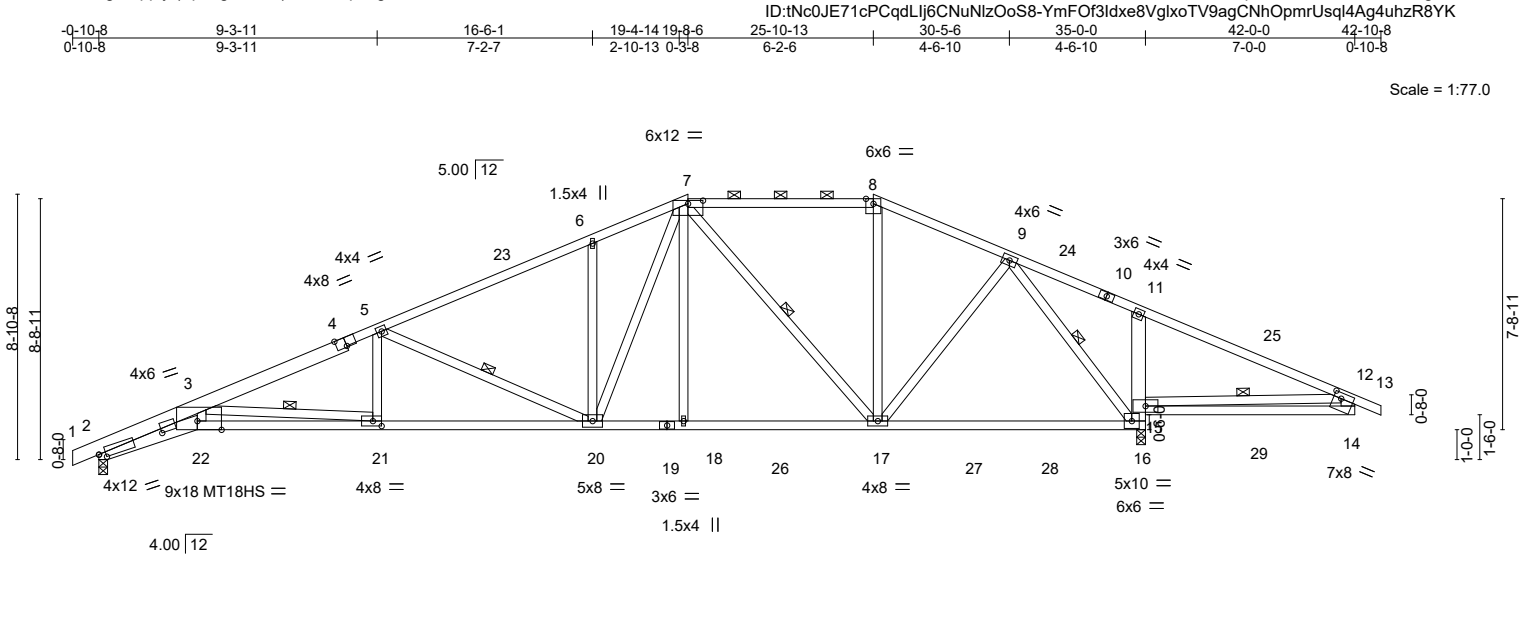


Plate Offsets (X,Y)-- [2:2-2-13,0-0-3], [2:0-2-13,0-1-13], [4:0-4-0,Edge], [7:0-6-0,0-1-5], [14:0-3-0,0-2-4], [21:0-3-8,0-2-0], [22:0-9-11,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.34	21-22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.59	21-22	>703	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.26	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 236 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
4-7: 2x4 SP 1650F 1.5E, 1-4: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except*
2-22: 2x6 SP 2400F 2.0E, 19-22: 2x4 SP 2400F 2.0E
11-16: 2x6 SPF No.2, 14-15: 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except*
12-14: 2x6 SPF No.2

BRACING-

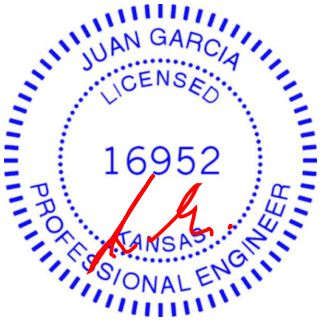
TOP CHORD Sheathed or 2-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-6 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-10-14 oc bracing: 21-22
6-0-0 oc bracing: 15-16.
WEBS 1 Row at midpt 5-20, 3-21, 7-17, 9-16, 12-15

REACTIONS. (size) 2=0-3-8, 16=0-3-8
Max Horz 2=175(LC 10)
Max Uplift 2=-215(LC 10), 16=-323(LC 7)
Max Grav 2=1605(LC 2), 16=2452(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6461/924, 3-5=-3602/462, 5-6=-2363/312, 6-7=-2296/401, 7-8=-1221/194, 8-9=-1365/191, 9-11=-519/781, 11-12=-623/868
BOT CHORD 2-22=-982/5879, 21-22=-878/5173, 20-21=-481/3325, 18-20=-115/1683, 17-18=-115/1680, 16-17=-21/682, 15-16=-592/387, 11-15=-437/196, 14-15=-221/365
WEBS 3-22=-249/1948, 5-21=0/493, 5-20=-1345/289, 6-20=-324/199, 7-20=-264/1062, 3-21=-1860/399, 7-17=-724/166, 9-17=-176/918, 9-16=-2160/575, 12-15=-1077/878

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-5-4, Interior(1) 3-5-4 to 13-9-2, Exterior(2R) 13-9-2 to 31-10-1, Interior(1) 31-10-1 to 38-8-2, Exterior(2E) 38-8-2 to 42-10-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=215, 16=323.
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.



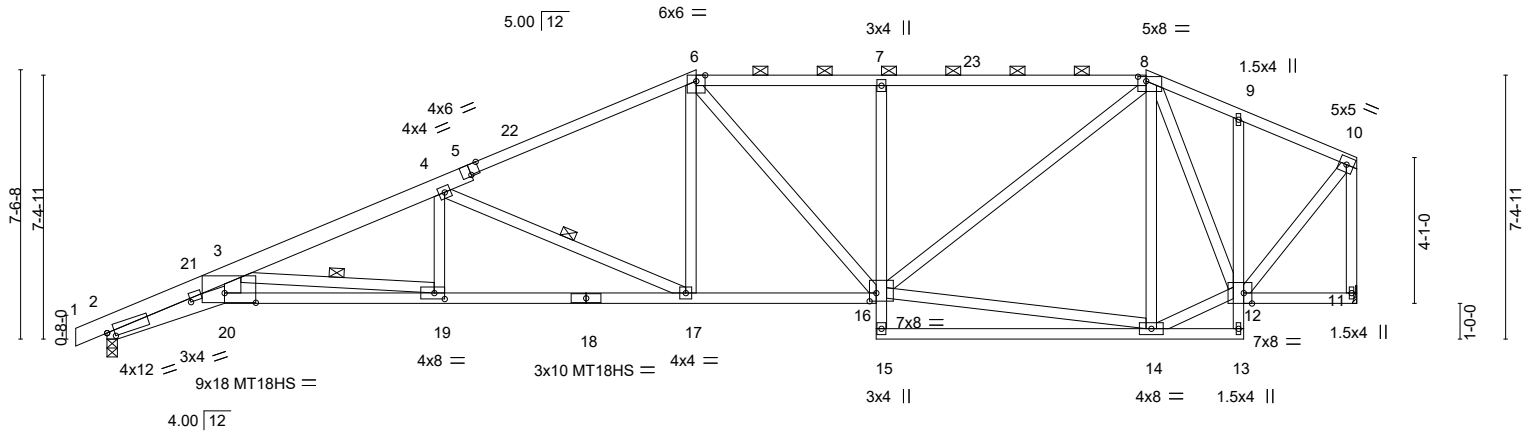
April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	C3	Hip	1	1	I57761090
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:55 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-U8M84lKtSFOCw35BavC2ldT26cS5yq92XT9AyZzR8YI

-0-10-8	3-3-8	9-3-11	16-6-0	29-1-3	31-10-0	35-0-0
0-10-8	3-3-8	6-0-3	7-2-4	12-7-3	2-8-13	3-2-0

Scale: 3/16"=1'



3-3-8	9-3-11	16-6-0	21-6-8	29-1-3	31-10-0	35-0-0
3-3-8	6-0-3	7-2-4	5-0-8	7-6-11	2-8-13	3-2-0

Plate Offsets (X,Y)-- [2:2-6-1,0-0-15], [2:0-2-9,0-1-13], [5:0-3-0,Edge], [8:0-2-12,0-1-8], [12:0-2-12,Edge], [16:0-2-4,0-2-12], [19:0-3-8,0-2-0], [20:0-10-8,0-3-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.33	19-20	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.59	19-20	>703	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 220 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E *Except*
6-8: 2x4 SP 1650F 1.5E, 8-10: 2x4 SP No.2, 1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
2-20: 2x6 SP 2400F 2.0E, 18-20: 2x4 SP 2400F 2.0E
7-15: 2x4 SPF No.3, 16-18: 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except*
3-20: 2x6 SPF No.2, 10-11: 2x4 SP No.2

BRACING-

TOP CHORD Sheathed or 3-5-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-13 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-19, 4-17

REACTIONS. (size) 2=0-3-8, 11=Mechanical
Max Horz 2=184(LC 7)
Max Uplift 2=-193(LC 10), 11=-170(LC 7)
Max Grav 2=1634(LC 1), 11=1561(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6842/871, 3-4=-3660/427, 4-6=-2524/367, 6-7=-2135/388, 7-8=-2137/391, 8-9=-948/249, 9-10=-988/214, 10-11=-1516/227
BOT CHORD 2-20=-926/6247, 19-20=-803/5314, 17-19=-388/3370, 16-17=-270/2221, 7-16=-554/205
WEBS 3-20=-241/2037, 3-19=-1959/418, 4-19=0/456, 4-17=-1242/281, 6-17=-25/650, 14-16=-175/981, 8-16=-199/1392, 8-14=-413/165, 12-14=-131/1117, 8-12=-582/63, 10-12=-159/1353

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-7-8, Interior(1) 2-7-8 to 11-6-10, Exterior(2R) 11-6-10 to 21-8-4, Interior(1) 21-8-4 to 24-1-13, Exterior(2R) 24-1-13 to 31-4-4, Exterior(2E) 31-4-4 to 34-10-4 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=193, 11=170.
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.

April 14,2023

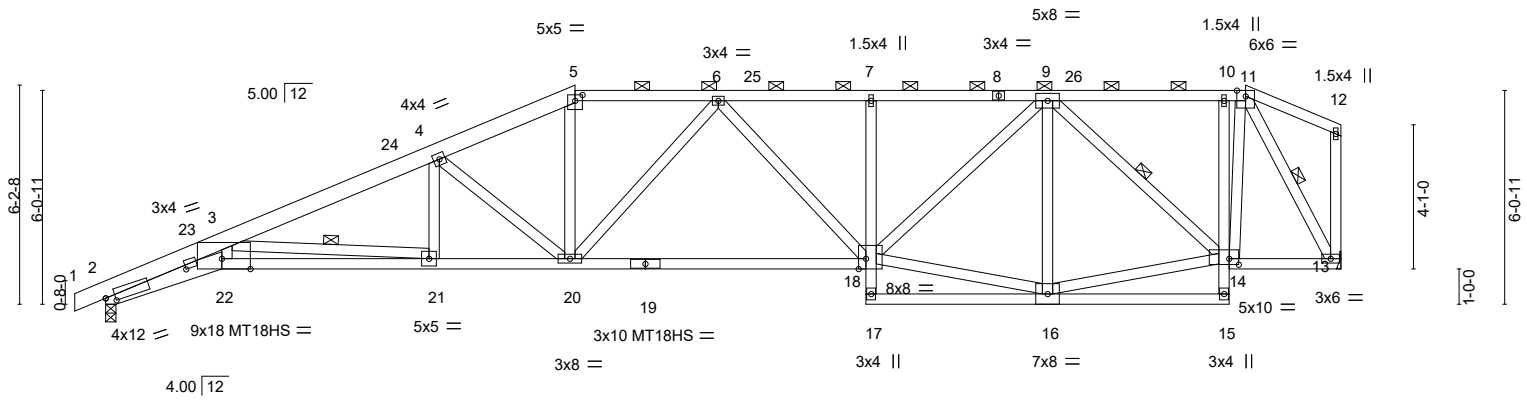
MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	C4	Hip	1	1	I57761091
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:35:57 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-RXUuVQM8_sew9MFZiKEWr2YRJQ5KQfzL?neH1SzR8YG

-0-10-8	9-3-11	13-3-10	17-4-5	21-6-8	26-8-4	31-10-0	32-3-10	35-0-0
0-10-8	9-3-11	3-11-15	4-0-11	4-2-3	5-1-12	5-1-12	0-5-10	2-8-6

Scale = 1:65.3



3-3-8	9-3-11	13-3-10	21-6-8	26-8-4	31-10-0	35-0-0
3-3-8	6-0-3	3-11-15	8-2-14	5-1-12	5-1-12	3-2-0

Plate Offsets (X,Y)-- [2:2-5-1,0-0-11], [2:0-3-5,0-1-13], [5:0-2-8,0-2-0], [14:0-3-4,0-2-0], [18:0-2-8,Edge], [22:0-9-11,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.32	21-22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.64	18-20	>654	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.29	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 221 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-5: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 2-22: 2x6 SP 2400F 2.0E, 19-22: 2x4 SP 2400F 2.0E 7-17: 2x4 SPF No.3
WEBS	2x4 SPF No.3 *Except* 12-13: 2x4 SP No.2

BRACING-

TOP CHORD	Sheathed or 3-5-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-0 max.): 5-11.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-10-4 oc bracing: 21-22 8-6-11 oc bracing: 18-20.
WEBS	1 Row at midpt 9-14, 11-13, 3-21

REACTIONS. (size) 2=0-3-8, 13=Mechanical
Max Horz 2=187(LC 7)
Max Uplift 2=-175(LC 6), 13=-219(LC 7)
Max Grav 2=1634(LC 1), 13=1561(LC 1)

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

TOP CHORD	2-3=-6553/688, 3-4=-3778/457, 4-5=-3037/399, 5-6=-2696/376, 6-7=-2707/438, 7-9=-2690/439, 9-10=-943/208, 10-11=-939/206
BOT CHORD	2-22=-794/5948, 21-22=-715/5248, 20-21=-486/3500, 18-20=-460/2843, 7-18=-311/123, 13-14=-151/775
WEBS	3-22=-178/1925, 5-20=-82/969, 6-20=-387/129, 16-18=-260/1692, 9-18=-196/1325, 14-16=-285/1661, 9-14=-1103/169, 11-14=-208/1312, 11-13=-1614/252, 4-20=-1003/249, 4-21=-6/287, 3-21=-1760/332, 9-16=-560/179

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-7-8, Interior(1) 2-7-8 to 8-4-3, Exterior(2R) 8-4-3 to 18-3-0, Interior(1) 18-3-0 to 27-4-3, Exterior(2R) 27-4-3 to 32-3-10, Exterior(2E) 32-3-10 to 34-10-4 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=175, 13=219.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

MiTek® 16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

NOTES-

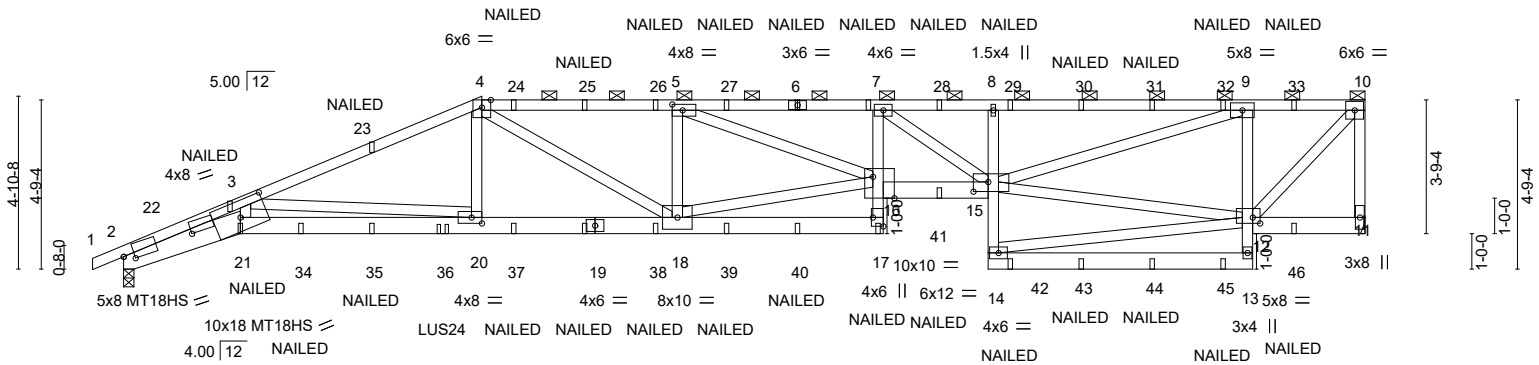
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	C5	Half Hip Girder	1	2	I57761092 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:02 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-nUInY8PGpPHDG87XUuqhY6FEXRrx5wr483M2ifzR8YB

-0-10-8	3-3-8	10-1-3	15-7-6	21-5-0	24-4-8	28-2-0	31-10-0	35-0-0
0-10-8	3-3-8	6-9-11	5-6-2	5-9-10	2-11-8	3-9-8	3-8-0	3-2-0

Scale = 1:65.0



3-3-8	10-1-3	15-7-6	21-5-0	24-4-8	28-2-0	31-10-0	35-0-0
3-3-8	6-9-11	5-6-2	5-9-10	2-11-8	3-9-8	3-8-0	3-2-0

Plate Offsets (X,Y)-- [2:0-3-11,0-1-11], [2:2-0-6,0-0-1], [5:0-3-8,0-2-0], [12:0-2-8,0-2-0], [15:0-5-0,0-3-4], [16:0-7-4,Edge], [17:Edge,0-3-8], [20:0-3-8,0-2-0], [21:0-9-0,0-5-7]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	0.51	17	>810	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.88	17	>476	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.38	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 445 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E *Except*
1-4: 2x4 SP 1650F 1.5E
BOT CHORD 2x6 SPF No.2 *Except*
2-21: 2x8 SP 2400F 2.0E, 19-21,15-16: 2x6 SP 2400F 2.0E
7-17: 2x4 SP 1650F 1.5E, 8-14,9-13: 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except*
10-11,16-18,9-15: 2x4 SP No.2

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

REACTIONS. (size) 11=Mechanical, 2=0-3-8
Max Horz 2=170(LC 5)
Max Uplift 11=-920(LC 5), 2=-777(LC 4)
Max Grav 11=2914(LC 1), 2=2837(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-12239/3490, 3-4=-6982/2104, 4-5=-7598/2482, 5-7=-11293/3673, 7-8=-9049/2908, 8-9=-9003/2923, 9-10=-2605/880, 10-11=-2807/909
BOT CHORD 2-21=-3360/11231, 20-21=-3063/10185, 18-20=-2006/6357, 17-18=-316/994, 16-17=-69/287, 7-16=-311/1153, 15-16=-3710/11323, 14-15=0/277, 8-15=-585/354, 12-13=0/274, 9-12=-2886/1126
WEBS 3-21=-827/3024, 3-20=-3794/1149, 4-20=-309/1367, 4-18=-608/1614, 5-18=-2102/810, 16-18=-2247/6761, 5-16=-1302/3954, 7-15=-2789/930, 10-12=-1239/3787, 12-15=-880/2442, 9-15=-2161/6654

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row 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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER
April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

NOTES-

10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=920, 2=777.
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 at 9-0-0 from the left end to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-10=-70, 2-21=-20, 17-21=-20, 15-16=-20, 13-14=-20, 11-12=-20
   Concentrated Loads (lb)
   Vert: 6=-76(B) 21=-61(B) 19=-85(B) 17=-85(B) 7=-76(B) 22=-122(B) 24=-76(B) 25=-76(B) 26=-76(B) 27=-76(B) 28=-81(B) 29=-109(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-89(B) 34=-5(B) 35=-167(B) 36=-228(B) 37=-85(B) 38=-85(B) 39=-85(B) 40=-85(B) 41=-117(B) 42=-52(B) 43=-52(B) 44=-52(B) 45=-52(B) 46=-73(B)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	D1	ROOF SPECIAL	1	1	I57761093
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:04 2023 Page 1
ID:tNc0JE71cPCqdLIj6CNuNlzOoS8-jtPYzqRXL0XxVRHvcIsAdXKbRFVgZ_oNcNr9nYzR8Y9

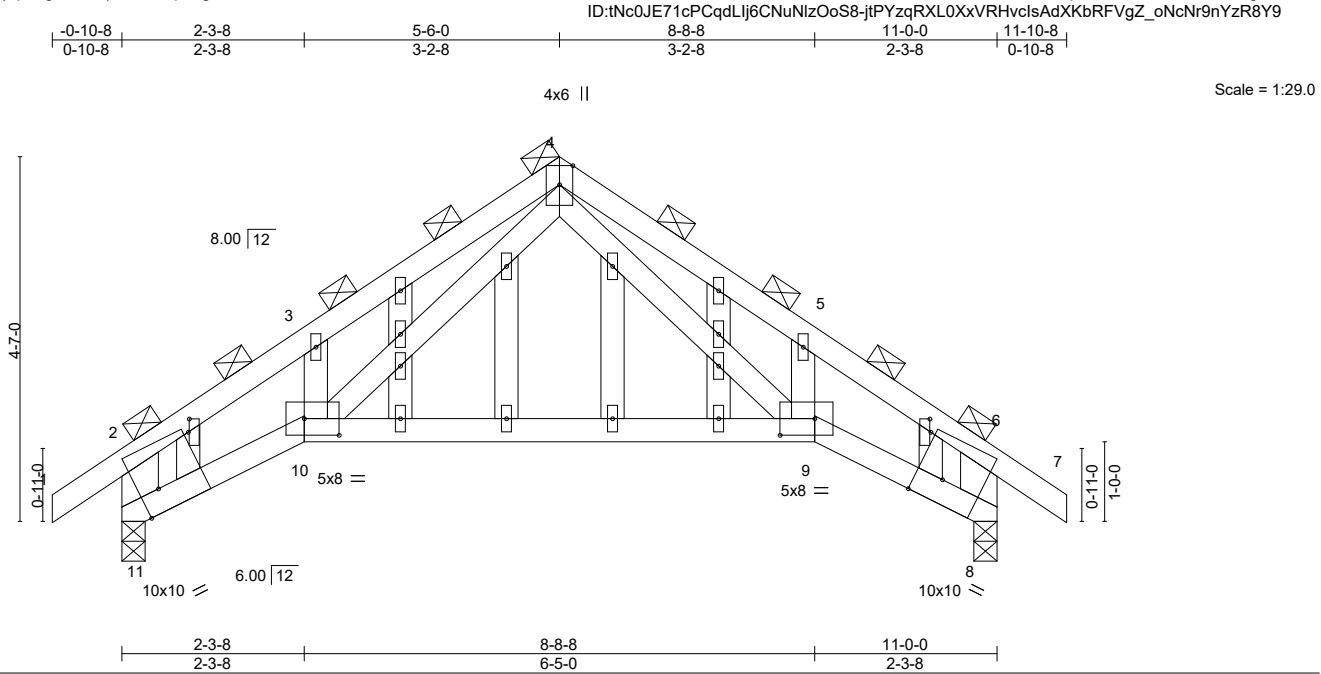


Plate Offsets (X,Y)-- [8:0-4-0,Edge], [9:0-5-4,0-2-8], [10:0-5-4,0-2-8], [11:0-2-14,Edge], [13:0-2-0,0-0-2], [25:0-2-0,0-0-2]

LOADING (psf)		SPACING-	3-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.14	9-10	>885	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.33	9-10	>380	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.16	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 65 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except*
2-11,6-8: 2x6 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (4-8-4 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=203(LC 9)
Max Uplift 11=-104(LC 10), 8=-104(LC 11)
Max Grav 11=828(LC 1), 8=828(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1255/127, 3-4=-1049/294, 4-5=-1022/318, 5-6=-1255/143, 2-11=-1097/202, 6-8=-1097/210
BOT CHORD 10-11=-110/1033, 9-10=0/566, 8-9=0/909
WEBS 4-9=-160/470, 4-10=-194/545

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4, Exterior(2R) 2-5-4 to 8-6-12, Interior(1) 8-6-12 to 8-10-8, Exterior(2E) 8-10-8 to 11-10-8 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) 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=104, 8=104.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	D2	Roof Special	3	1	I57761094
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:06 2023 Page 1
ID:tNc0JE71cPCqdLIj6CNuNlzOoS8-gGXIOVSntdnfkIRIjjueiyQxB2CJ1vDf3hKGrRzR8Y7

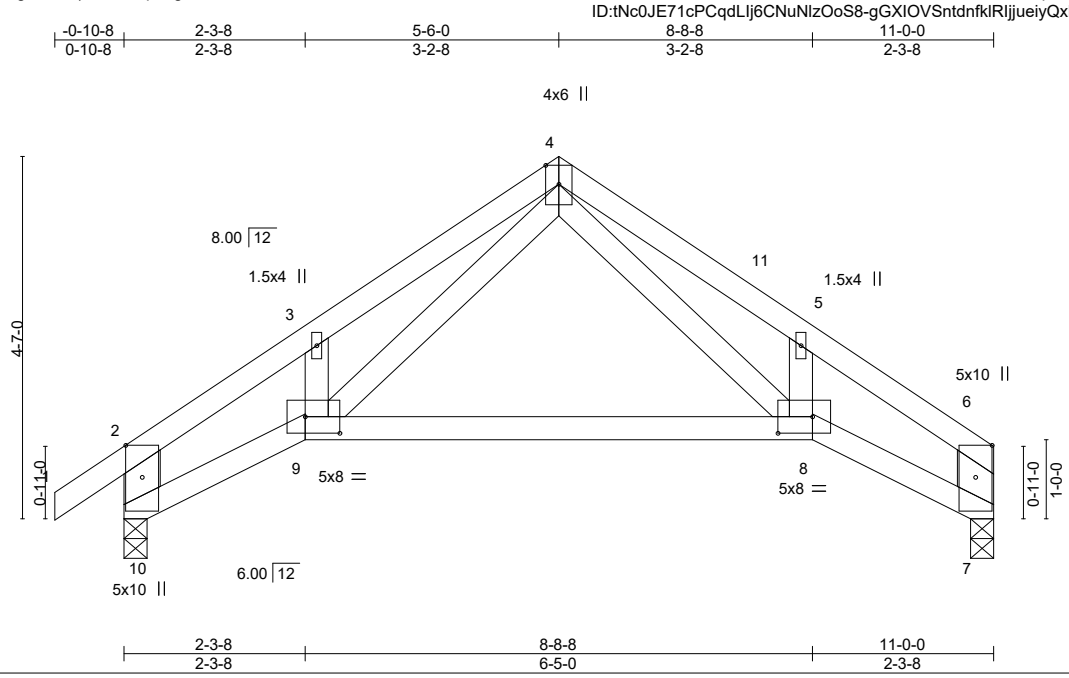


Plate Offsets (X,Y)-- [8:0-5-4,0-2-8], [9:0-5-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.10	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.24	8-9	>528	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 53 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except*
2-10,6-7: 2x6 SPF No.2

BRACING-
TOP CHORD Sheathed or 4-8-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=129(LC 7)
Max Uplift 10=-69(LC 10), 7=-45(LC 11)
Max Grav 10=556(LC 1), 7=470(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-846/131, 3-4=-702/233, 4-5=-702/254, 5-6=-828/144, 2-10=-736/170, 6-7=-621/114
BOT CHORD 9-10=-96/676, 8-9=-8/368, 7-8=-49/606
WEBS 4-8=-120/332, 4-9=-136/366

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4, Exterior(2R) 2-5-4 to 7-9-4, Exterior(2E) 7-9-4 to 10-9-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 10, 7 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 100 lb uplift at joint(s) 10, 7.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	D3	Half Hip Girder	1	2	I57761095
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:07 2023 Page 1
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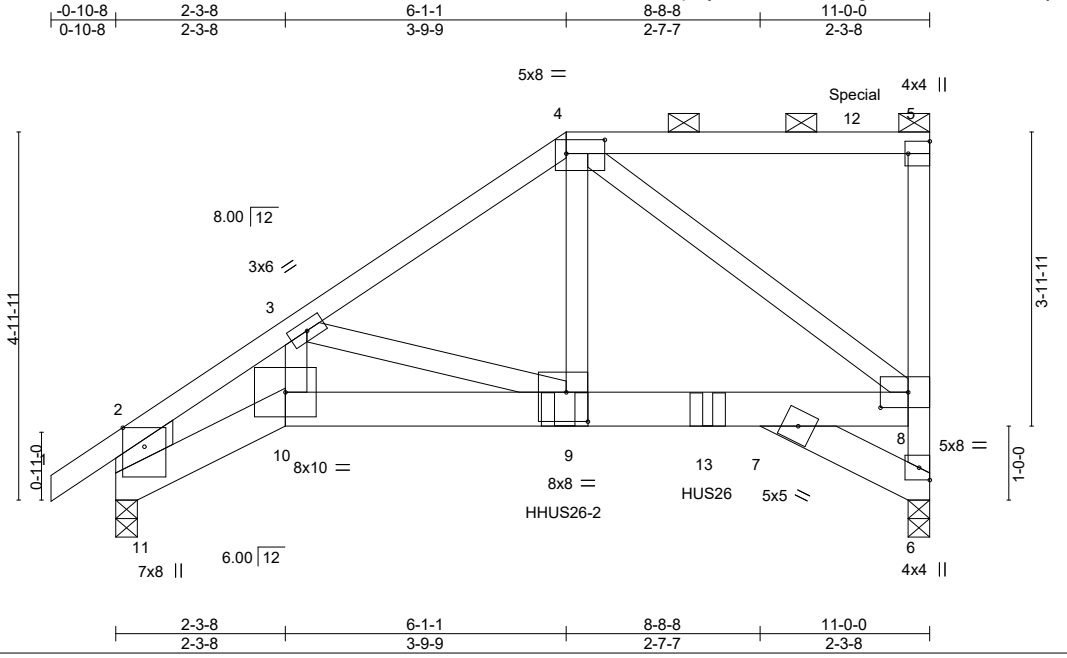

Plate Offsets (X,Y)-- [4:0-6-4,0-2-4], [5:Edge,0-3-8], [8:0-4-8,0-2-8], [9:0-3-8,0-4-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.06	7-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.11	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 140 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SPF No.2 *Except*
10-11: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except*
5-6: 2x4 SP No.2, 2-11: 2x10 SP 2400F 2.0E

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

REACTIONS. (size) 6=0-3-8, 11=0-3-8
Max Horz 11=190(LC 24)
Max Uplift 6=-932(LC 5), 11=-575(LC 8)
Max Grav 6=4630(LC 1), 11=2426(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4129/1047, 3-4=-4210/1033, 6-8=-4454/923, 5-8=-1425/191, 2-11=-2700/687
BOT CHORD 10-11=-935/3028, 9-10=-949/3215, 7-9=-984/3671, 7-8=-987/3681
WEBS 3-9=-305/353, 4-9=-1127/4293, 4-8=-4334/1128

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-2-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 9-4 2x4 - 1 row at 0-4-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 6, 11 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) except (jt=lb) 6=932, 11=575.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie HHUS26-2 (14-SD10212 Girder, 6-SD10212 Truss) or equivalent at 6-0-13 from the left end to connect truss(es) to front face of bottom chord.

April 14,2023

Continued on page 2

NOTES-

12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 8-0-0 from the left end to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1496 lb down and 178 lb up at 10-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-5=-70, 10-11=-20, 7-10=-20, 6-7=-20
   Concentrated Loads (lb)
   Vert: 9=-2988(F) 12=-1496(F) 13=-1541(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	E1	COMMON SUPPORTED GAB	1	1	I57761096
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:09 2023 Page 1
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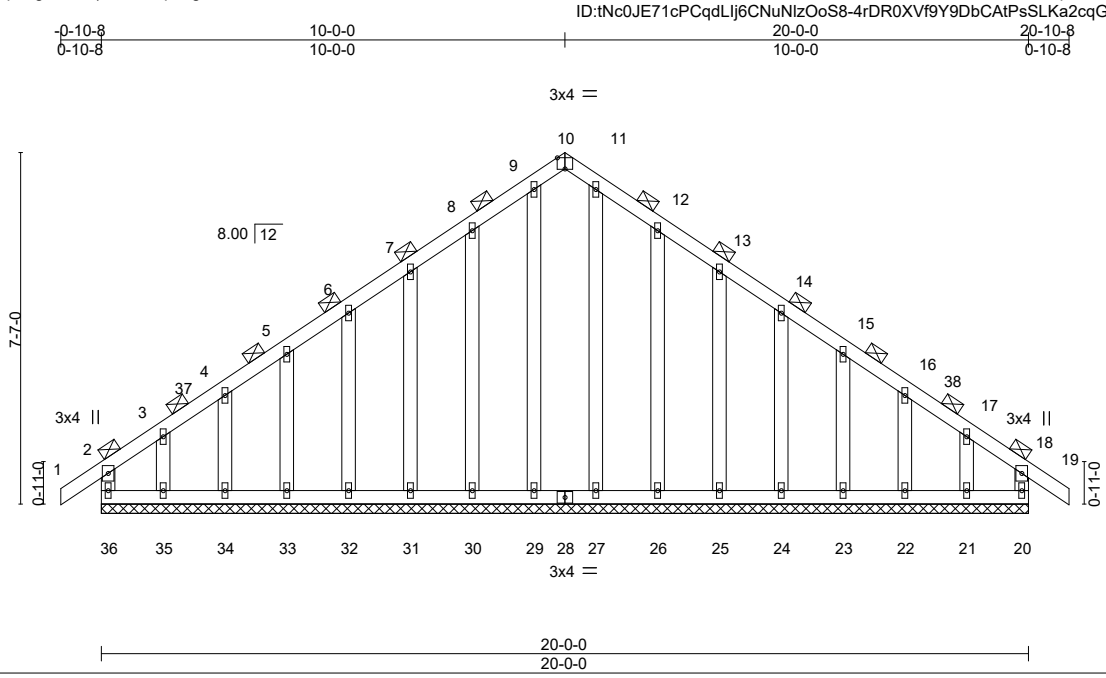

Plate Offsets (X,Y)-- [10:0-2-0,Edge]

LOADING (psf)		SPACING- 3-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	19	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 133 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
18-20: 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 36=-312(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 10, 34, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22 except 36=-179(LC 6), 20=-103(LC 7), 35=-170(LC 10), 21=-146(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 20, 34, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21 except 36=296(LC 18), 10=323(LC 11), 35=258(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-113/277, 7-8=-143/343, 8-9=-180/413, 9-10=-189/446, 10-11=-189/446, 11-12=-180/413, 12-13=-143/343, 13-14=-108/277

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-0-0, Corner(3R) 7-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 17-10-8, Corner(3E) 17-10-8 to 20-10-8 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) 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 34, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22 except (jt=lb) 36=179, 20=103, 35=170, 21=146.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	E2	Common	3	1	I57761097
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:10 2023 Page 1
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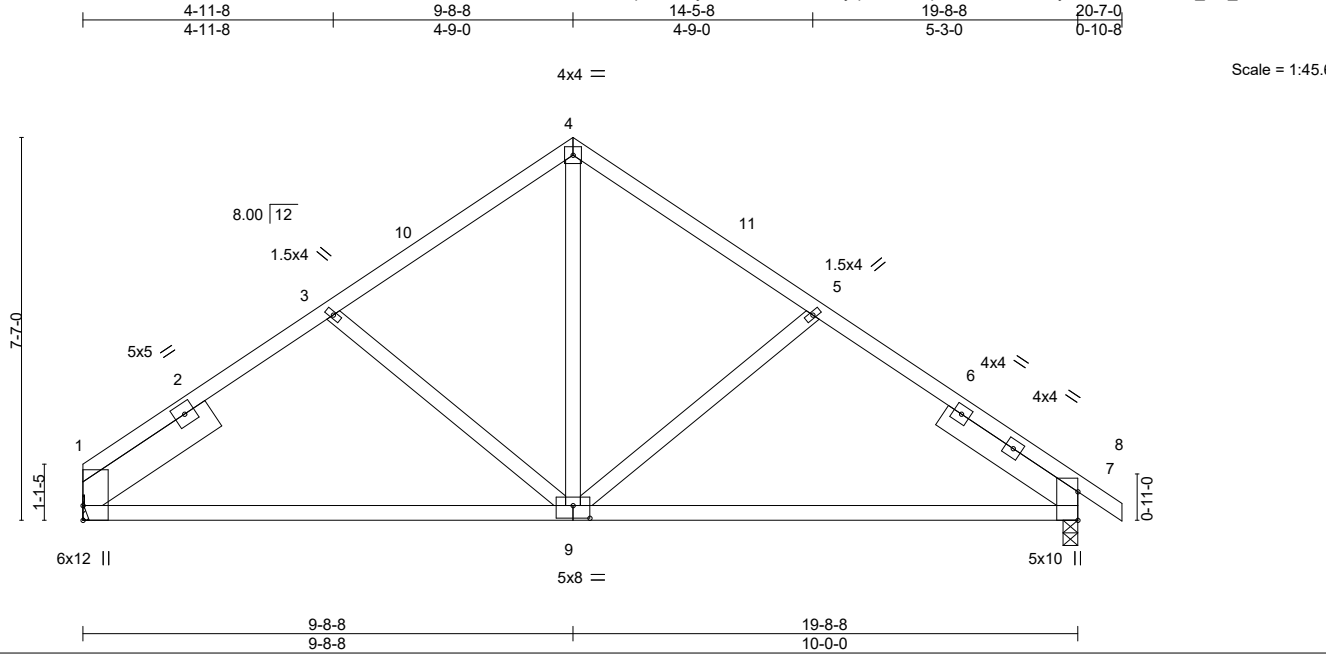

Plate Offsets (X,Y)-- [9:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.26	7-9	>908	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.53	7-9	>449	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 102 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
SLIDER Left 2x8 SPF No.2 3-1-15, Right 2x6 SPF No.2 3-2-12

BRACING-
TOP CHORD Sheathed or 5-9-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=183(LC 7)
Max Uplift 1=-85(LC 10), 7=-107(LC 11)
Max Grav 1=886(LC 1), 7=949(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1106/185, 3-4=-831/182, 4-5=-834/182, 5-7=-1121/186
BOT CHORD 1-9=-141/817, 7-9=-58/830
WEBS 5-9=-318/188, 3-9=-283/182, 4-9=-67/486

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-8-8, Exterior(2R) 6-8-8 to 12-8-8, Interior(1) 12-8-8 to 17-7-0, Exterior(2E) 17-7-0 to 20-7-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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 except (jt=lb) 7=107.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	E3	COMMON	8	1	I57761098
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:12 2023 Page 1
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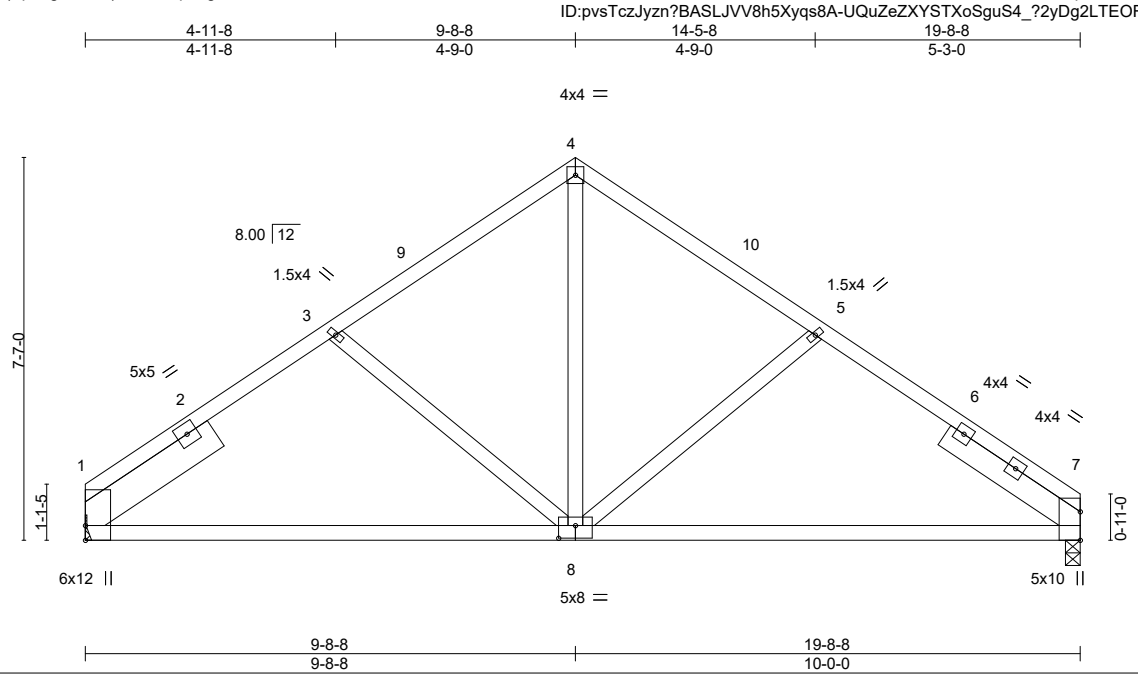

Plate Offsets (X,Y)-- [8:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.26	7-8	>908	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.53	7-8	>448	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 100 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
SLIDER Left 2x8 SPF No.2 3-1-15, Right 2x6 SPF No.2 3-2-12

BRACING-
TOP CHORD Sheathed or 5-9-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-183(LC 8)
Max Uplift 1=-85(LC 10), 7=-88(LC 11)
Max Grav 1=887(LC 1), 7=887(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1108/186, 3-4=-833/183, 4-5=-837/184, 5-7=-1128/188
BOT CHORD 1-8=-141/818, 7-8=-60/836
WEBS 5-8=-323/190, 3-8=-283/182, 4-8=-69/489

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-8-8, Exterior(2R) 6-8-8 to 12-8-8, Interior(1) 12-8-8 to 16-8-8, Exterior(2E) 16-8-8 to 19-8-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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.
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.

April 14,2023

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-5=-70, 1-5=-20
   Concentrated Loads (lb)
   Vert: 1=-157(B) 5=-876(B) 8=-867(B) 10=-868(B) 11=-867(B) 12=-867(B) 13=-867(B) 14=-867(B) 15=-867(B) 16=-867(B) 17=-866(B) 18=-866(B)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J1	Jack-Open	1	1	I57761103
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:20 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-FyNbKIdZawYfQvW_Yf8wGv?SOh8hJGMjHsj?KdzR8Xv

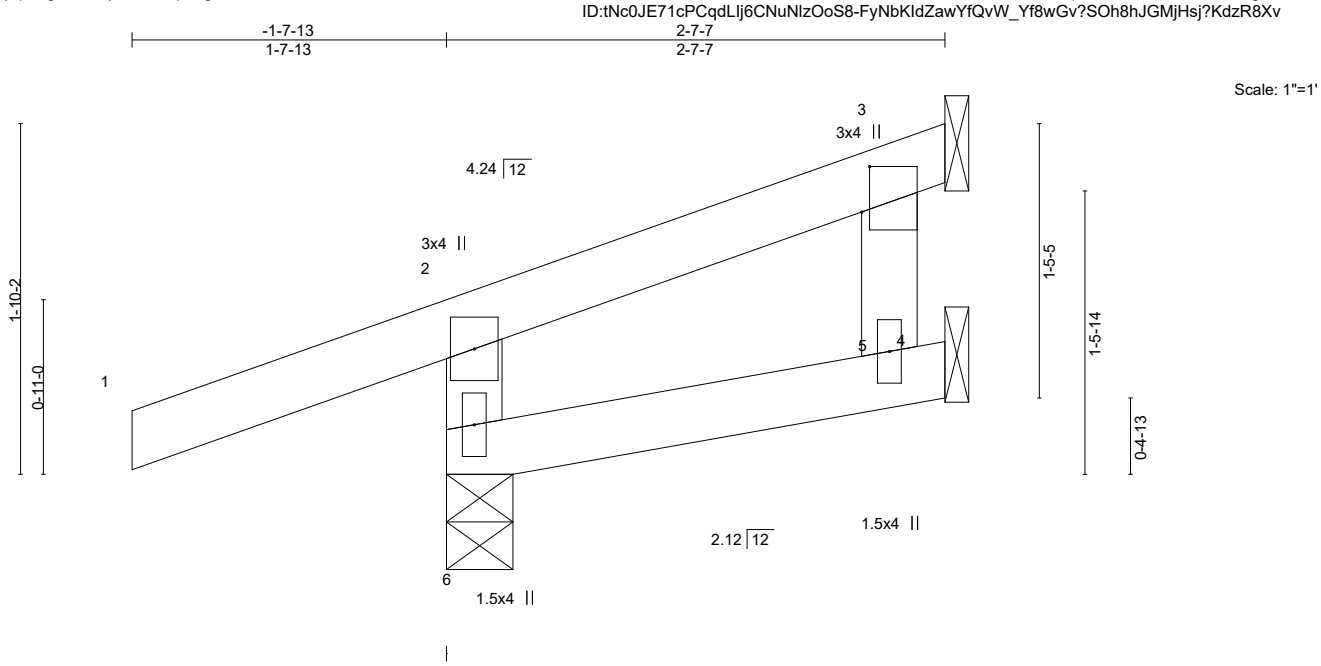

Plate Offsets (X,Y)-- [3:0-2-14,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
3-5: 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 2-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-4-3, 3=Mechanical, 4=Mechanical
Max Horz 6=52(LC 6)
Max Uplift 6=-102(LC 6), 3=-13(LC 10), 4=-41(LC 3)
Max Grav 6=277(LC 1), 3=106(LC 3), 4=13(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-240/303

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=25ft; 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
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 6=102.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J2	Jack-Open	1	1	I57761104
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:30 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-zt_NQjlqD?oFdRGv7mKGg0PDqja9foSCaQ8Xh2zR8Xl

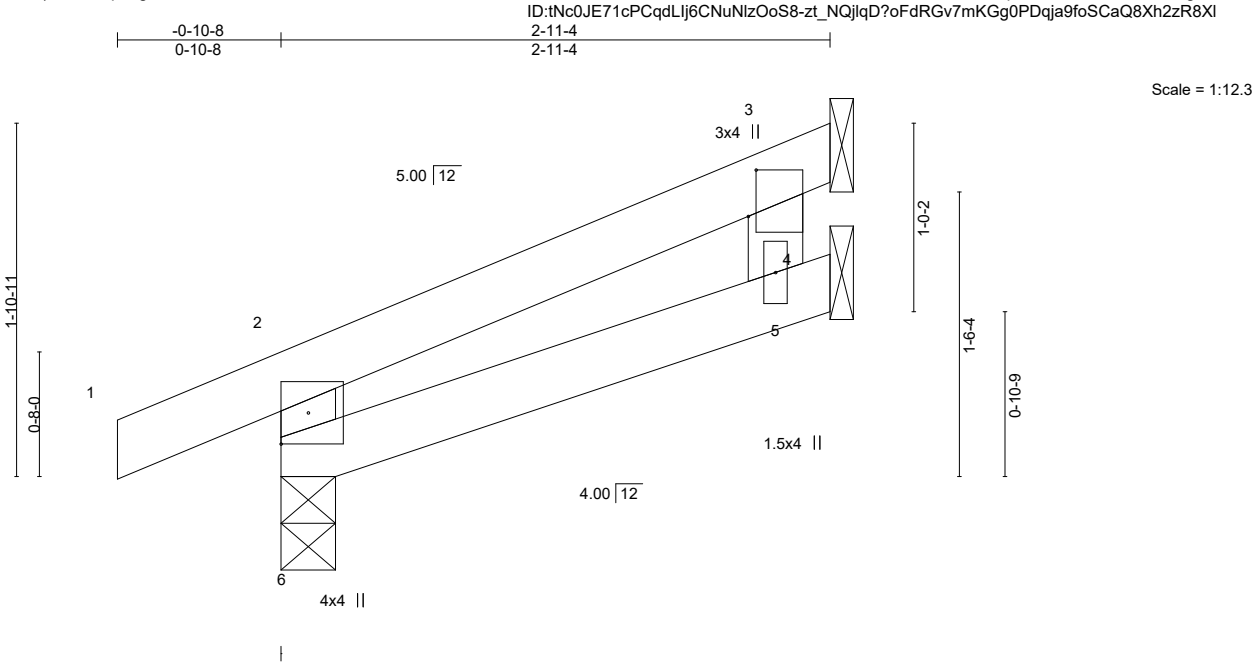

Plate Offsets (X,Y)-- [3:0-3-0,0-0-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
3-5: 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 4=Mechanical, 3=Mechanical
Max Horz 6=49(LC 10)
Max Uplift 6=-30(LC 6), 4=-89(LC 3), 3=-36(LC 10)
Max Grav 6=193(LC 1), 4=6(LC 10), 3=178(LC 3)

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=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 3.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J3	Jack-Open	1	1	I57761105
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:32 2023 Page 1
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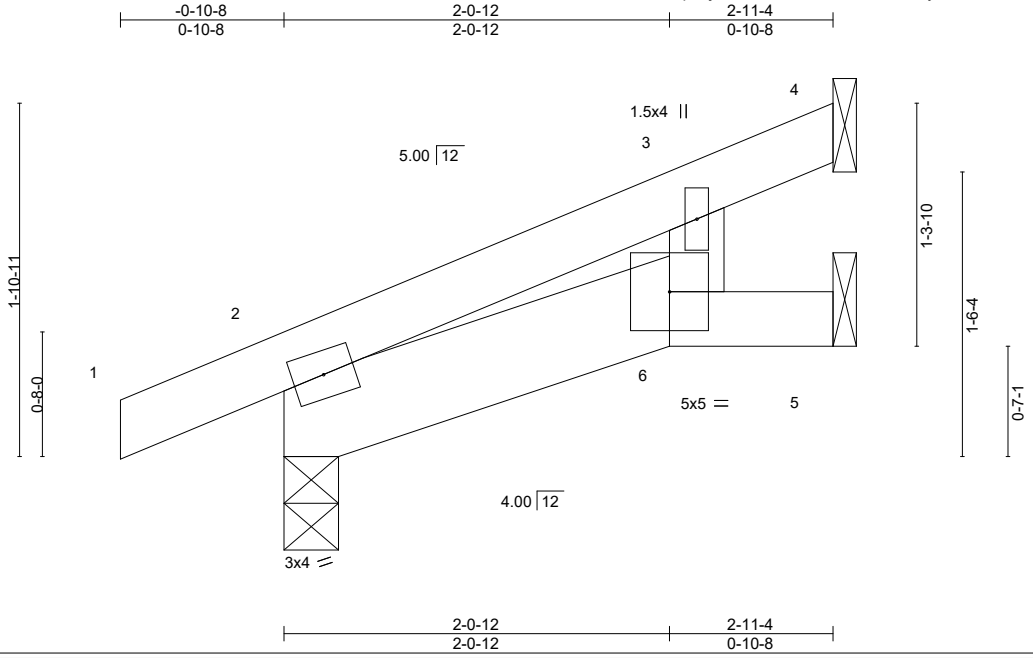


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.01	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-6: 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 2-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=61(LC 10)
Max Uplift 4=-38(LC 10), 2=-31(LC 10)
Max Grav 4=101(LC 1), 2=208(LC 1), 5=16(LC 3)

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=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
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.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

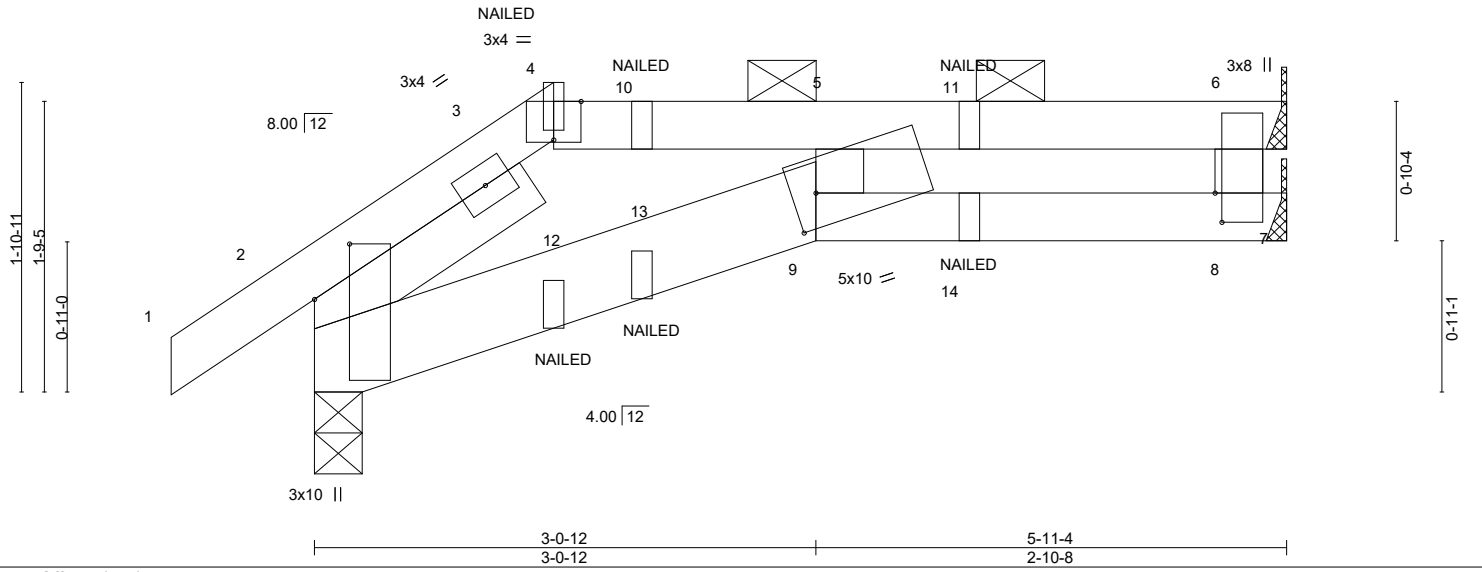
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J4	Half Hip Girder	1	1	I57761106
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:33 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-NSfV2knjWwBpUv?UputzIe1cPxU?s9ueHOMBHMzR8Xi

-0-10-8 / 0-10-8 | 1-5-9 / 1-5-9 | 3-0-12 / 1-7-3 | 5-11-4 / 2-10-8

Scale = 1:14.1



3-0-12 / 3-0-12 | 5-11-4 / 2-10-8

Plate Offsets (X,Y)-- [2:0-4-1,0-2-9], [4:0-2-0,Edge], [6:0-2-2,0-0-8], [9:0-1-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	0.08	9	>838	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.12	9	>544	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-9: 2x6 SPF No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 1-7-4

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except
2-0-0 oc purlins: 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical, 8=Mechanical
Max Horz 2=58(LC 8)
Max Uplift 2=-101(LC 8), 6=-71(LC 5), 8=-26(LC 5)
Max Grav 2=334(LC 25), 6=192(LC 22), 8=107(LC 3)

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8 except (jt=lb) 2=101.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
12) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
13) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-6=-70, 2-9=-20, 7-9=-20

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J4	Half Hip Girder	1	1	I57761106 Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=43(F) 10=-31(F) 11=-94(F) 12=10(F) 14=67(F)

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J5	Half Hip	1	1	I57761107
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:34 2023 Page 1
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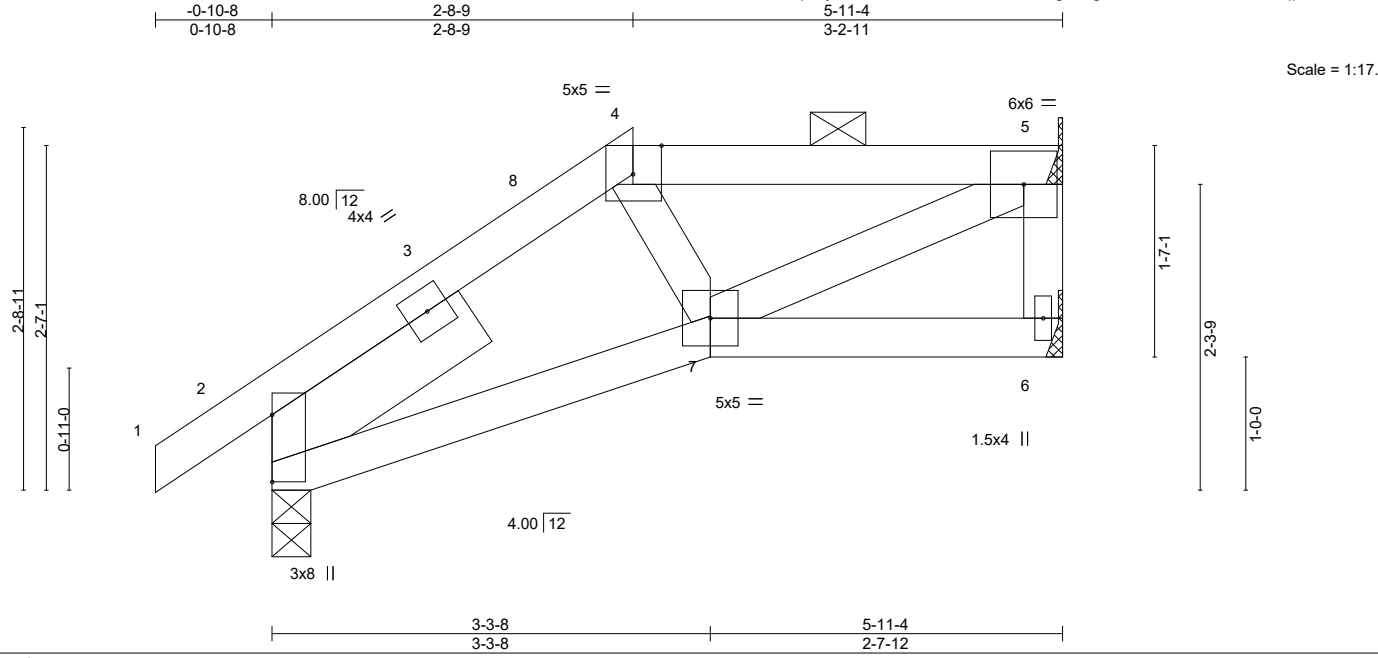

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [4:0-2-9,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	2-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x6 SPF No.2 1-10-9

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=71(LC 7)
Max Uplift 2=-40(LC 10), 5=-65(LC 7)
Max Grav 6=50(LC 3), 2=330(LC 1), 5=226(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-369/109

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 2-8-9, Exterior(2E) 2-8-9 to 5-9-8 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J6	Half Hip	1	1	I57761108
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:36 2023 Page 1
ID:tNc0JE71cPCqdLlj6CNuNlzOoS8-n1LehmqborZOLMk3U1RgwHfCV8b_3Us4zMbruhzR8Xf

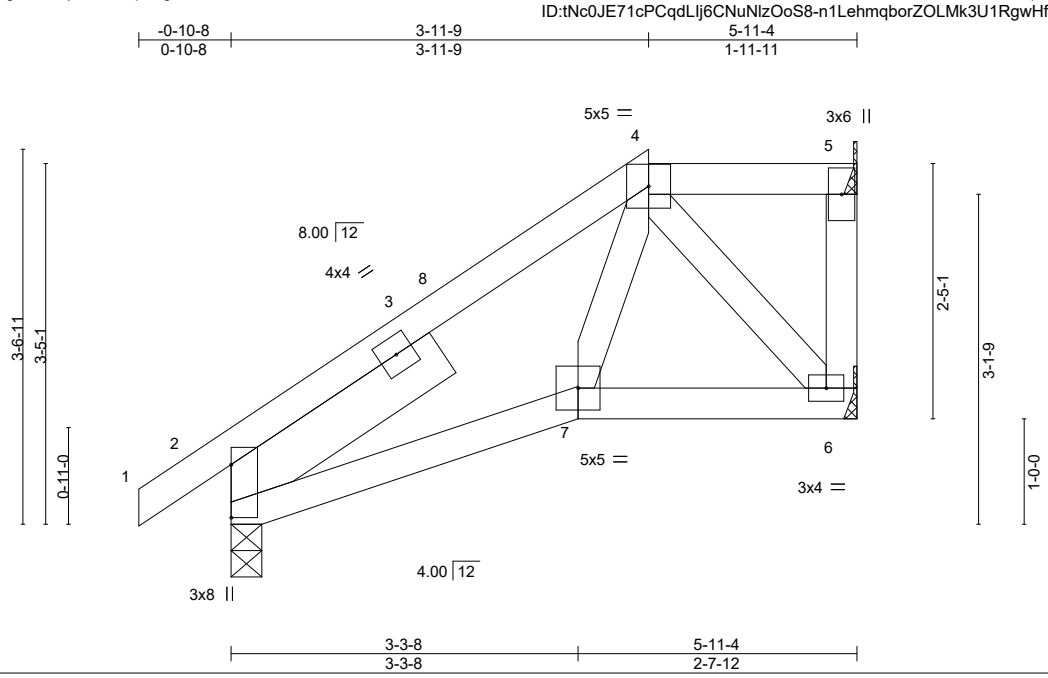

Plate Offsets (X,Y)-- [2:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	2-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x6 SPF No.2 2-5-8

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

REACTIONS. (size) 5=Mechanical, 6=Mechanical, 2=0-3-8
Max Horz 2=103(LC 7)
Max Uplift 5=-26(LC 6), 6=-29(LC 7), 2=-41(LC 10)
Max Grav 5=64(LC 1), 6=187(LC 1), 2=330(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-327/41

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 3-11-9, Exterior(2E) 3-11-9 to 5-9-8 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J7	Half Hip Girder	1	1	I57761109
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:37 2023 Page 1
ID:tNc0JE71cPCqdLIj6CNuNlzOoS8-GDv0u6qEZ9hFyWJF2kyvSUCQiYxioxBDB0KPQ8zR8Xe

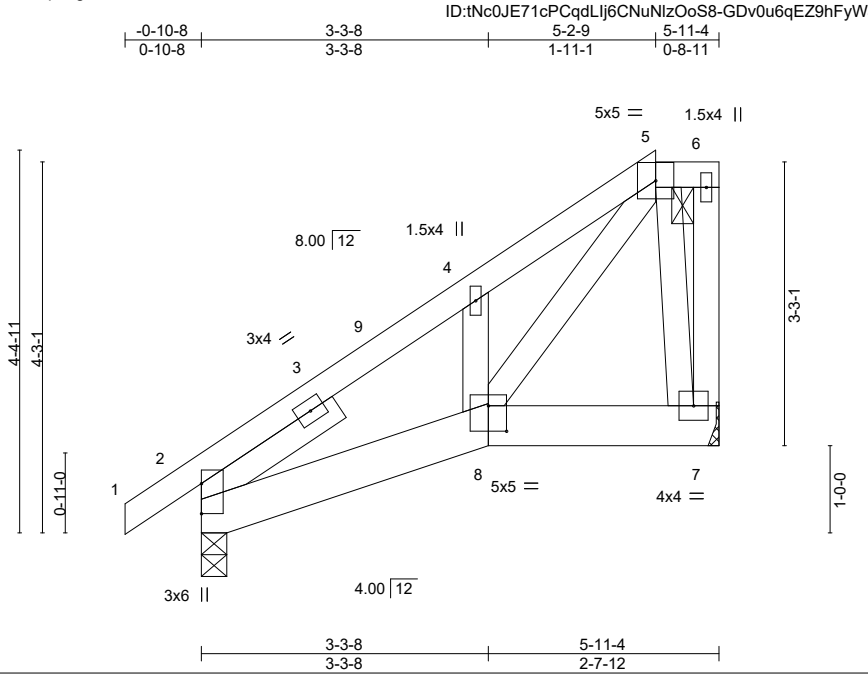

Plate Offsets (X,Y)-- [8:0-2-8,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 1-10-13

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=134(LC 7)
Max Uplift 7=-61(LC 10), 2=-38(LC 10)
Max Grav 7=249(LC 17), 2=332(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-363/106, 4-5=-275/196
BOT CHORD 2-8=-97/302
WEBS 5-8=-196/329

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 5-2-9, Exterior(2E) 5-2-9 to 5-9-8 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J8	Jack-Open	6	1	I57761110
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:38 2023 Page 1
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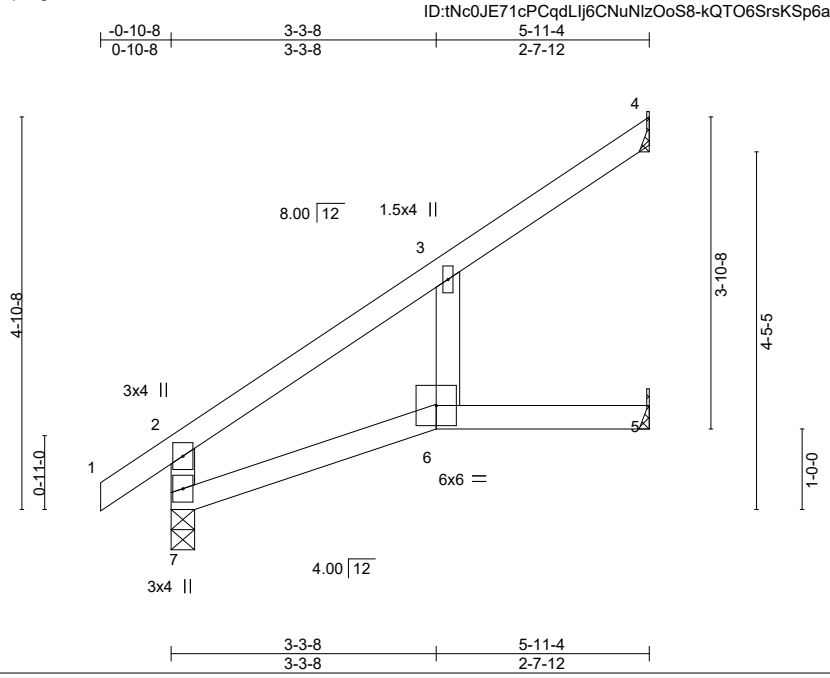

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	0.13	6-7	>546	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.15	6-7	>460	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	-0.06	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
3-6: 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=163(LC 10)
Max Uplift 4=-82(LC 10), 5=-31(LC 10)
Max Grav 7=336(LC 1), 4=155(LC 17), 5=111(LC 17)

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=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 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 100 lb uplift at joint(s) 4, 5.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J9	Jack-Open	1	1	I57761111
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:39 2023 Page 1
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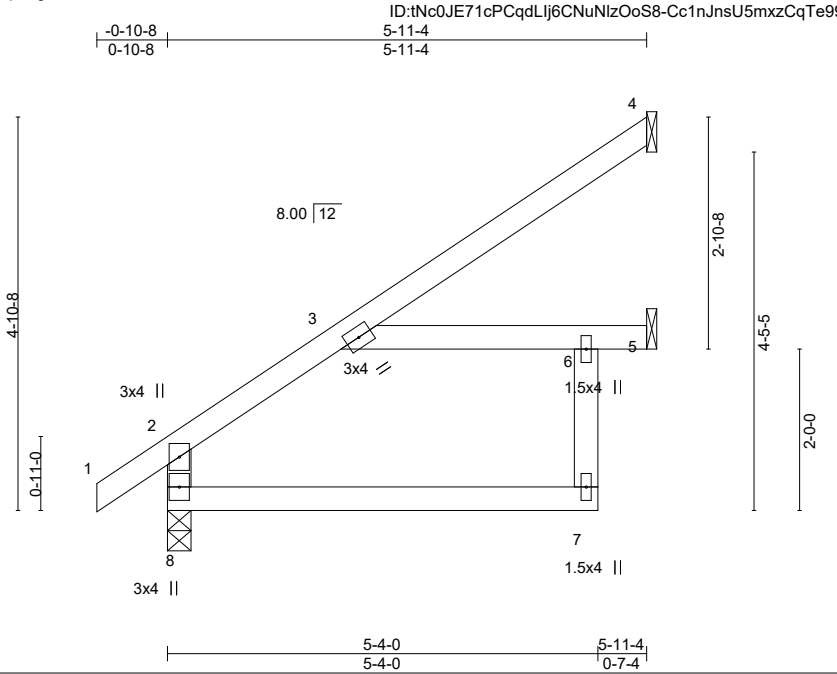

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	0.12	3-6	>552	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.16	3-6	>430	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.15	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP 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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=164(LC 10)
Max Uplift 4=-86(LC 10), 5=-2(LC 10)
Max Grav 8=359(LC 1), 4=159(LC 17), 5=178(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-320/96

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J10	Jack-Open	4	1	I57761112
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:21 2023 Page 1
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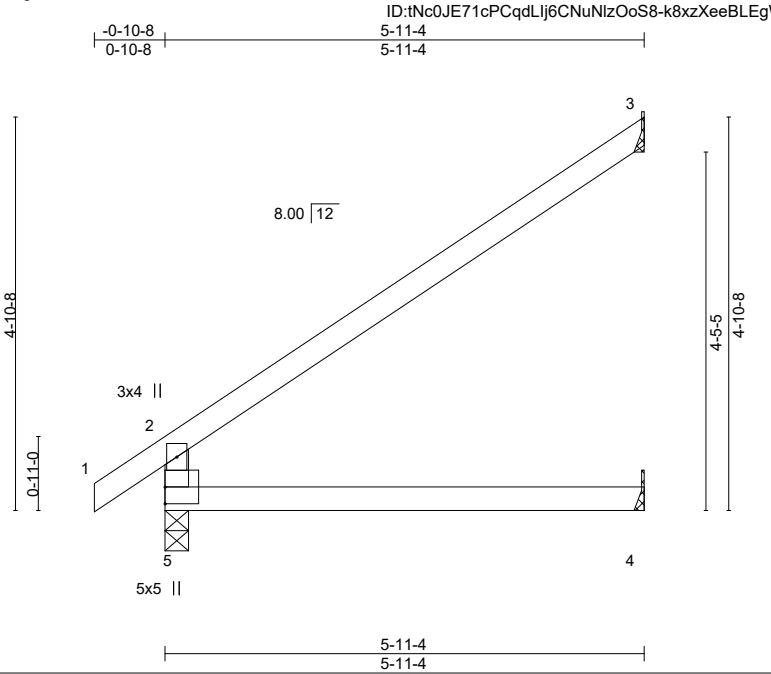

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	0.08	4-5	>884	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.11	4-5	>598	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.06	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 22 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP 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) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=164(LC 10)
Max Uplift 3=-118(LC 10)
Max Grav 5=336(LC 1), 3=189(LC 17), 4=109(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/127

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=118.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J11	Jack-Open	1	1	I57761113
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:22 2023 Page 1
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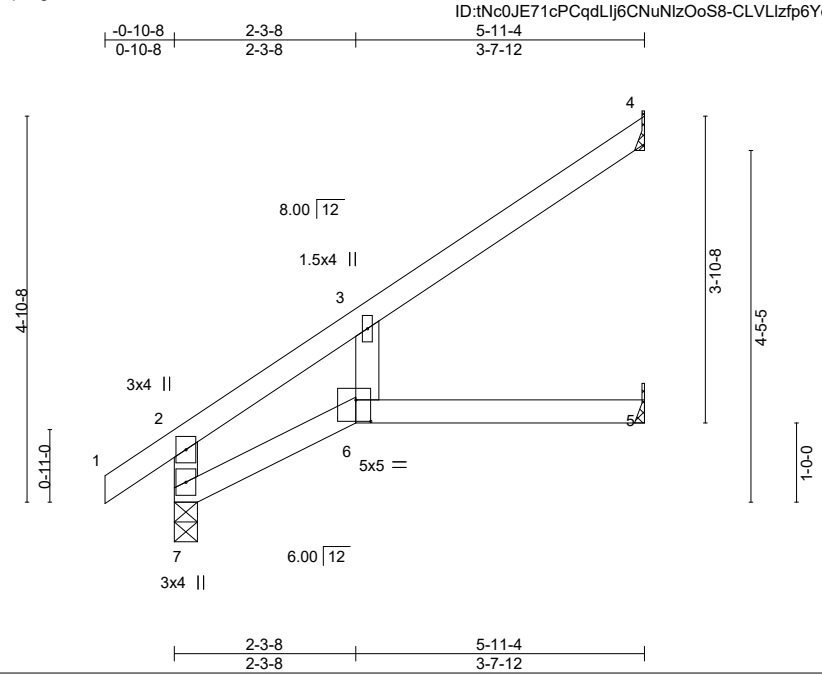

Plate Offsets (X,Y)-- [6:0-2-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	0.12	5-6	>553	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.15	5-6	>468	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
3-6: 2x4 SPF No.3

BRACING-
TOP CHORD Sheathed or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=163(LC 10)
Max Uplift 4=-96(LC 10), 5=-16(LC 10)
Max Grav 7=336(LC 1), 4=169(LC 17), 5=101(LC 3)

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=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 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 100 lb uplift at joint(s) 4, 5.
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.

April 14,2023

16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	J12	Jack-Open	17	1	I57761114
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:23 2023 Page 1
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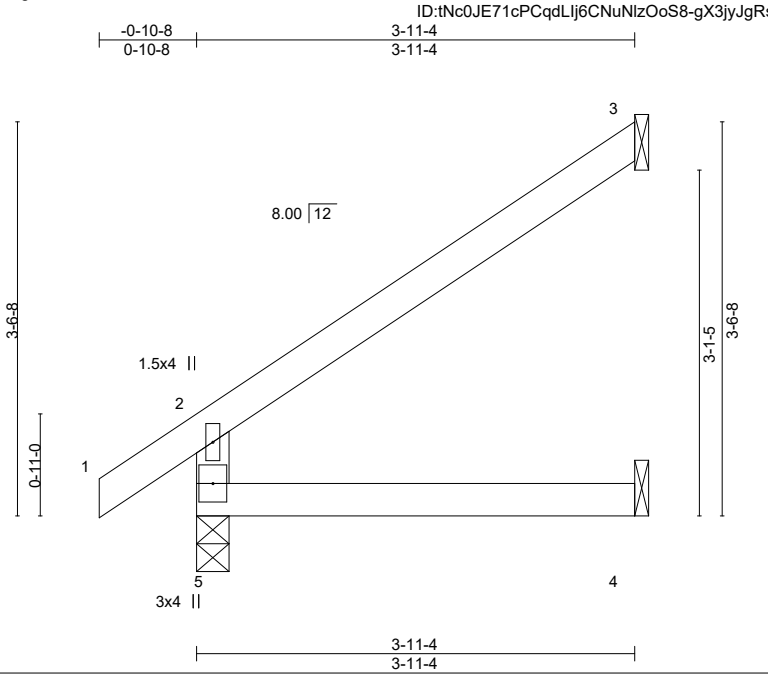

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=111(LC 10)
Max Uplift 5=-2(LC 10), 3=-80(LC 10)
Max Grav 5=249(LC 1), 3=122(LC 17), 4=71(LC 3)

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=25ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	LAY1	GABLE	1	1	I57761120
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:40 2023 Page 1
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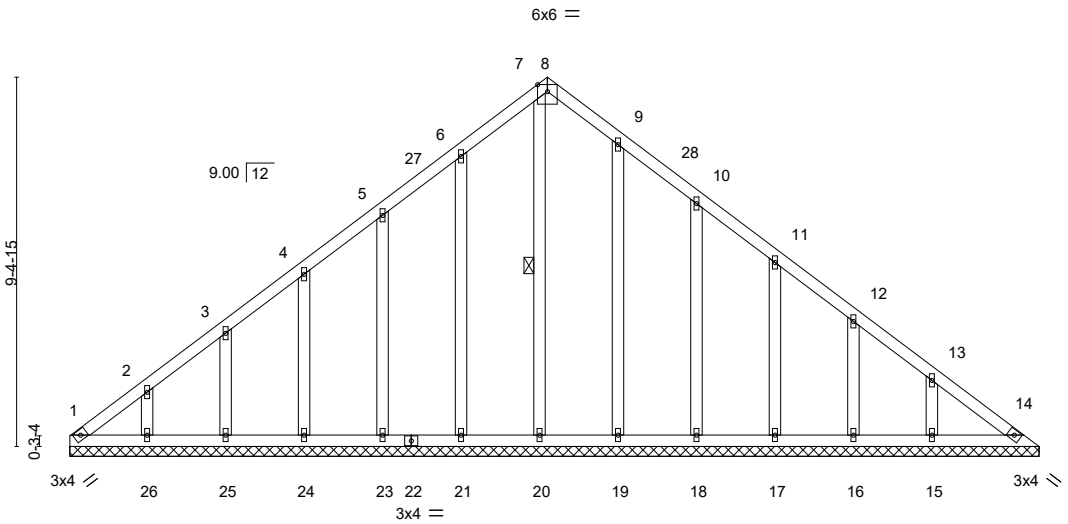
12-2-0 / 12-2-0 | 24-8-6 / 12-6-6

Scale = 1:58.7



24-8-6 / 24-8-6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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.
WEBS 1 Row at midpt 7-20

REACTIONS. All bearings 24-8-6.
(lb) - Max Horz 1=-229(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 26, 25, 24, 23, 21, 19, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 1, 14, 26, 25, 24, 23, 21, 20, 19, 18, 17, 16, 15

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-266/185

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-2-0, Exterior(2R) 9-2-0 to 15-2-0, Interior(1) 15-2-0 to 21-3-2, Exterior(2E) 21-3-2 to 24-3-2 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
3) All plates are 1.5x4 MT20 unless otherwise indicated.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 26, 25, 24, 23, 21, 19, 18, 17, 16, 15.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	LAY2	Lay-In Gable	1	1	I57761121
					Job Reference (optional)

8.630 s Feb 23 2023 MiTek Industries, Inc. Fri Apr 14 09:10:50 2023 Page 1
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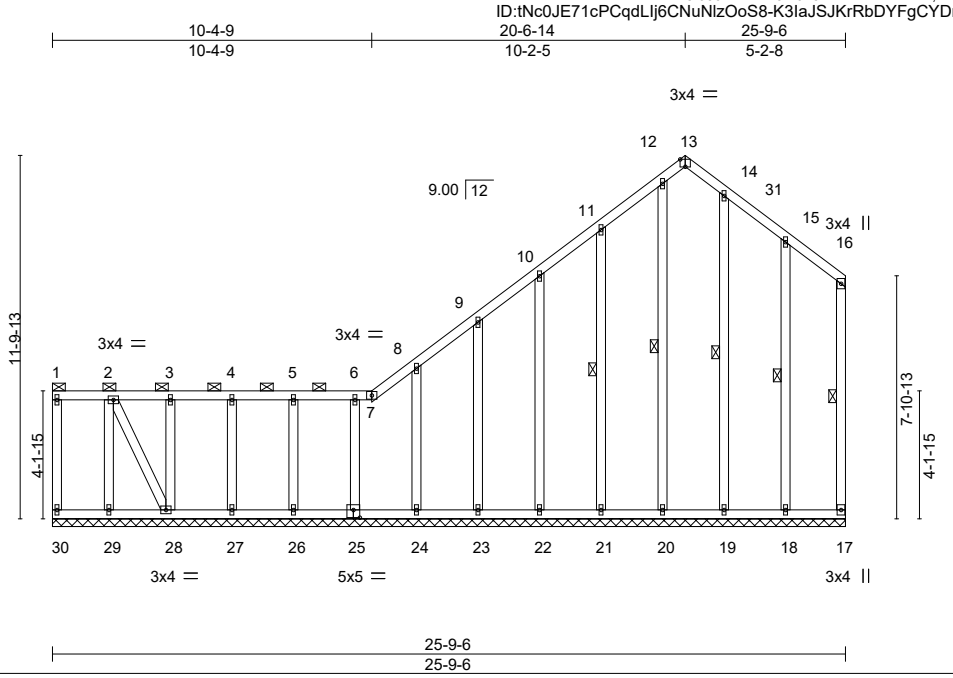

Plate Offsets (X,Y)-- [13:0-2-0,Edge], [25:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.19	Horz(CT)	-0.01	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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, and 2-0-0 oc purlins (6-0-0 max.): 1-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 27-28,26-27,25-26.
WEBS 1 Row at midpt 16-17, 12-20, 11-21, 14-19, 15-18

REACTIONS. All bearings 25-9-6.
(lb) - Max Horz 30=348(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 30, 17, 22, 23, 24, 26, 27, 19, 18 except 20=-113(LC 9), 21=-105(LC 10), 25=-136(LC 6), 28=-444(LC 7), 29=-369(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 30, 17, 20, 21, 22, 23, 24, 26, 27, 19, 18 except 25=250(LC 18), 28=371(LC 17), 29=501(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-277/218, 8-9=-295/236, 9-10=-265/226, 11-12=-240/283, 14-15=-220/258
BOT CHORD 29-30=-348/266, 28-29=-348/266
WEBS 2-29=-460/393, 2-28=-399/522

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=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-6-14, Exterior(2R) 17-6-14 to 22-7-10, Exterior(2E) 22-7-10 to 25-7-10 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
3) Provide adequate drainage to prevent water ponding.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 17, 22, 23, 24, 26, 27, 19, 18 except (jt=lb) 20=113, 21=105, 25=136, 28=444, 29=369.
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.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V1	Valley	1	1	I57761123
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:45 2023 Page 1
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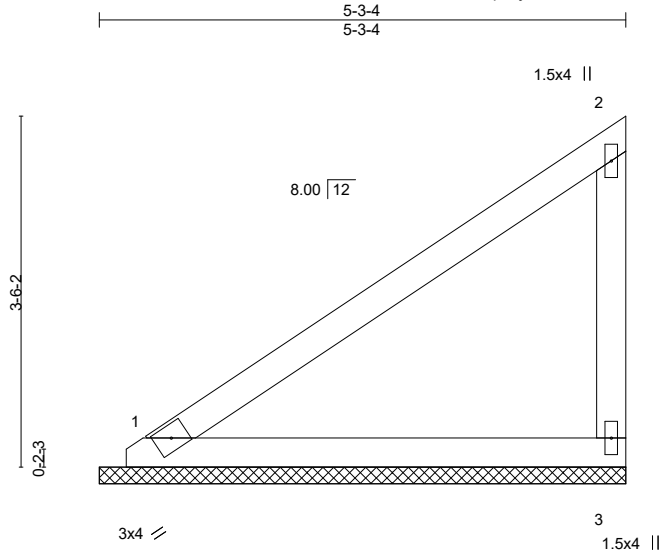

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 1=5-3-4, 3=5-3-4
Max Horz 1=119(LC 9)
Max Uplift 1=-15(LC 10), 3=-56(LC 10)
Max Grav 1=209(LC 1), 3=223(LC 17)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V2	Valley	1	1	I57761124
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:47 2023 Page 1
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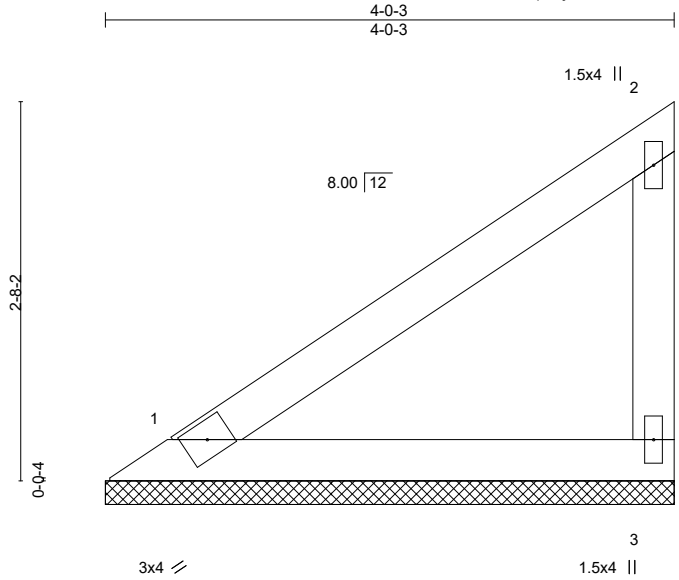

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 1=4-0-3, 3=4-0-3
Max Horz 1=87(LC 7)
Max Uplift 1=-11(LC 10), 3=-41(LC 10)
Max Grav 1=153(LC 1), 3=163(LC 17)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V3	Valley	1	1	I57761125
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:48 2023 Page 1
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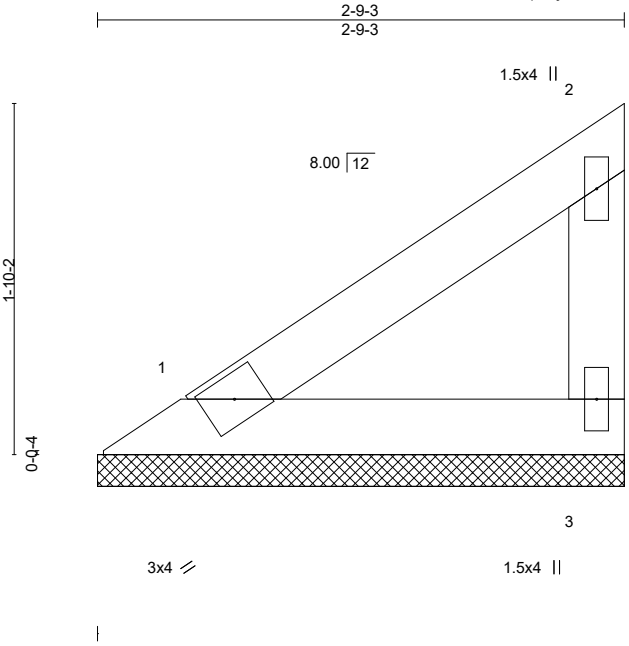

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Sheathed or 2-9-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-9-3, 3=2-9-3
Max Horz 1=55(LC 7)
Max Uplift 1=-7(LC 10), 3=-26(LC 10)
Max Grav 1=96(LC 1), 3=103(LC 17)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V4	Valley	1	1	I57761126
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:49 2023 Page 1
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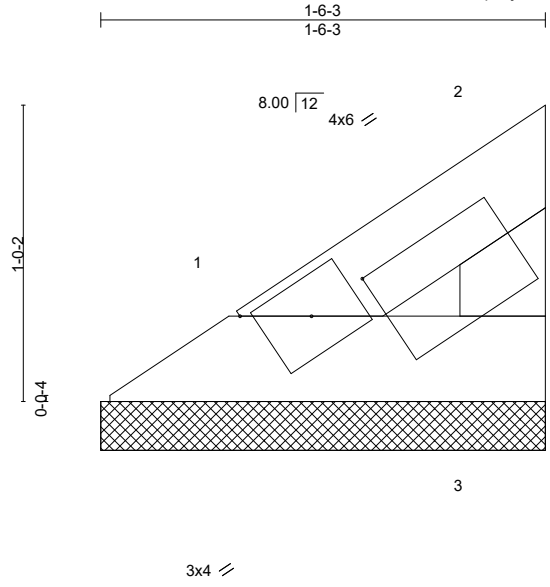

Plate Offsets (X,Y)-- [2:0-5-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 5 lb	FT = 20%

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

BRACING-
TOP CHORD Sheathed or 1-6-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=1-6-3, 3=1-6-3
Max Horz 1=23(LC 7)
Max Uplift 1=-3(LC 10), 3=-11(LC 10)
Max Grav 1=40(LC 1), 3=43(LC 17)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V5	Valley	1	1	I57761127
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:50 2023 Page 1
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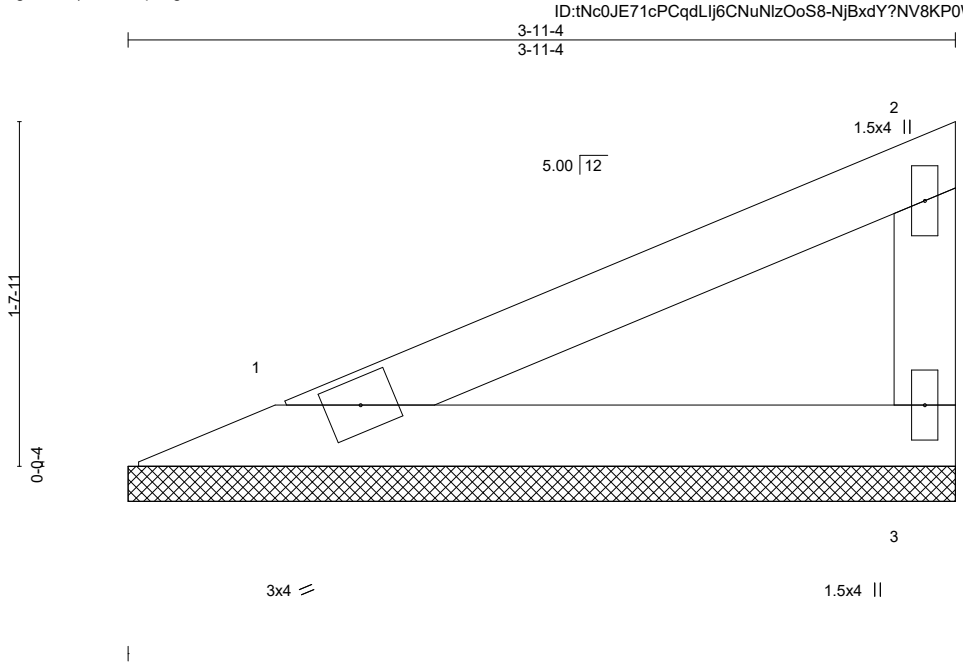

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 1=3-11-4, 3=3-11-4
Max Horz 1=54(LC 7)
Max Uplift 1=-18(LC 10), 3=-29(LC 10)
Max Grav 1=137(LC 1), 3=137(LC 1)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 14,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V6	Valley	1	1	I57761128
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:51 2023 Page 1
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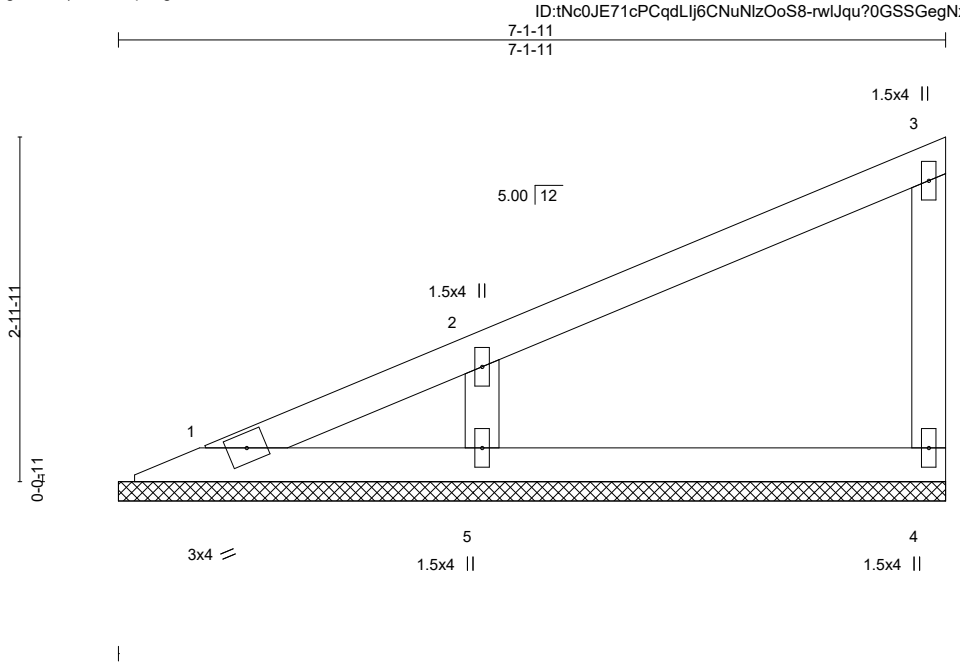

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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 10-0-0 oc bracing.

REACTIONS. (size) 1=7-1-11, 4=7-1-11, 5=7-1-11
Max Horz 1=110(LC 7)
Max Uplift 4=-24(LC 10), 5=-91(LC 10)
Max Grav 1=62(LC 18), 4=140(LC 1), 5=367(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-285/255

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	V7	Valley	1	1	I57761129
					Job Reference (optional)

8.630 s Feb 23 2023 MiTek Industries, Inc. Fri Apr 14 09:11:21 2023 Page 1
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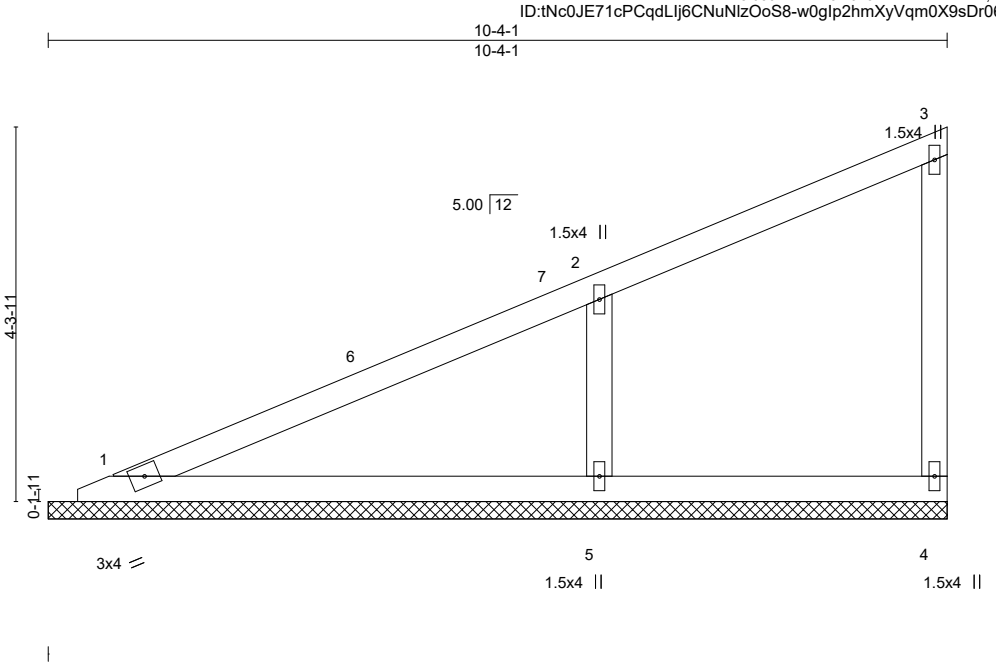

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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 10-0-0 oc bracing.

REACTIONS. (size) 1=10-4-1, 4=10-4-1, 5=10-4-1
Max Horz 1=166(LC 7)
Max Uplift 1=-1(LC 10), 4=-21(LC 7), 5=-133(LC 10)
Max Grav 1=204(LC 1), 4=104(LC 1), 5=542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-397/248

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-11-6, Exterior(2R) 5-11-6 to 10-2-5 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=133.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
Tupelo-Roof	V8	Valley	1	1	I57761130
					Job Reference (optional)

8.630 s Feb 23 2023 MiTek Industries, Inc. Fri Apr 14 09:11:43 2023 Page 1
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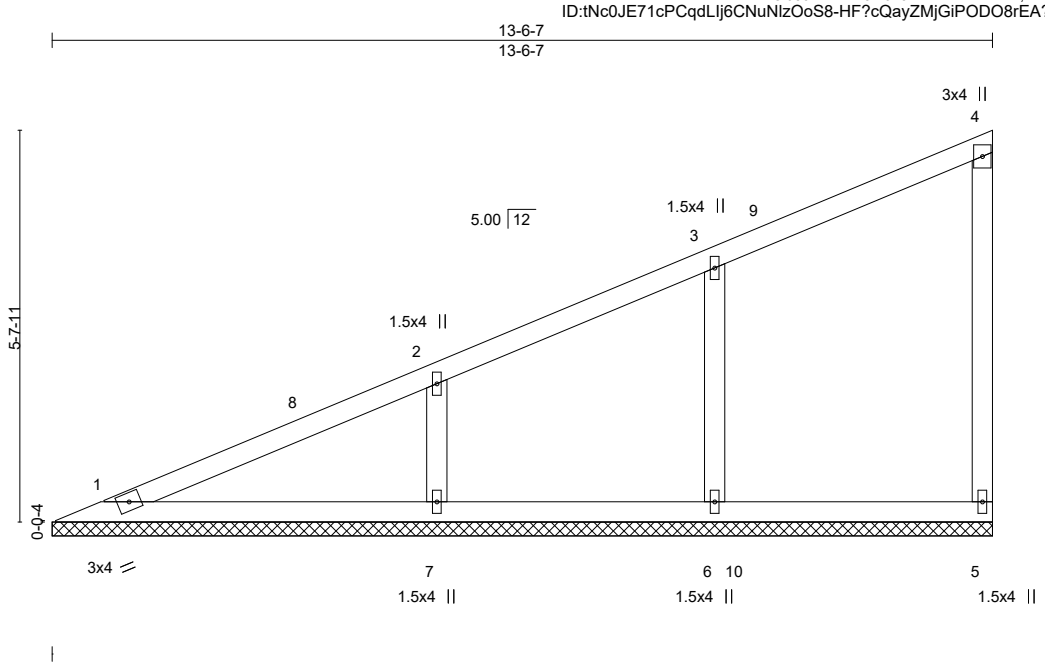

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 52 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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 10-0-0 oc bracing.

REACTIONS. All bearings 13-6-7.
(lb) - Max Horz 1=222(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-113(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=396(LC 2), 7=464(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-284/156, 2-7=-334/190

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 10-4-11, Exterior(2E) 10-4-11 to 13-4-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=113.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
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NUMBER E-2000162101
PROFESSIONAL ENGINEER

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16952
KANSAS
PROFESSIONAL ENGINEER

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V9	Valley	1	1	I57761131
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:55 2023 Page 1
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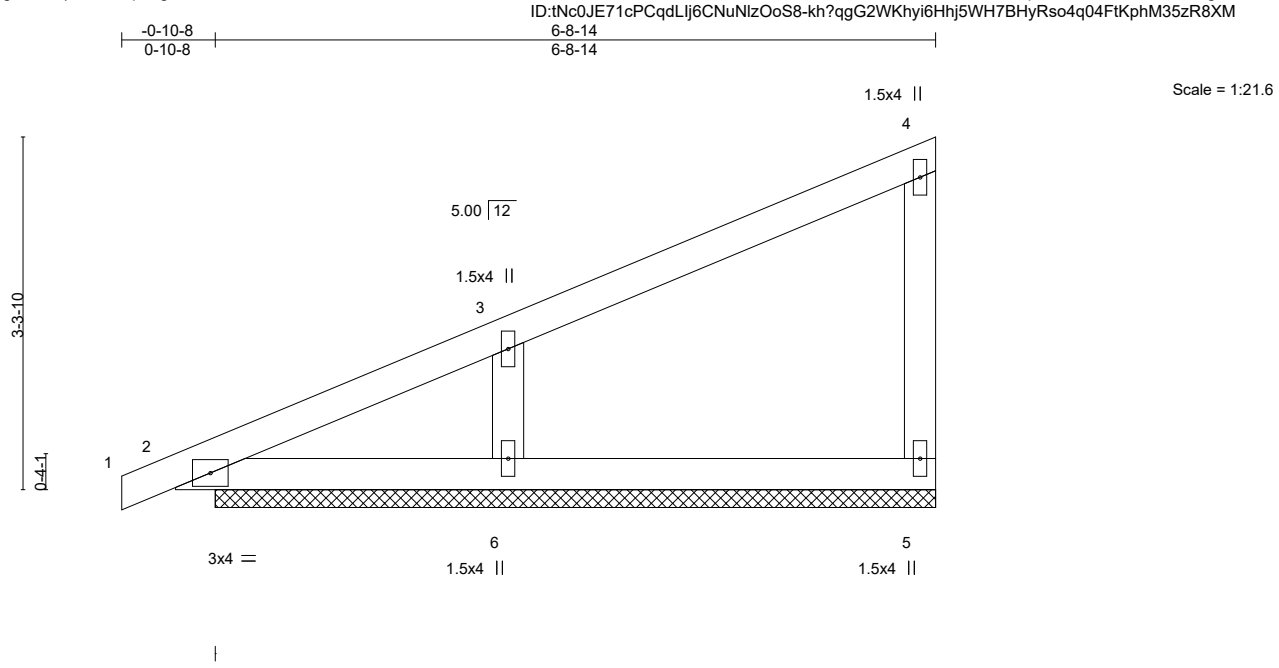

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	1	n/r	80		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 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 10-0-0 oc bracing.

REACTIONS. (size) 5=6-8-14, 2=6-8-14, 6=6-8-14
Max Horz 2=127(LC 7)
Max Uplift 5=-22(LC 10), 2=-4(LC 6), 6=-97(LC 10)
Max Grav 5=137(LC 1), 2=134(LC 1), 6=391(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-303/276

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
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.

April 14,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage 70
P230177-01	V10	Valley	1	1	I57761132
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Apr 13 11:36:46 2023 Page 1
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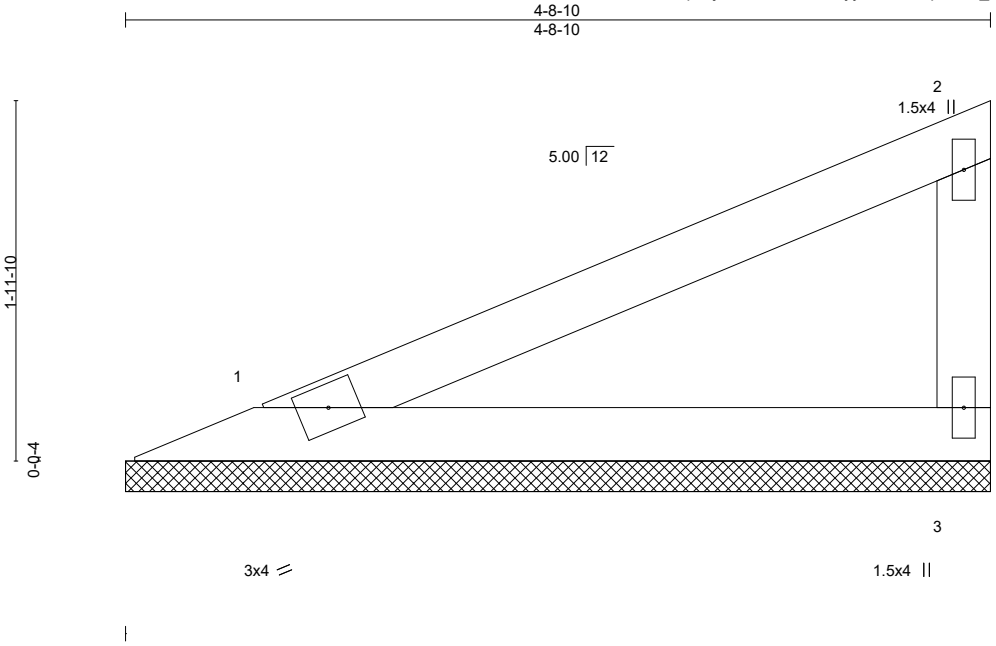

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 1=4-8-10, 3=4-8-10
Max Horz 1=67(LC 7)
Max Uplift 1=-23(LC 10), 3=-36(LC 10)
Max Grav 1=172(LC 1), 3=172(LC 1)

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=25ft; 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) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

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16952
KANSAS
PROFESSIONAL ENGINEER

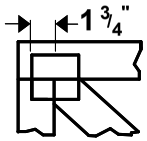
April 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

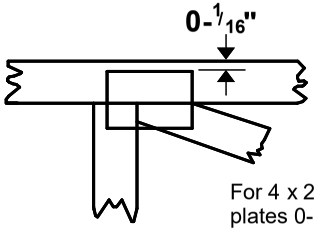
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2023

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.

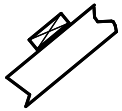
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

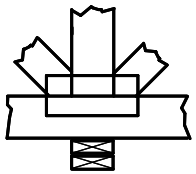
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

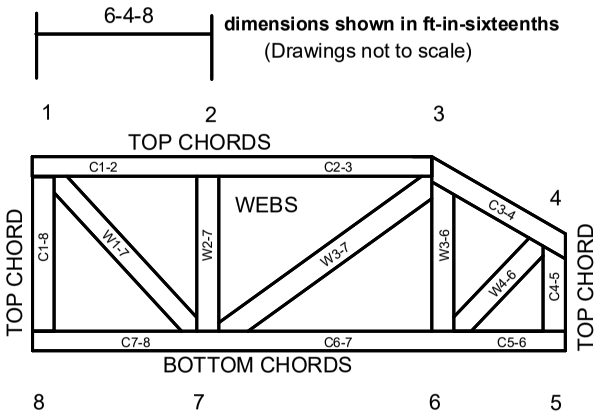


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.