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

RE: P220274-P220274-02 - Roof

Site Information:

Project Customer: Summit Homes Project Name: Winchester - Modern Farmhouse
Lot/Block: 181 Subdivision: Woodside Ridge
Model:
Address: 2063 NW O'Brian Rd
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 115 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf Floor Load: N/A psf

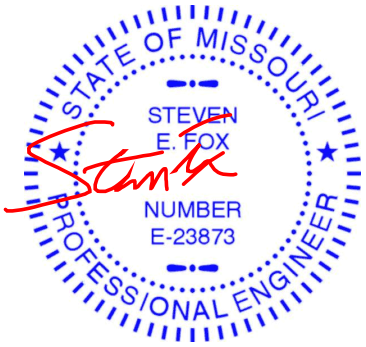
Mean Roof Height (feet): 35 Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I52120770	A01	5/24/22	35	I52120804	G04	5/24/22
2	I52120771	A02	5/24/22	36	I52120805	G05	5/24/22
3	I52120772	A03	5/24/22	37	I52120806	H01	5/24/22
4	I52120773	AG01	5/24/22	38	I52120807	H02	5/24/22
5	I52120774	B01	5/24/22	39	I52120808	J01	5/24/22
6	I52120775	B02	5/24/22	40	I52120809	J02	5/24/22
7	I52120776	B03	5/24/22	41	I52120810	J03	5/24/22
8	I52120777	B04	5/24/22	42	I52120811	J04	5/24/22
9	I52120778	B05	5/24/22	43	I52120812	J05	5/24/22
10	I52120779	B06	5/24/22	44	I52120813	J06	5/24/22
11	I52120780	C01	5/24/22	45	I52120814	J07	5/24/22
12	I52120781	C02	5/24/22	46	I52120815	J08	5/24/22
13	I52120782	C03	5/24/22	47	I52120816	J09	5/24/22
14	I52120783	CJ01	5/24/22	48	I52120817	J10	5/24/22
15	I52120784	CJ02	5/24/22	49	I52120818	J11	5/24/22
16	I52120785	CJ03	5/24/22	50	I52120819	J12	5/24/22
17	I52120786	CJ04	5/24/22	51	I52120820	J13	5/24/22
18	I52120787	D01	5/24/22	52	I52120821	J14	5/24/22
19	I52120788	D02	5/24/22	53	I52120822	J15	5/24/22
20	I52120789	D03	5/24/22	54	I52120823	LG01	5/24/22
21	I52120790	D04	5/24/22	55	I52120824	LG02	5/24/22
22	I52120791	D05	5/24/22	56	I52120825	LG03	5/24/22
23	I52120792	E01	5/24/22	57	I52120826	LG04	5/24/22
24	I52120793	E02	5/24/22	58	I52120827	V01	5/24/22
25	I52120794	E03	5/24/22	59	I52120828	V02	5/24/22
26	I52120795	E04	5/24/22	60	I52120829	V03	5/24/22
27	I52120796	E05	5/24/22				
28	I52120797	E06	5/24/22				
29	I52120798	E07	5/24/22				
30	I52120799	E08	5/24/22				
31	I52120800	E09	5/24/22				
32	I52120801	G01	5/24/22				
33	I52120802	G02	5/24/22				
34	I52120803	G03	5/24/22				

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: Fox, Steve
My license renewal date for the state of Missouri is December 31, 2022.

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.



May 24,2022
Fox, Steve

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	A01	Common Supported Gable	1	1	Job Reference (optional)	I52120770

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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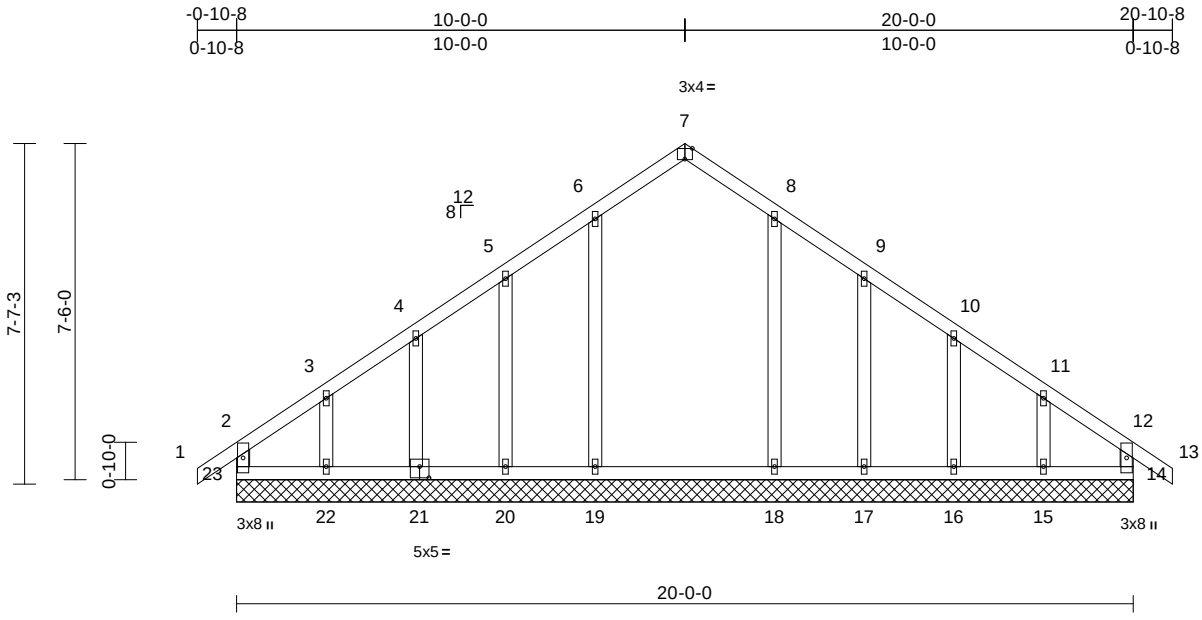

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Plate Offsets (X, Y): [7:0-2-0,Edge], [21:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 103 lb	FT = 20%

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

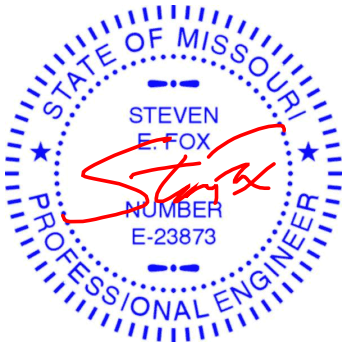
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 14=236/20-0-0, 15=128/20-0-0, 16=198/20-0-0, 17=151/20-0-0, 18=246/20-0-0, 19=246/20-0-0, 20=150/20-0-0, 21=195/20-0-0, 22=128/20-0-0, 23=239/20-0-0
Max Horiz 23=-227 (LC 10)
Max Uplift 14=-19 (LC 9), 15=-173 (LC 13), 16=-50 (LC 13), 17=-112 (LC 13), 18=-16 (LC 13), 19=-23 (LC 12), 20=-109 (LC 12), 21=-51 (LC 12), 22=-172 (LC 12), 23=-30 (LC 8)
Max Grav 14=243 (LC 22), 15=186 (LC 20), 16=198 (LC 1), 17=168 (LC 20), 18=246 (LC 1), 19=254 (LC 19), 20=162 (LC 19), 21=195 (LC 1), 22=189 (LC 19), 23=248 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-23=-208/30, 1-2=0/40, 2-3=-231/107, 3-4=-163/70, 4-5=-149/52, 5-6=-129/74, 6-7=-135/113, 7-8=-135/113, 8-9=-117/70, 9-10=-139/39, 10-11=-156/59, 11-12=-224/94, 12-13=0/40, 12-14=-205/21
BOT CHORD 22-23=-96/222, 20-22=-96/224, 19-20=-96/224, 18-19=-96/224, 17-18=-96/224, 16-17=-96/224, 15-16=-96/224, 14-15=-96/224
WEBS 6-19=-184/65, 5-20=-136/137, 4-21=-151/105, 3-22=-143/171, 8-18=-176/59, 9-17=-140/138, 10-16=-153/105, 11-15=-142/173

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 10-0-0, Corner(3R) 10-0-0 to 15-0-0, Exterior(2N) 15-0-0 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 23, 19 lb uplift at joint 14, 23 lb uplift at joint 19, 109 lb uplift at joint 20, 51 lb uplift at joint 21, 172 lb uplift at joint 22, 16 lb uplift at joint 18, 112 lb uplift at joint 17, 50 lb uplift at joint 16 and 173 lb uplift at joint 15.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120771
P220274-P220274-02	A02	Common	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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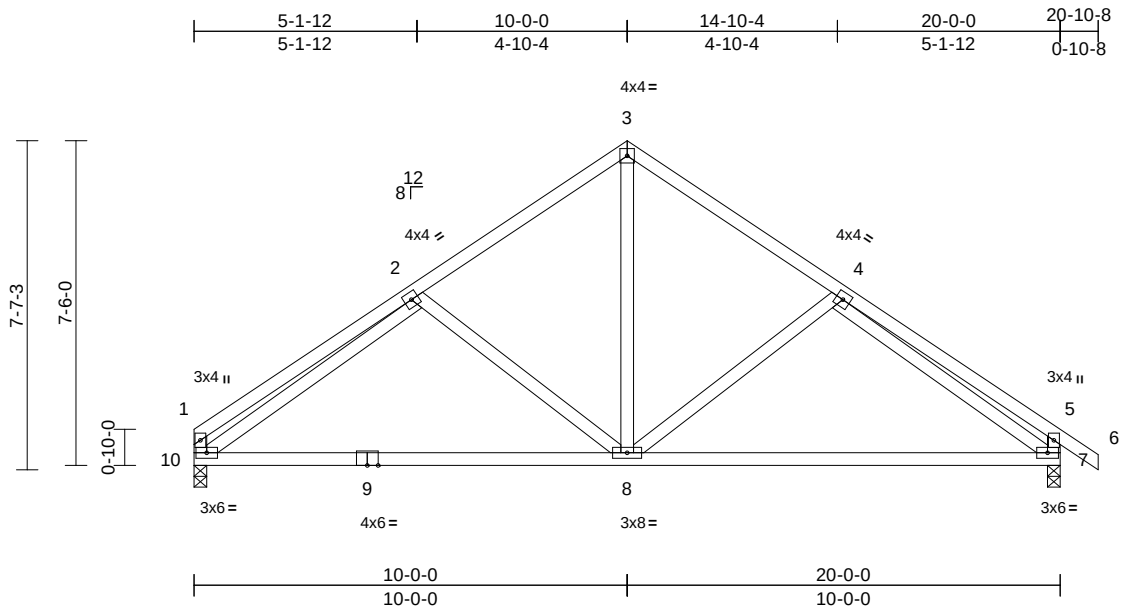

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.18	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.37	7-8	>634	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 104 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 10-1,7-5:2x4 SP No.2

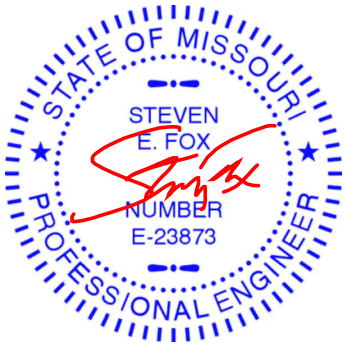
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 7=960/0-3-8, 10=885/0-3-8
Max Horiz 10=-221 (LC 8)
Max Uplift 7=-149 (LC 13), 10=-123 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-417/88, 2-3=-880/202, 3-4=-878/200, 4-5=-469/137, 5-6=0/40, 1-10=-343/105, 5-7=-447/163
BOT CHORD 8-10=-182/891, 7-8=-83/847
WEBS 3-8=-84/540, 4-8=-299/239, 2-8=-309/242, 2-10=-741/164, 4-7=-687/127

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-0-5, Interior (1) 5-0-5 to 10-0-0, Exterior(2R) 10-0-0 to 14-11-11, Interior (1) 14-11-11 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 7. This connection is for uplift only and does not consider lateral forces.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120772
P220274-P220274-02	A03	Common	2	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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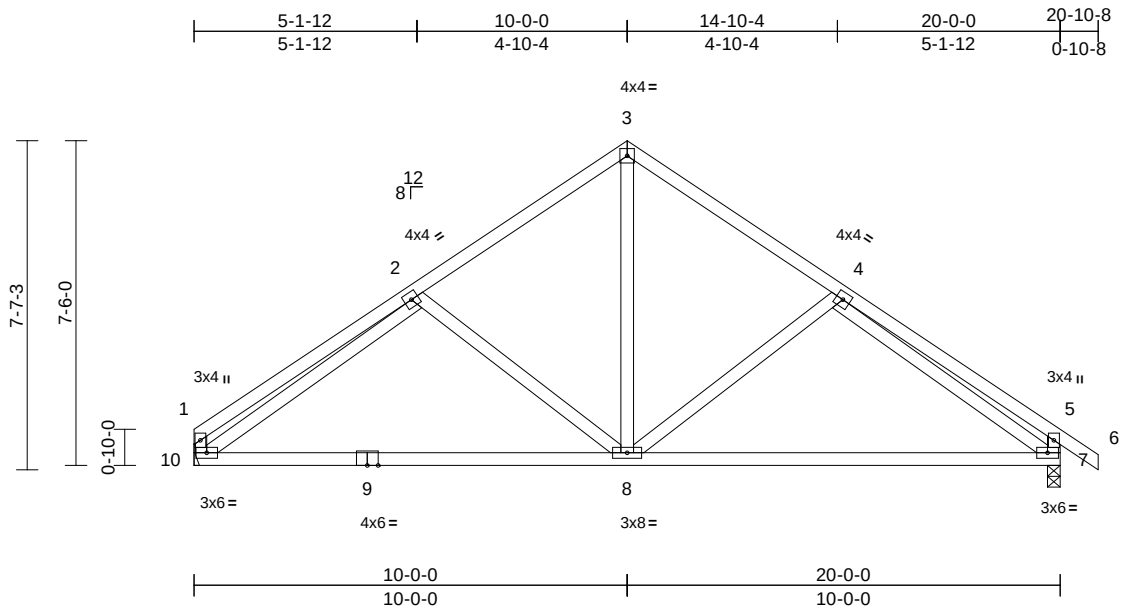

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.18	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.37	7-8	>634	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 104 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 10-1,7-5:2x4 SP No.2

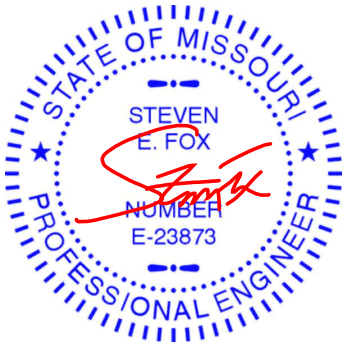
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 7=960/0-3-8, 10=885/ Mechanical
Max Horiz 10=-221 (LC 8)
Max Uplift 7=-149 (LC 13), 10=-123 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-417/88, 2-3=-880/202, 3-4=-878/200, 4-5=-469/137, 5-6=0/40, 1-10=-343/105, 5-7=-447/163
BOT CHORD 8-10=-182/891, 7-8=-83/847
WEBS 3-8=-84/540, 4-8=-299/239, 2-8=-309/242, 2-10=-741/164, 4-7=-687/127

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-0-5, Interior (1) 5-0-5 to 10-0-0, Exterior(2R) 10-0-0 to 14-11-11, Interior (1) 14-11-11 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 10.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/02/2022

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	AG01	Jack-Closed Girder	1	1	Job Reference (optional) I52120773

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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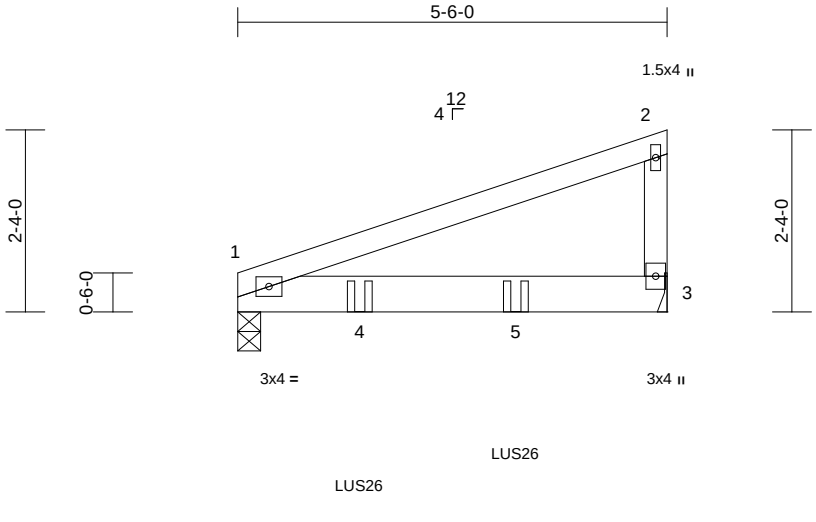

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.10	1-3	>648	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.18	1-3	>352	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.3

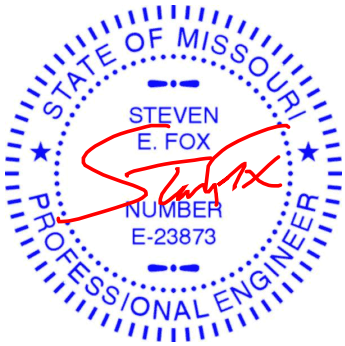
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-4 oc bracing.

REACTIONS (lb/size) 1=1162/0-3-8, 3=1037/ Mechanical
Max Horiz 1=91 (LC 9)
Max Uplift 1=-189 (LC 8), 3=-184 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-127/77, 2-3=-182/241
BOT CHORD 1-3=-39/42

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
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.
7) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-6-12 from the left end to 3-6-12 to connect truss(es) to front face of bottom chord.
8) Fill all nail holes where hanger is in contact with lumber.
9) 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 (lb/ft)
Vert: 1-2=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 4=-865 (F), 5=-865 (F)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	B01	Roof Special Girder	1	1	Job Reference (optional)	I52120774

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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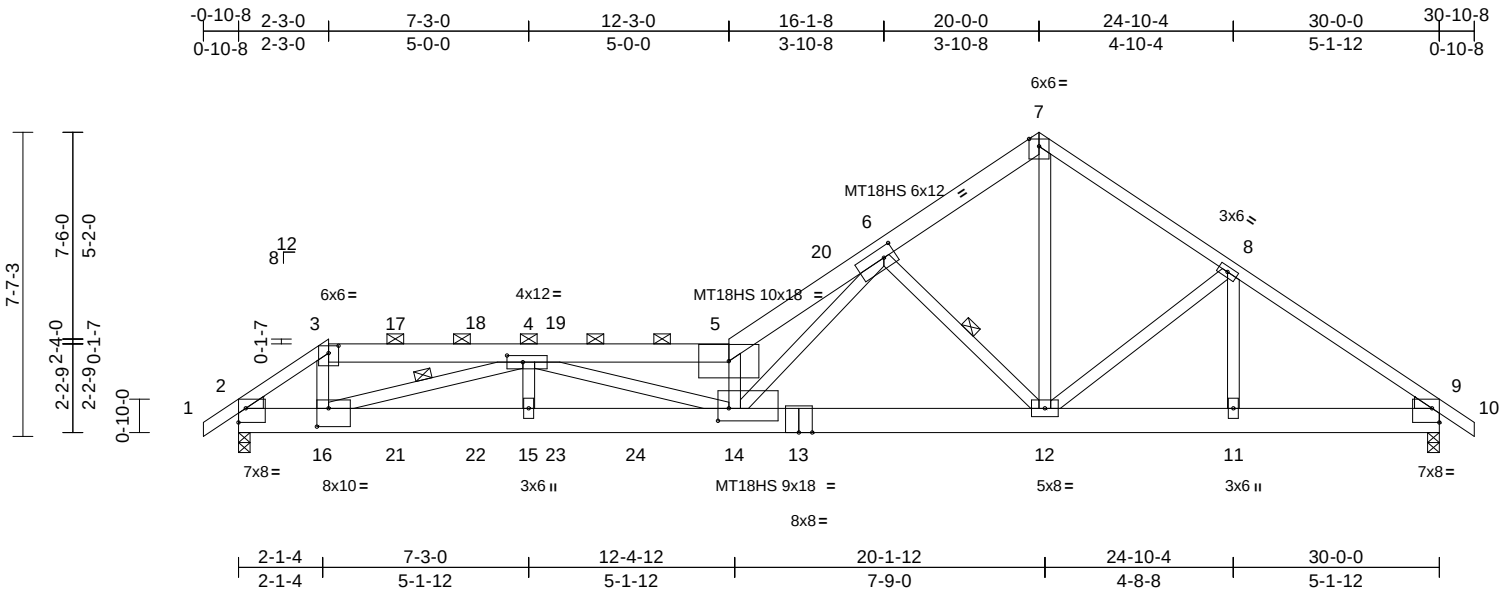

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Plate Offsets (X, Y): [2:Edge,0-4-4], [3:0-3-0,0-2-3], [4:0-4-12,0-2-0], [6:0-3-8,0-3-0], [9:Edge,0-4-4], [14:0-3-4,0-3-12], [16:0-3-8,0-5-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.54	14-15	>664	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.96	14-15	>372	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 208 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-5,5-7:2x6 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 13-9:2x8 SPF No.2
WEBS 2x4 SP No.2 *Except* 4-15,12-8,8-11,12-6:2x4 SPF No.3, 6-14:2x4 SP 2400F 2.0E
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-9 oc purlins, except
2-0-0 oc purlins (2-11-4 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 8-8-5 oc bracing.
WEBS 1 Row at midpt 4-16, 6-12

REACTIONS (lb/size) 2=2617/0-3-8, 9=1839/0-3-8
Max Horiz 2=-203 (LC 10)
Max Uplift 2=-596 (LC 12), 9=-286 (LC 13)

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

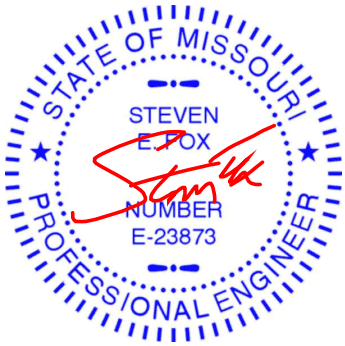
TOP CHORD 2-3=-4050/865, 3-17=-2916/668, 17-18=-2919/669, 4-18=-2923/670, 4-19=-9313/1769, 5-19=-9310/1769, 5-20=-10613/2050, 6-20=-10476/2069, 6-7=-2375/499, 7-8=-2411/494, 8-9=-2641/449
BOT CHORD 2-16=-753/3101, 16-21=-1790/8296, 21-22=-1790/8296, 15-22=-1790/8296, 15-23=-1790/8296, 23-24=-1790/8296, 14-24=-1790/8296, 13-14=-686/3602, 12-13=-686/3602, 11-12=-277/2024, 9-11=-277/2024
WEBS 3-16=-390/2225, 4-16=-5658/1125, 4-15=0/679, 4-14=-43/1067, 5-14=-5983/1236, 7-12=-445/2294, 6-12=-2528/641, 6-14=-1582/7982

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-3-0, Exterior(2R) 2-3-0 to 7-3-0, Interior (1) 7-3-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-10-4, Interior (1) 24-10-4 to 30-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 596 lb uplift at joint 2 and 286 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 158 lb down and 107 lb up at 3-11-4, and 158 lb down and 107 lb up at 5-11-4, and 158 lb down and 107 lb up at 7-11-4 on top chord, and 198 lb down and 86 lb up at 2-3-0, 66 lb down at 3-11-4, 66 lb down at 5-11-4, and 66 lb down at 7-11-4, and 1017 lb down and 196 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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 (lb/ft)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 7-10=-70, 2-9=-20
Concentrated Loads (lb)
Vert: 16=-198 (F), 17=-108 (F), 18=-108 (F), 19=-108 (F), 21=-33 (F), 22=-33 (F), 23=-33 (F), 24=-1017 (F)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120775
P220274-P220274-02	B02	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:01 Page: 1
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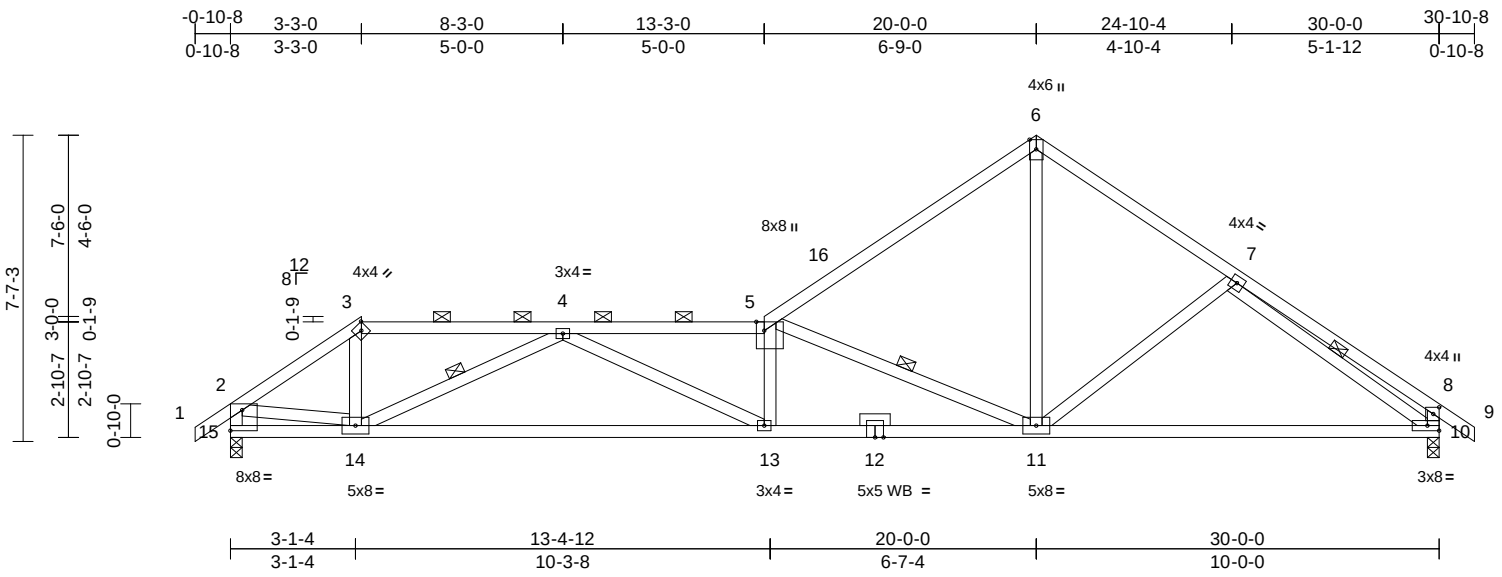


Scale = 1:57.2

Plate Offsets (X, Y): [3:0-1-14,0-2-0], [5:0-2-10,Edge], [8:0-2-0,0-1-12], [15:Edge,0-6-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.30	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.70	13-14	>510	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 152 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP 1650F 1.5E
WEBS	2x4 SPF No.3 *Except* 15-2,10-8:2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-2 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-14, 5-11, 7-10

REACTIONS (lb/size) 10=1408/0-3-8, 15=1408/0-3-8
Max Horiz 15=227 (LC 11)
Max Uplift 10=-177 (LC 13), 15=-271 (LC 12)

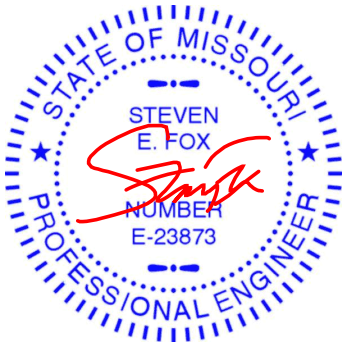
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/40, 2-3=-1819/287, 3-4=-1435/273, 4-5=-3805/638, 5-6=-1650/296, 6-7=-1608/315, 7-8=-595/129, 8-9=0/40, 2-15=-1431/250, 8-10=-529/161
BOT CHORD	14-15=-226/227, 13-14=-632/3044, 11-13=-643/3790, 10-11=-161/1400
WEBS	3-14=-32/713, 4-14=-1802/390, 4-13=-58/848, 5-13=-227/126, 5-11=-2714/576, 6-11=-162/1267, 7-11=-246/227, 2-14=-113/1425, 7-10=-1262/228

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-3-0, Exterior(2R) 3-3-0 to 8-3-0, Interior (1) 8-3-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-11-11, Interior (1) 24-11-11 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	B03	Roof Special	1	1	Job Reference (optional) I52120776

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:01 Page: 1
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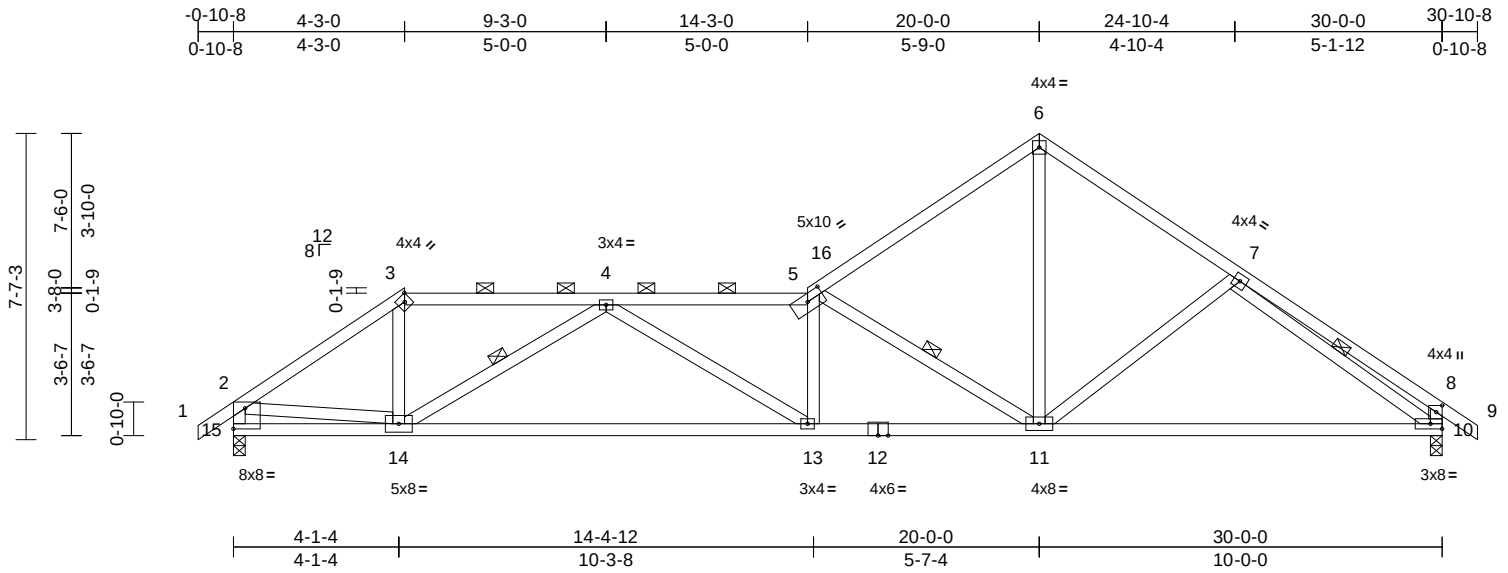


Scale = 1:57.2

Plate Offsets (X, Y): [3:0-1-14,0-2-0], [5:0-5-0,0-2-3], [8:0-2-0,0-1-12], [15:Edge,0-6-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.29	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.65	13-14	>546	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-10:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 15-2,10-8:2x4 SP No.2

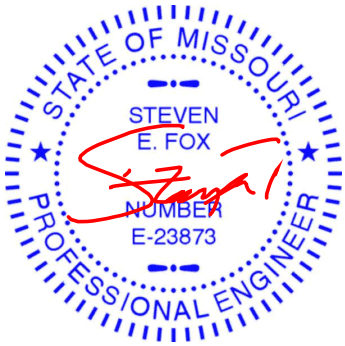
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-13 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-14, 7-10, 5-11

REACTIONS (lb/size) 10=1408/0-3-8, 15=1408/0-3-8
Max Horiz 15=227 (LC 11)
Max Uplift 10=-177 (LC 13), 15=-271 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-1860/308, 3-4=-1454/299, 4-5=-3062/522, 5-6=-1624/306, 6-7=-1605/314, 7-8=-592/126, 8-9=0/40, 2-15=-1403/267, 8-10=-525/158
BOT CHORD 14-15=-242/319, 13-14=-528/2597, 11-13=-501/3054, 10-11=-162/1401
WEBS 3-14=-31/703, 4-14=-1354/292, 4-13=-35/548, 5-13=-143/112, 2-14=-63/1326, 7-10=-1266/237, 6-11=-185/1304, 5-11=-2073/458, 7-11=-248/229

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-3-0, Exterior(2R) 4-3-0 to 9-3-0, Interior (1) 9-3-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-11-11, Interior (1) 24-11-11 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	B04	Roof Special	1	1	Job Reference (optional)	I52120777

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:01 Page: 1
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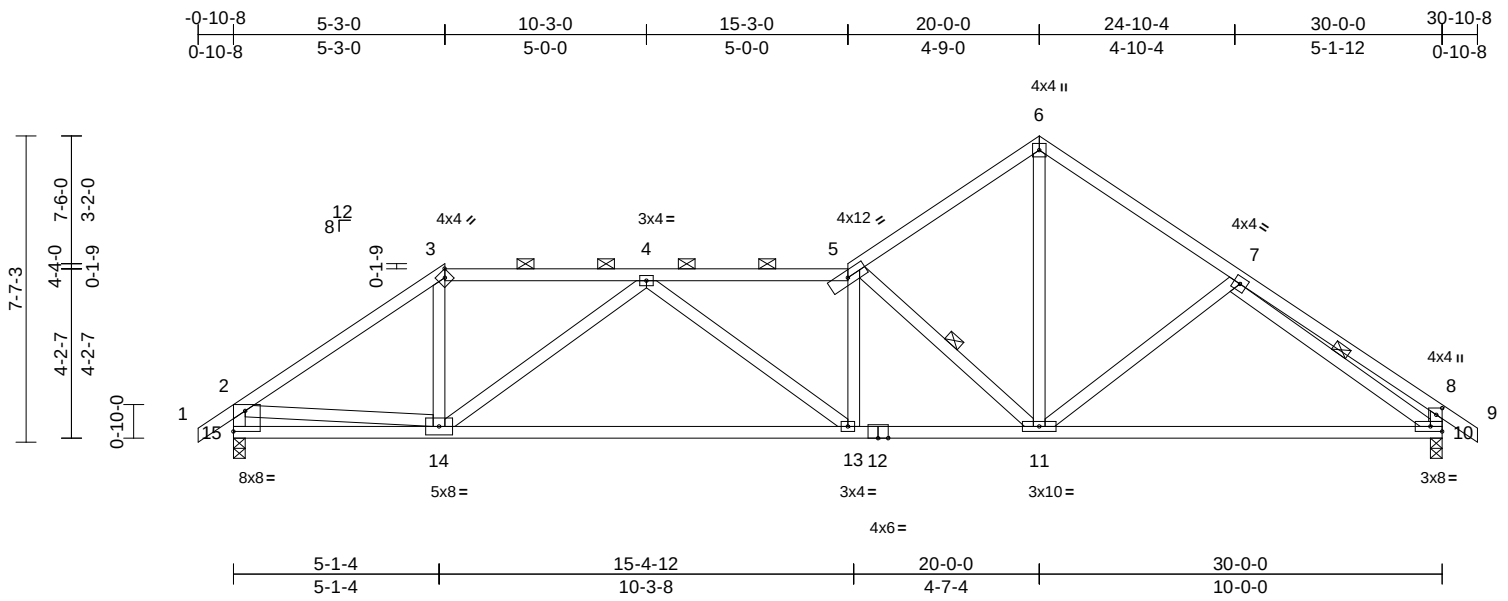


Scale = 1:57.2

Plate Offsets (X, Y): [3:0-1-14,0-2-0], [8:0-2-0,0-1-12], [15:Edge,0-6-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.28	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.62	13-14	>573	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-10:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 15-2,10-8:2x4 SP No.2

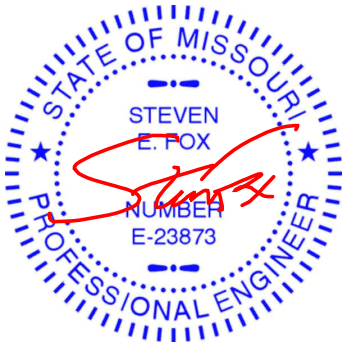
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-11 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 11-13.
WEBS 1 Row at midpt 7-10, 5-11

REACTIONS (lb/size) 10=1408/0-3-8, 15=1408/0-3-8
Max Horiz 15=227 (LC 11)
Max Uplift 10=-177 (LC 13), 15=-271 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-1870/319, 3-4=-1448/318, 4-5=-2546/445, 5-6=-1601/315, 6-7=-1604/314, 7-8=-588/124, 8-9=0/40, 2-15=-1384/281, 8-10=-522/157
BOT CHORD 14-15=-278/438, 13-14=-449/2278, 11-13=-396/2542, 10-11=-164/1402
WEBS 3-14=-22/669, 4-14=-1045/223, 4-13=-26/354, 5-13=-72/102, 2-14=-82/1191, 7-10=-1270/242, 6-11=-206/1342, 5-11=-1681/385, 7-11=-250/231

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-3-0, Exterior(2R) 5-3-0 to 10-3-0, Interior (1) 10-3-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-11-11, Interior (1) 24-11-11 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	B05	Roof Special	1	1	Job Reference (optional)	I52120778

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:02 Page: 1
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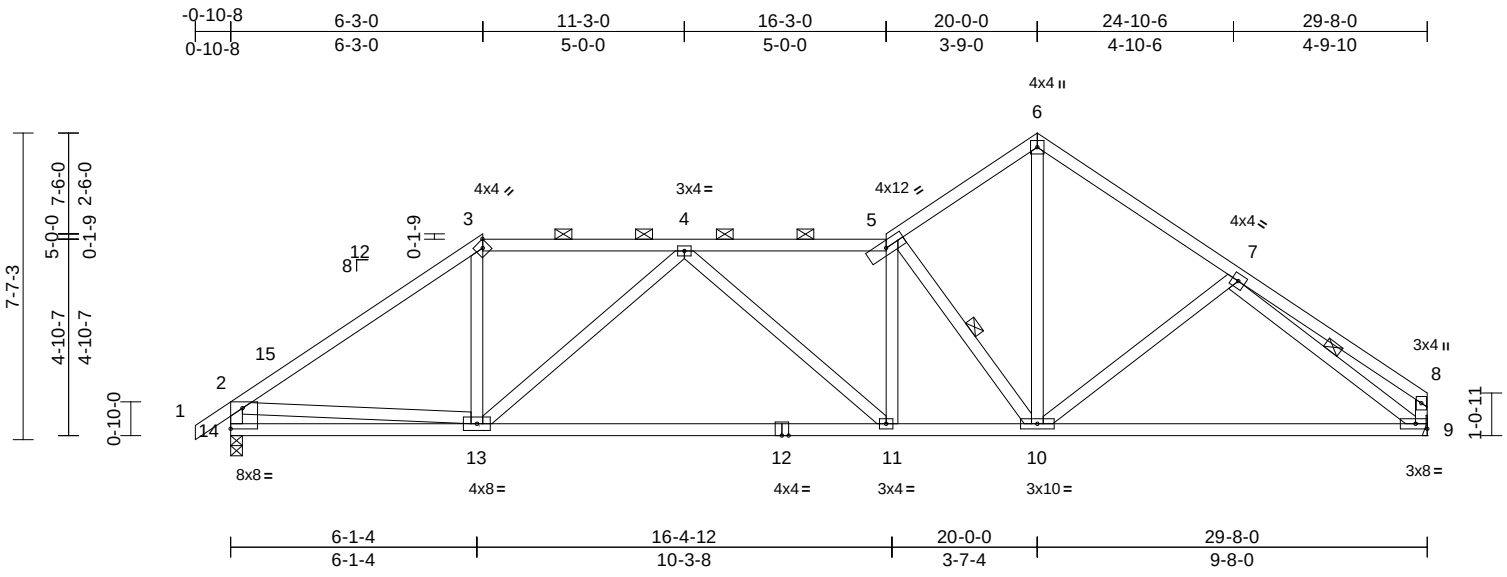


Scale = 1:57.1

Plate Offsets (X, Y): [3:0-1-14,0-2-0], [14:Edge,0-6-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.28	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.61	11-13	>579	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 20%

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

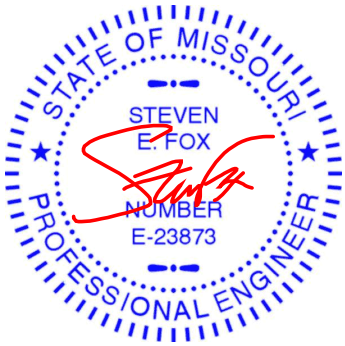
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-12 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-9, 5-10

REACTIONS (lb/size) 9=1321/ Mechanical, 14=1395/0-3-8
Max Horiz 14=224 (LC 9)
Max Uplift 9=-154 (LC 12), 14=-269 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-1840/321, 3-4=-1409/331, 4-5=-2113/384, 5-6=-1532/320, 6-7=-1557/308, 7-8=-354/57, 2-14=-1355/290, 8-9=-302/82
BOT CHORD 13-14=-358/566, 11-13=-391/1998, 10-11=-320/2112, 9-10=-196/1319
WEBS 3-13=-9/608, 4-13=-791/194, 4-11=-18/221, 5-11=-11/138, 2-13=-122/1013, 7-9=-1435/274, 6-10=-227/1329, 5-10=-1434/338, 7-10=-209/222

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-3-0, Exterior(2R) 6-3-0 to 11-3-0, Interior (1) 11-3-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-11-11, Interior (1) 24-11-11 to 29-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 9.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



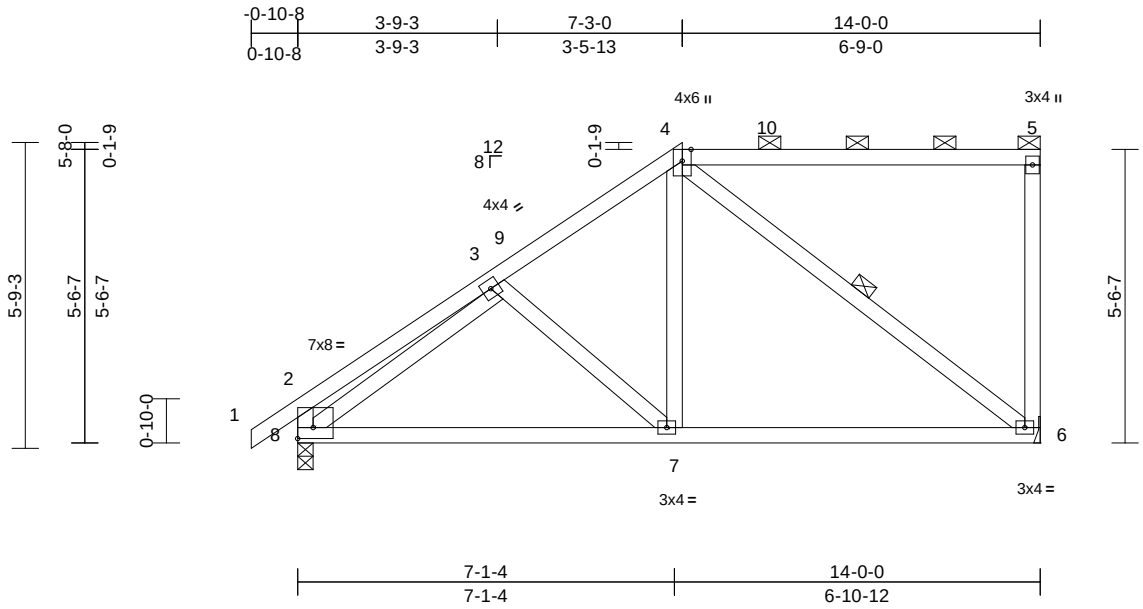
May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120779
P220274-P220274-02	B06	Half Hip	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:02 Page: 1
ID:OzIwkj0pnkIj3SqH04AdUhzYcki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWCDoi7J4z3C?f



Scale = 1:43.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.10	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 8-2:2x4 SP No.2

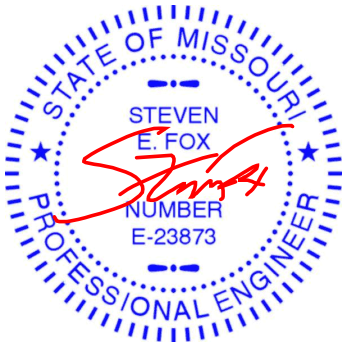
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS (lb/size) 6=614/ Mechanical, 8=691/0-3-8
Max Horiz 8=234 (LC 9)
Max Uplift 6=-142 (LC 9), 8=-109 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-271/116, 3-4=-584/155, 4-5=-112/111, 5-6=-228/107, 2-8=-316/139
BOT CHORD 7-8=-353/537, 6-7=-226/436
WEBS 4-7=-13/328, 4-6=-526/203, 3-8=-485/85, 3-7=-178/167

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-3-0, Exterior(2E) 7-3-0 to 13-10-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 6.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



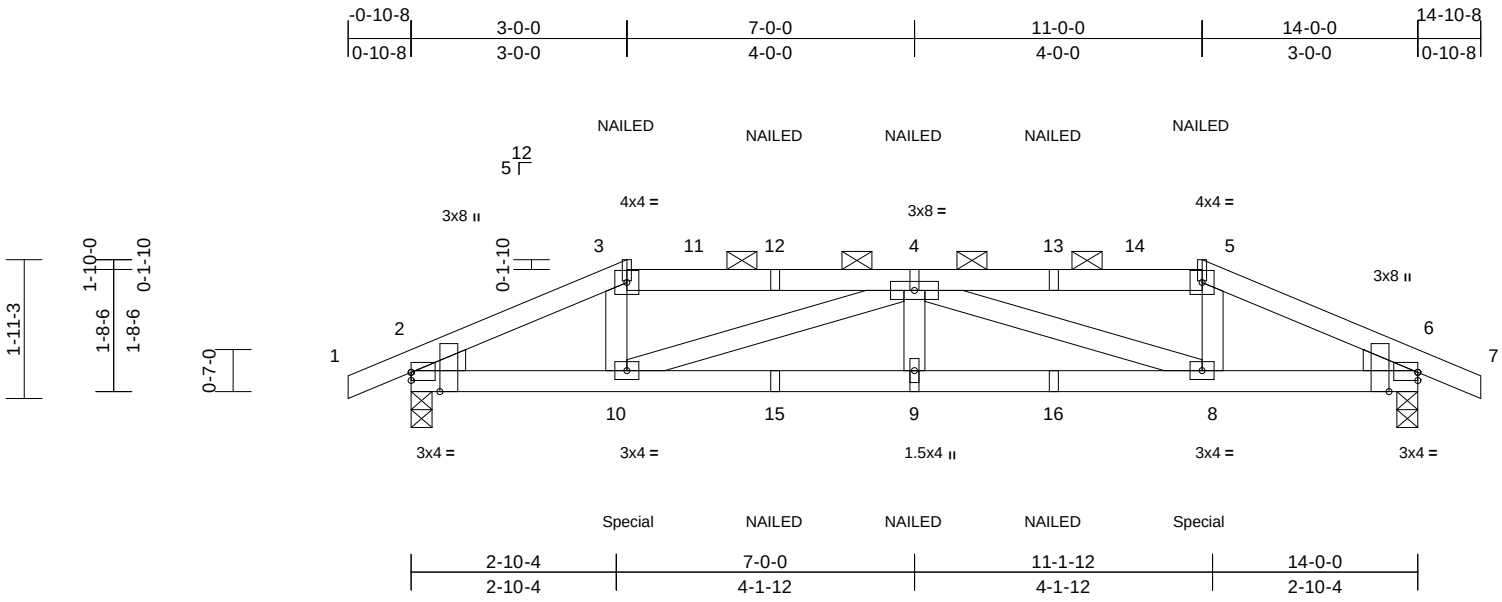
May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	C01	Hip Girder	1	2	Job Reference (optional)	I52120780

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:02 Page: 1
ID:f_DZxGCiFfK8PRslYapvTkzQQHW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoiYJ4zJC?f



Scale = 1:32

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.04	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 122 lb	FT = 20%

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

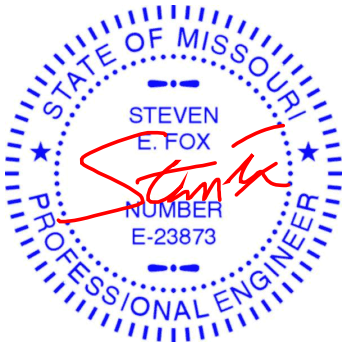
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=868/0-3-8, 6=868/0-3-8
Max Horiz 2=29 (LC 16)
Max Uplift 2=-245 (LC 8), 6=-245 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-1521/516, 3-4=-1271/480, 4-5=-1271/480, 5-6=-1521/516, 6-7=0/6
BOT CHORD 2-10=-406/1312, 9-10=-639/1953, 8-9=-639/1953, 6-8=-406/1312
WEBS 3-10=-89/453, 4-10=-753/256, 4-9=0/201, 4-8=-753/256, 5-8=-89/453

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-0-0, Exterior(2R) 3-0-0 to 10-0-14, Interior (1) 10-0-14 to 11-0-0, Exterior(2E) 11-0-0 to 14-10-8 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
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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 Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 49 lb up at 3-0-0, and 131 lb down and 49 lb up at 10-11-4 on bottom 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 (lb/ft)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 3=-15 (B), 5=-15 (B), 10=-131 (B), 9=-8 (B), 8=-131 (B), 4=-15 (B), 12=-15 (B), 13=-15 (B), 15=-8 (B), 16=-8 (B)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	C02	Hip	1	1	Job Reference (optional)	I52120781

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:03 Page: 1
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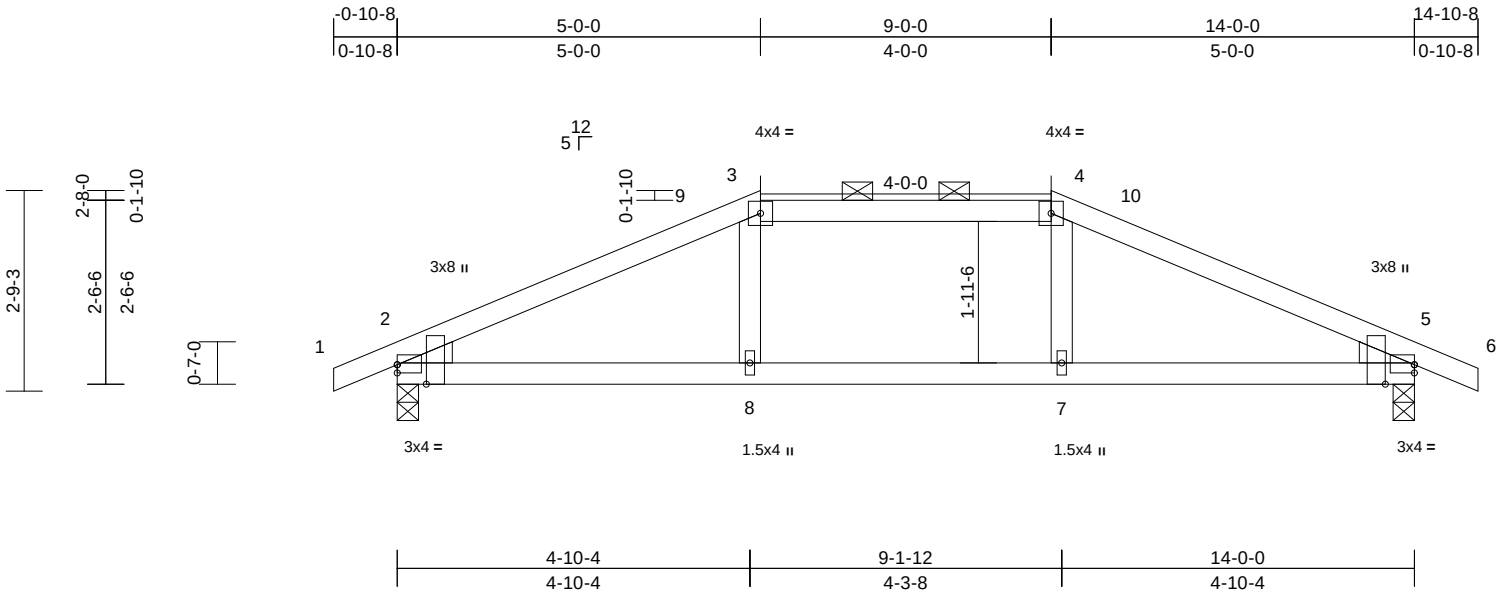


Scale = 1:31.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.08	5-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.11	5-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 53 lb	FT = 20%

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

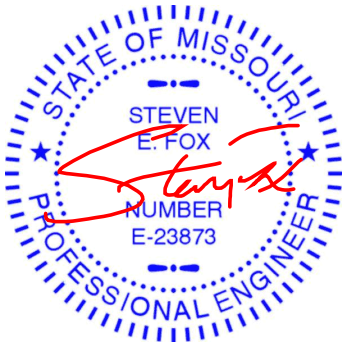
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=688/0-3-8, 5=688/0-3-8
Max Horiz 2=45 (LC 12)
Max Uplift 2=-108 (LC 8), 5=-108 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-1044/318, 3-4=-870/333, 4-5=-1044/318, 5-6=0/6
BOT CHORD 2-8=-205/877, 7-8=-208/870, 5-7=-206/877
WEBS 3-8=0/193, 4-7=0/193

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-0-0, Exterior(2E) 5-0-0 to 14-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120782
P220274-P220274-02	C03	Common	5	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:03 Page: 1
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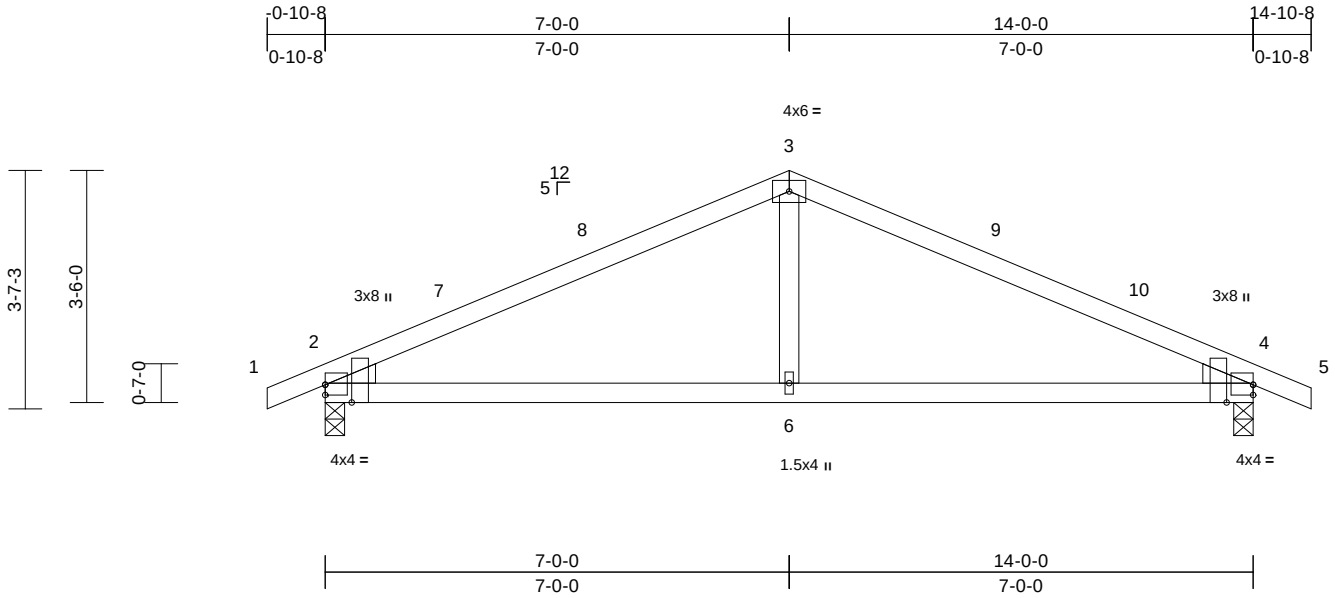


Scale = 1:34.8

Plate Offsets (X, Y): [2:Edge,0-1-14], [2:0-3-3,Edge], [4:Edge,0-1-14], [4:0-3-3,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.06	4-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.13	4-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 52 lb	FT = 20%

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

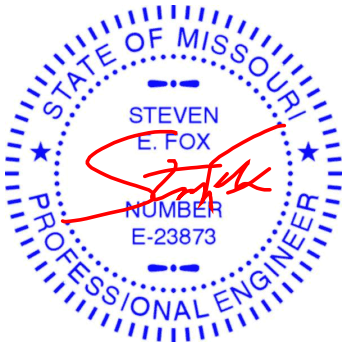
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=688/0-3-8, 4=688/0-3-8
Max Horiz 2=-62 (LC 13)
Max Uplift 2=-122 (LC 12), 4=-122 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-933/318, 3-4=-933/318, 4-5=0/6
BOT CHORD 2-6=-182/758, 4-6=-182/758
WEBS 3-6=0/333

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 12-0-0, Interior (1) 12-0-0 to 14-10-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120783
P220274-P220274-02	CJ01	Diagonal Hip Girder	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:03 Page: 1
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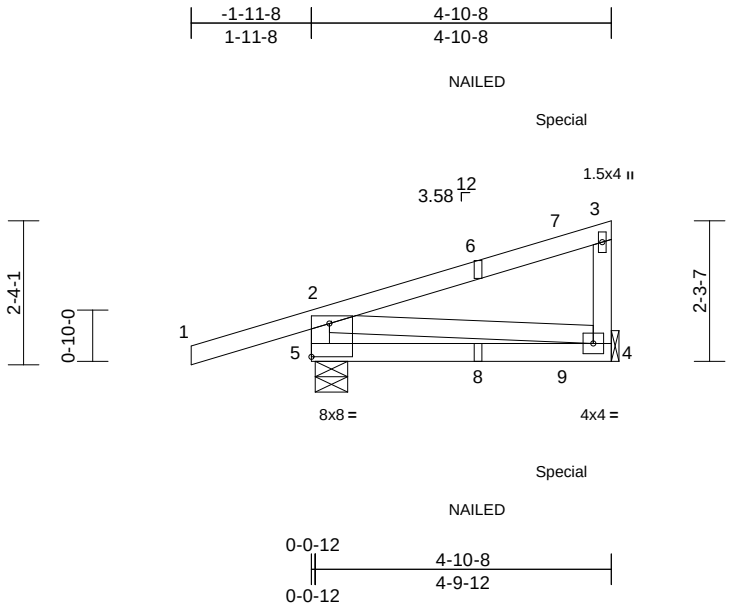

Scale = 1:37.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.03	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	4-5	>937	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

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

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

REACTIONS (lb/size) 4=221/ Mechanical, 5=393/0-6-5
Max Horiz 5=102 (LC 9)
Max Uplift 4=-73 (LC 9), 5=-164 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-348/476, 1-2=0/42, 2-3=-107/52, 3-4=-165/167
BOT CHORD 4-5=-244/132
WEBS 2-4=-101/218

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
5) 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.
6) N/A
7) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 106 lb up at 4-1-0 on top chord, and 30 lb down at 4-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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 (lb/ft)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-45 (F), 8=6 (B), 9=-15 (F)

May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	CJ02	Diagonal Hip Girder	2	1	Job Reference (optional) I52120784

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:04 Page: 1
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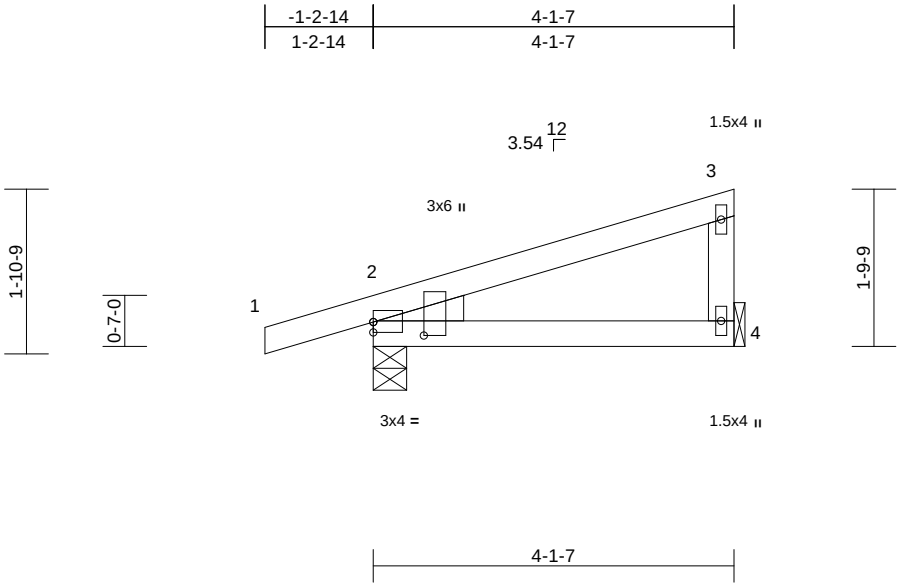


Scale = 1:26.3

Plate Offsets (X, Y): [2:Edge,0-1-7], [2:0-1-14,0-6-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.02	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

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

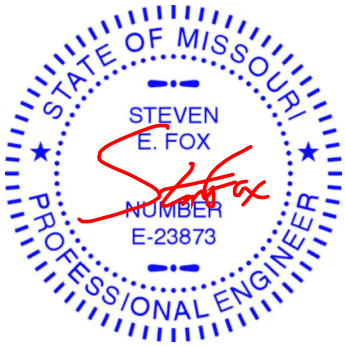
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=289/0-4-9, 4=151/ Mechanical
Max Horiz 2=70 (LC 9)
Max Uplift 2=-110 (LC 8), 4=-37 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-94/56, 3-4=-113/161
BOT CHORD 2-4=-30/33

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 2. This connection is for uplift only and does not consider lateral forces.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	CJ03	Diagonal Hip Girder	3	1	Job Reference (optional) I52120785

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:04 Page: 1
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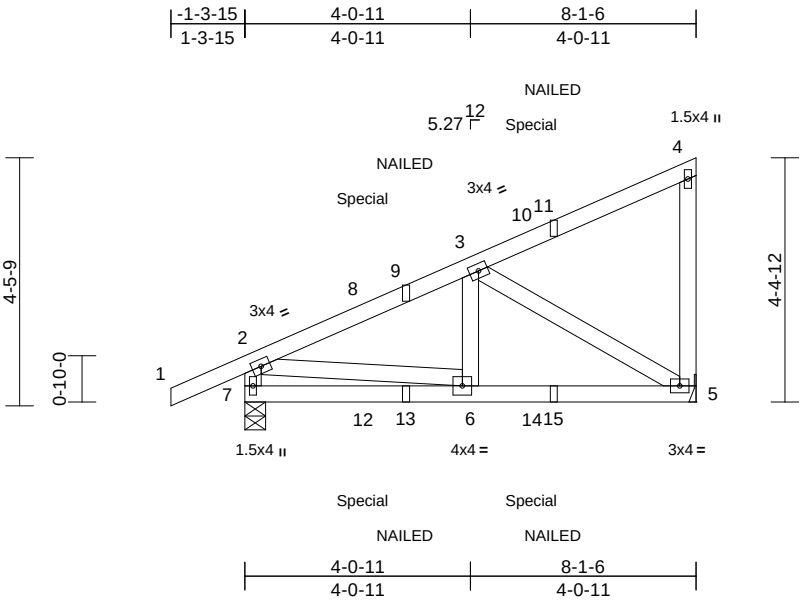


Scale = 1:41.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 44 lb	FT = 20%

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

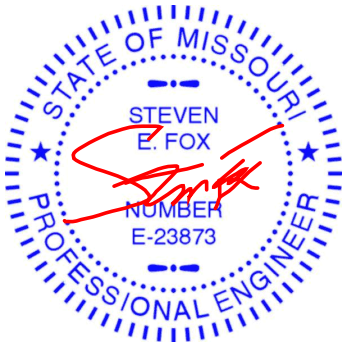
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-5-3 oc bracing.

REACTIONS (lb/size) 5=371/ Mechanical, 7=477/0-4-7
Max Horiz 7=197 (LC 9)
Max Uplift 5=-146 (LC 9), 7=-130 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-449/299, 1-2=0/41, 2-3=-548/171, 3-4=-219/97, 4-5=-114/131
BOT CHORD 6-7=-389/234, 5-6=-319/409
WEBS 2-6=-67/503, 3-6=0/170, 3-5=-457/309

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-3-15 to 5-8-15, Exterior(2R) 5-8-15 to 7-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 5.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
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.
7) N/A
8) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down and 57 lb up at 2-1-10, and 158 lb down and 108 lb up at 5-2-1 on top chord, and 6 lb down and 8 lb up at 2-1-10, and 27 lb down at 5-2-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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 (lb/ft)
Vert: 1-2=-70, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-9 (F), 11=-10 (B), 12=3 (F), 13=2 (B), 14=-14 (F), 15=-13 (B)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	CJ04	Diagonal Hip Girder	1	1	Job Reference (optional) I52120786

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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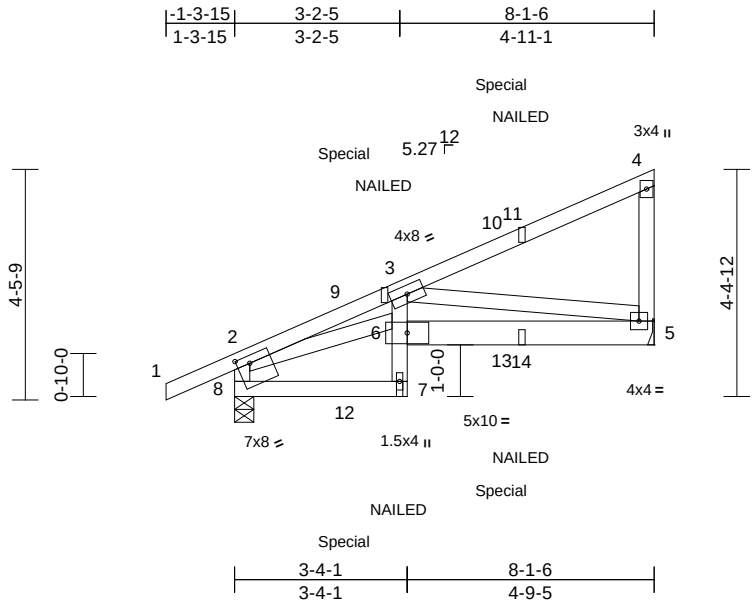


Scale = 1:44.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	0.04	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.05	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%

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

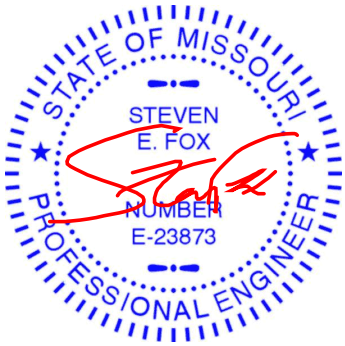
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-8 oc bracing.

REACTIONS (lb/size) 5=362/ Mechanical, 8=474/0-4-7
Max Horiz 8=178 (LC 9)
Max Uplift 5=-142 (LC 12), 8=-127 (LC 12)
Max Grav 5=366 (LC 19), 8=474 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-437/321, 1-2=0/41, 2-3=-900/440, 3-4=-199/63, 4-5=-143/150
BOT CHORD 7-8=-175/148, 6-7=-25/58, 3-6=-73/220, 5-6=-778/914
WEBS 2-6=-475/673, 3-5=-885/724

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-3-15 to 5-8-15, Exterior(2R) 5-8-15 to 7-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 5.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
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.
7) N/A
8) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down and 57 lb up at 2-1-10, and 148 lb down and 86 lb up at 5-2-1 on top chord, and 6 lb down and 8 lb up at 2-1-10, and 44 lb down and 33 lb up at 5-2-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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 (lb/ft)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 7=2 (F), 10=-6 (B), 12=3 (B), 13=-39 (B), 14=11 (F)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120787
P220274-P220274-02	D01	Hip Girder	1	2	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:05 Page: 1
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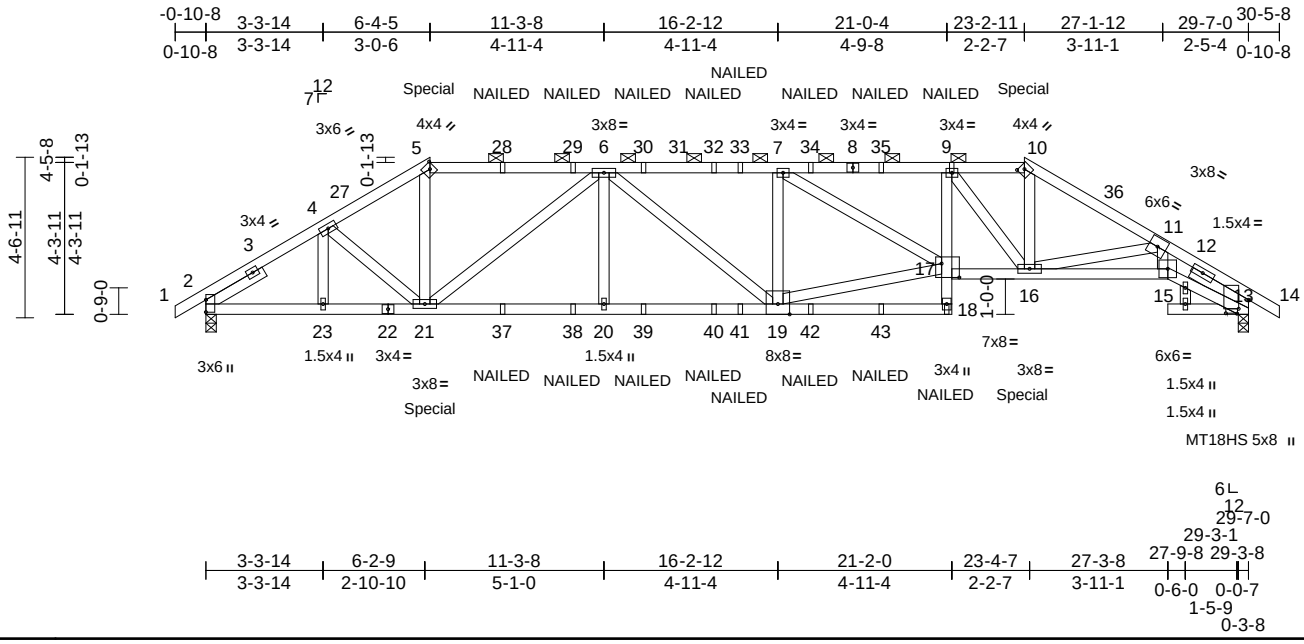


Scale = 1:65.4

Plate Offsets (X, Y): [2:Edge,0-0-0], [5:0-1-9,0-2-0], [10:0-2-0,0-1-9], [13:0-3-1,0-3-6], [13:0-3-12,0-0-2], [17:0-6-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	0.20	18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.35	18-19	>999	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.22	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 329 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 5-8,8-10:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 18-9:2x4 SPF No.3, 15-13:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 1-10-13, Right 2x4 SP No.2 -- 1-11-1

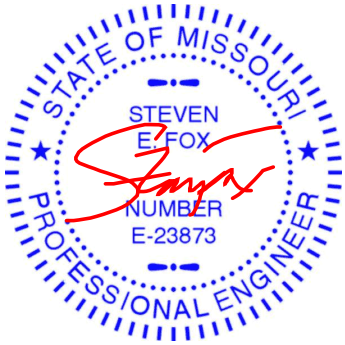
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except 2-0-0 oc purlins (5-1-1 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.

REACTIONS (lb/size) 2=2403/0-3-8, 13=2388/0-3-8
Max Horiz 2=116 (LC 11)
Max Uplift 2=-743 (LC 12), 13=-756 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-3691/1176, 4-5=-3712/1253, 5-6=-3192/1122, 6-7=-4698/1628, 7-9=-5310/1849, 9-10=-4117/1421, 10-11=-4825/1624, 11-13=-7354/2290, 13-14=0/1
BOT CHORD 2-23=-986/2938, 21-23=-986/2938, 20-21=-1554/4497, 19-20=-1554/4497, 18-19=-83/319, 17-18=0/189, 9-17=-344/1177, 16-17=-1804/5336, 15-16=-1581/5130, 13-15=-1876/6125
WEBS 4-23=-50/56, 4-21=-279/502, 5-21=-364/1340, 6-21=-1717/654, 6-20=0/364, 6-19=-143/302, 7-19=-1019/570, 17-19=-1569/4509, 7-17=-266/725, 9-16=-2017/783, 10-16=-675/2009, 11-15=-729/2566, 11-16=-946/336

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-4-5, Exterior(2R) 6-4-5 to 13-5-2, Interior (1) 13-5-2 to 23-2-11, Exterior(2E) 23-2-11 to 30-5-8 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
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) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 136 lb down and 128 lb up at 6-4-5, and 119 lb down and 98 lb up at 23-2-11 on top chord, and 392 lb down and 145 lb up at 6-4-5, and 390 lb down and 175 lb up at 23-1-15 on bottom 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 (lb/ft)
Vert: 1-5=-70, 5-10=-70, 10-14=-70, 2-18=-20, 15-17=-20, 13-15=-20
Concentrated Loads (lb)



May 24,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	D01	Hip Girder	1	**2**	Job Reference (optional) I52120787

Vert: 5=-93 (B), 18=-61 (B), 9=-73 (B), 21=-386 (B), 16=-371 (B), 10=-56 (B), 28=-93 (B), 29=-93 (B), 30=-93 (B), 32=-93 (B), 33=-93 (B), 34=-93 (B), 35=-93 (B), 37=-45 (B), 38=-45 (B), 39=-45 (B), 40=-45 (B), 41=-45 (B), 42=-45 (B), 43=-45 (B)

Job	Truss	Truss Type	Qty	Ply	Roof	I52120788
P220274-P220274-02	D02	Hip	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:06 Page: 1
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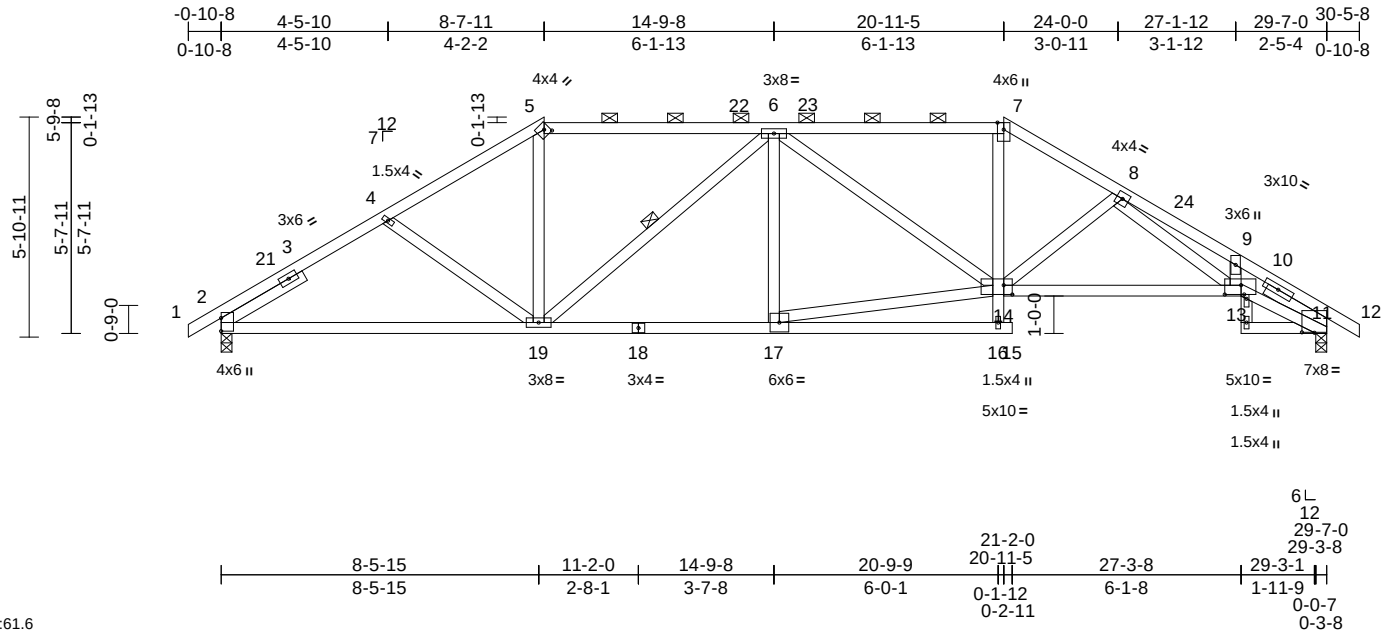


Scale = 1:61.6

Plate Offsets (X, Y): [5:0-1-9,0-2-0], [11:0-4-0,0-0-2], [13:0-5-4,0-3-0], [13:0-1-6,0-0-12], [14:0-2-12,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.15	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.34	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.20	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 5-7:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 13-11:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 20-13:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-6-13, Right 2x4 SP No.2 -- 1-11-1

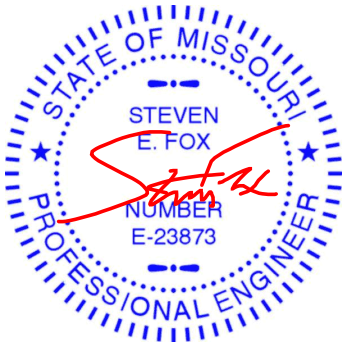
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins, except 2-0-0 oc purlins (3-7-7 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-19

REACTIONS (lb/size) 2=1388/0-3-8, 11=1399/0-3-8
Max Horiz 2=154 (LC 11)
Max Uplift 2=-163 (LC 12), 11=-163 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2038/290, 4-5=-1812/248, 5-6=-1522/250, 6-7=-1825/271, 7-8=-2169/285, 8-9=-3292/431, 9-11=-4102/409, 11-12=0/1
BOT CHORD 2-19=-249/1614, 17-19=-234/1884, 16-17=-1/61, 15-16=0/0, 13-14=-200/2211, 11-13=-311/3381
WEBS 4-19=-182/189, 5-19=-35/524, 6-19=-576/200, 6-17=-171/114, 9-13=0/1005, 8-14=-489/174, 8-13=-114/857, 14-16=0/121, 7-14=-76/776, 14-17=-237/1846, 6-14=-222/143

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-0, Interior (1) 4-4-0 to 8-7-11, Exterior(2R) 8-7-11 to 15-8-9, Interior (1) 15-8-9 to 20-11-5, Exterior(2R) 20-11-5 to 28-0-2, Interior (1) 28-0-2 to 30-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	D03	Hip	1	1	Job Reference (optional) I52120789

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:06 Page: 1
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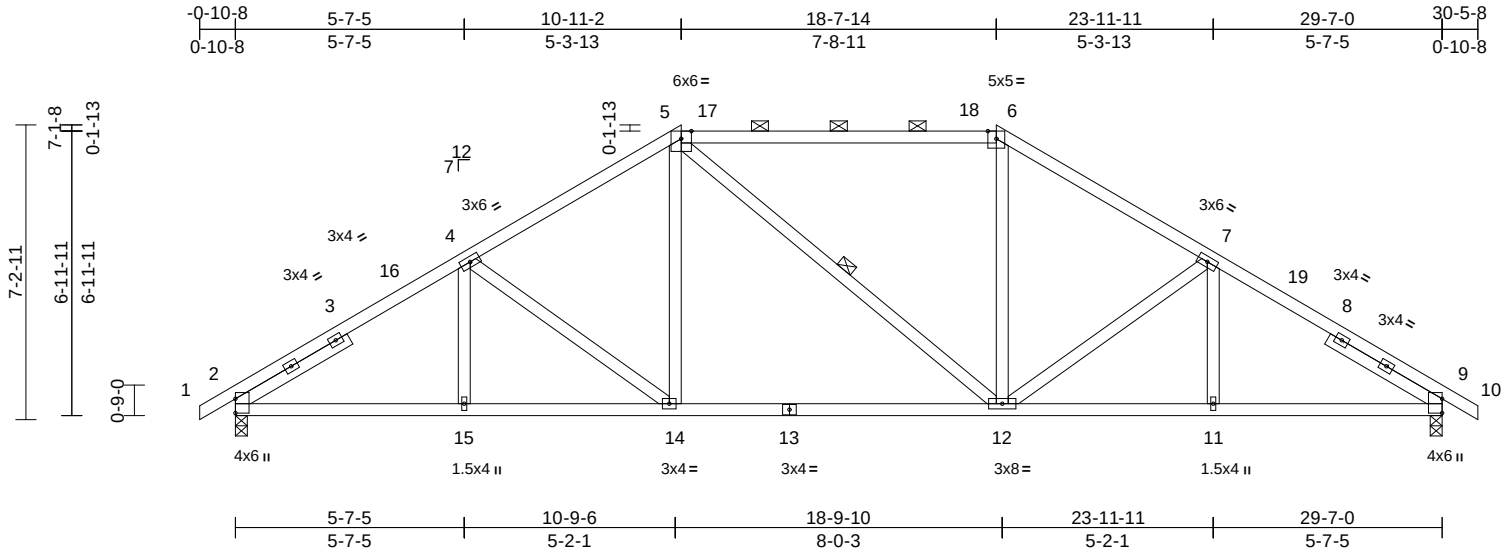


Scale = 1:56.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.12	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.27	12-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 154 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 3-2-11, Right 2x4 SP No.2 -- 3-2-11

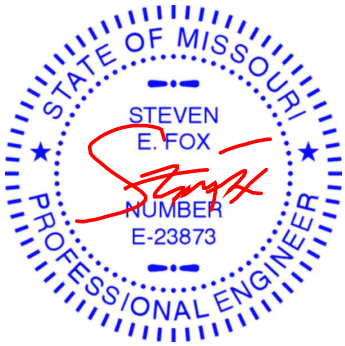
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-12

REACTIONS (lb/size) 2=1393/0-3-8, 9=1393/0-3-8
Max Horiz 2=-191 (LC 10)
Max Uplift 2=-188 (LC 12), 9=-188 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2057/277, 4-5=-1696/288, 5-6=-1395/304, 6-7=-1696/292, 7-9=-2057/283, 9-10=0/5
BOT CHORD 2-15=-238/1648, 14-15=-238/1648, 12-14=-112/1395, 11-12=-175/1648, 9-11=-175/1648
WEBS 4-15=0/191, 4-14=-380/204, 5-14=-33/395, 5-12=-160/161, 6-12=-2/395, 7-12=-379/204, 7-11=0/190

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-11-2, Exterior(2R) 10-11-2 to 18-0-0, Interior (1) 18-0-0 to 18-7-14, Exterior(2R) 18-7-14 to 25-8-11, Interior (1) 25-8-11 to 30-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	D04	Hip	1	1	I52120790

Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:07 Page: 1
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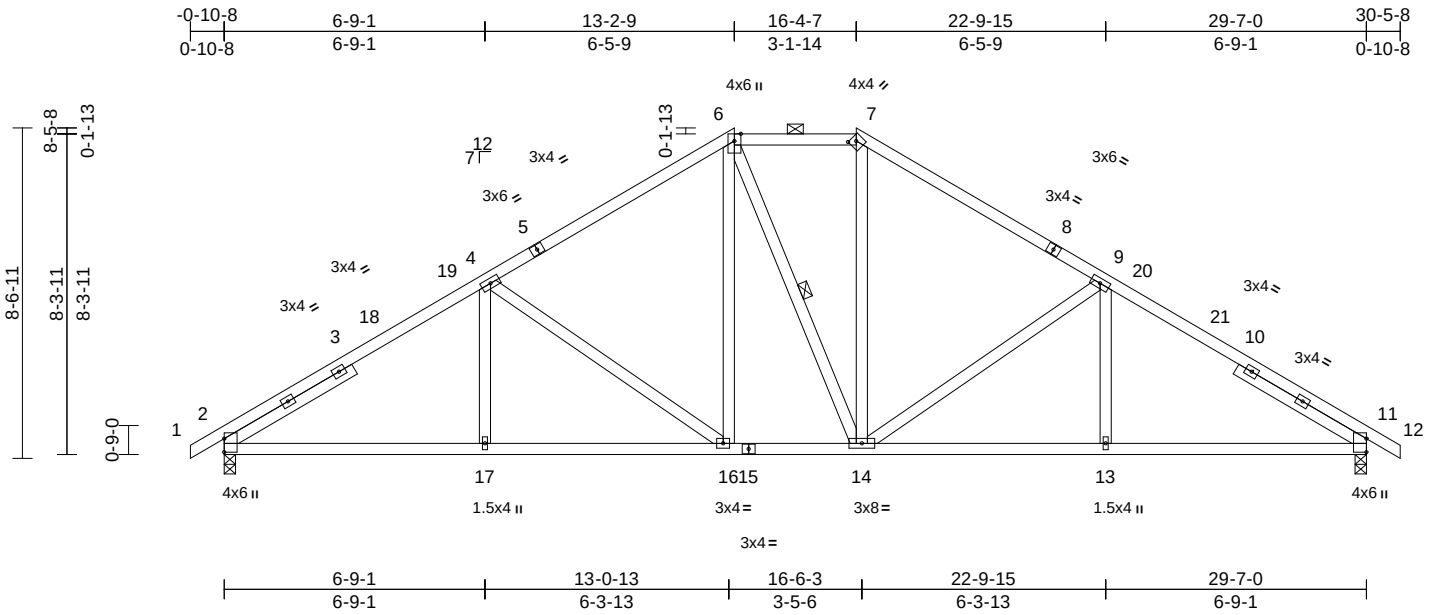


Scale = 1:59.7

Plate Offsets (X, Y): [7:0-2-0,0-1-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.08	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.17	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 3-10-10, Right 2x4 SP No.2 -- 3-10-10

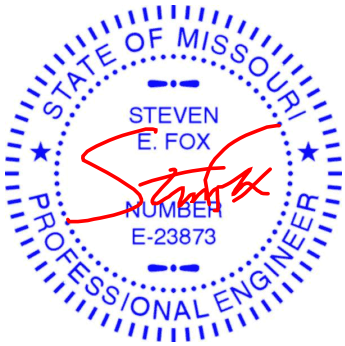
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (5-1-2 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-14

REACTIONS (lb/size) 2=1393/0-3-8, 11=1392/0-3-8
Max Horiz 2=-228 (LC 10)
Max Uplift 2=-207 (LC 12), 11=-207 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2045/274, 4-6=-1534/249, 6-7=-1220/270, 7-9=-1535/249, 9-11=-2044/275, 11-12=0/5
BOT CHORD 2-17=-271/1640, 16-17=-271/1640, 14-16=-67/1219, 13-14=-117/1640, 11-13=-117/1640
WEBS 4-17=0/283, 4-16=-554/246, 6-16=-83/405, 6-14=-178/183, 7-14=-67/387, 9-14=-553/246, 9-13=0/281

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-2-9, Exterior(2E) 13-2-9 to 16-4-7, Exterior(2R) 16-4-7 to 23-5-5, Interior (1) 23-5-5 to 30-5-8 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 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120791
P220274-P220274-02	D05	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:07 Page: 1
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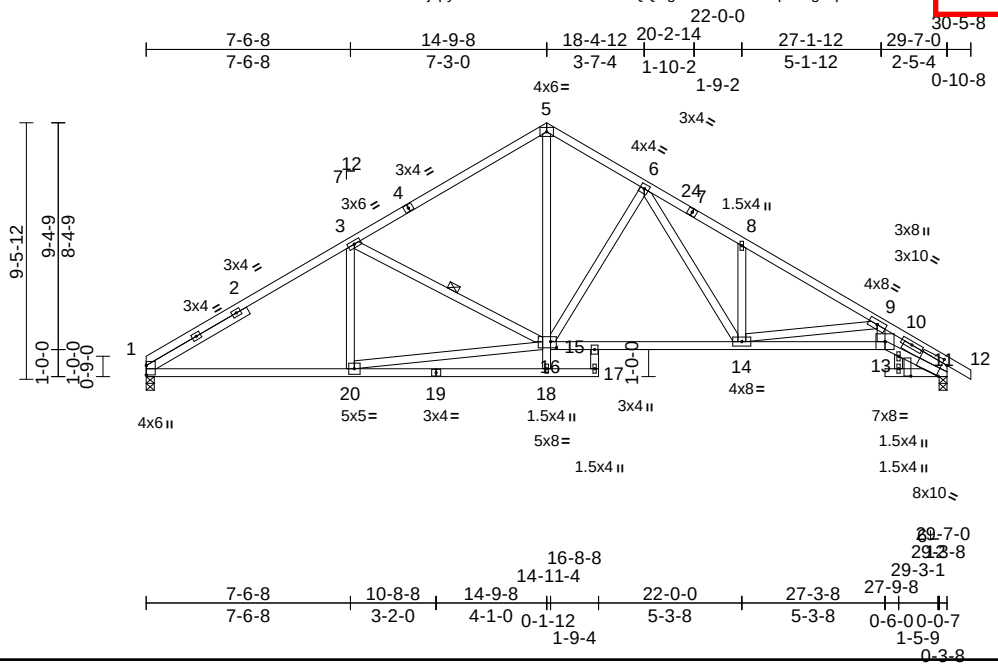


Scale = 1:85.1

Plate Offsets (X, Y): [11:0-2-4,0-1-13], [11:Edge,1-0-2], [16:0-2-8,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.16	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.31	14-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.22	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 171 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 7-12:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 17-15:2x4 SPF No.3, 13-11:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 4-4-2, Right 2x4 SP No.2 -- 1-11-1

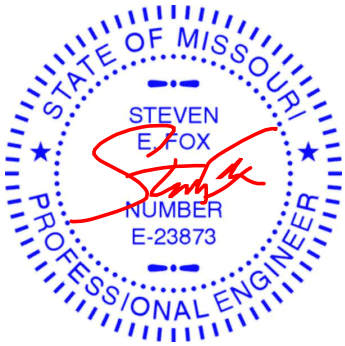
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-16

REACTIONS (lb/size) 1=1324/0-3-8, 11=1397/0-3-8
Max Horiz 1=-255 (LC 8)
Max Uplift 1=-194 (LC 12), 11=-219 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2014/293, 3-5=-1547/296, 5-6=-1481/318, 6-8=-2393/444, 8-9=-2330/324, 9-11=-4192/564, 11-12=0/1
BOT CHORD 1-20=-292/1615, 18-20=-43/105, 17-18=-52/56, 15-17=-75/0, 15-16=-39/1468, 14-15=-91/1525, 13-14=-369/2902, 11-13=-434/3492
WEBS 3-20=-49/170, 16-18=0/292, 5-16=-161/1039, 8-14=-448/231, 9-14=-927/266, 9-13=-133/1529, 6-16=-591/244, 6-14=-237/895, 16-20=-251/1523, 3-16=-510/269

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 14-9-8, Exterior(2R) 14-9-8 to 19-9-8, Interior (1) 19-9-8 to 30-5-8 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) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 11. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120792
P220274-P220274-02	E01	Roof Special Girder	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:08 Page: 1
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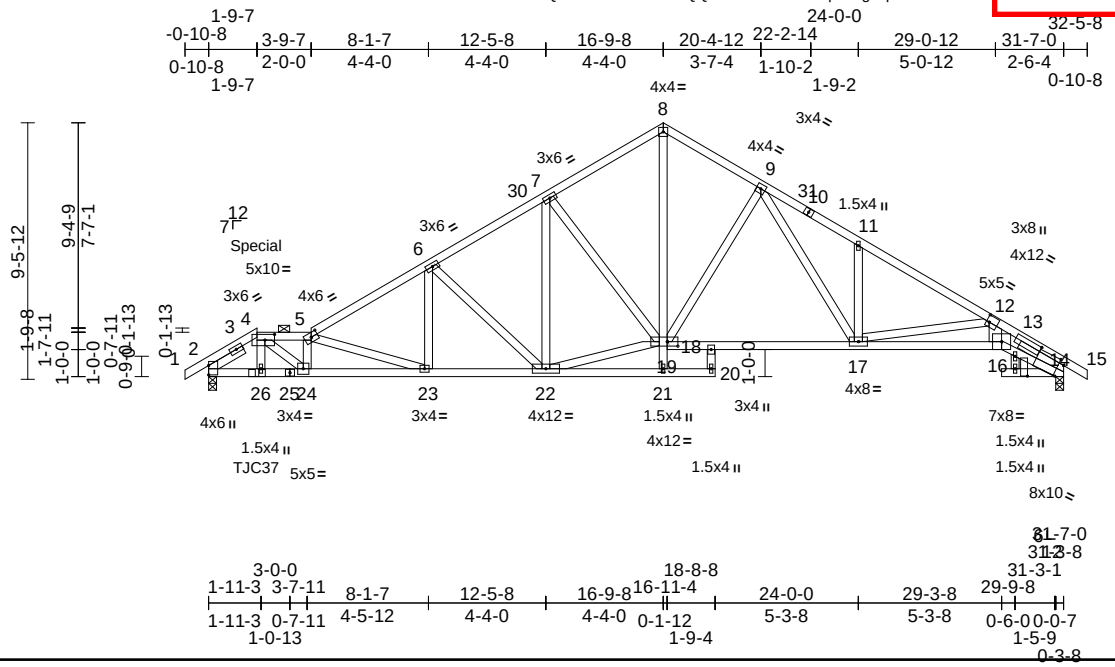


Scale = 1:85.1

Plate Offsets (X, Y): [4:0-4-4,0-2-8], [5:0-3-0,0-1-15], [12:0-1-4,0-3-0], [14:0-2-4,0-1-13], [14:Edge,1-0-2], [14:1-0-6,0-2-0], [19:0-4-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.20	17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.39	17-18	>970	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.25	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 193 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 10-15:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 20-18:2x4 SPF No.3, 19-16,16-14:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 12-16:2x6 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-5-12, Right 2x4 SP No.2 -- 1-11-1

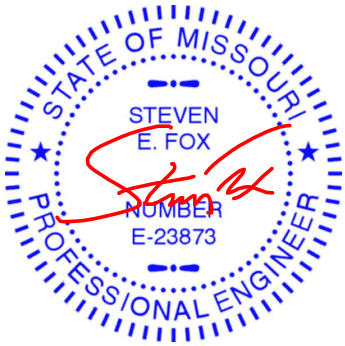
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins, except 2-0-0 oc purlins (3-1-13 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=1470/0-3-8, 14=1486/0-3-8
Max Horiz 2=256 (LC 11)
Max Uplift 2=-242 (LC 12), 14=-226 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2115/323, 4-5=-3151/490, 5-6=-2565/389, 6-7=-1979/352, 7-8=-1663/335, 8-9=-1672/345, 9-11=-2587/456, 11-12=-2522/347, 12-14=-4549/586, 14-15=0/1
BOT CHORD 2-26=-383/1625, 24-26=-382/1628, 23-24=-620/3269, 22-23=-379/2160, 21-22=-46/56, 20-21=-84/21, 18-20=-51/0, 18-19=-64/1672, 17-18=-119/1692, 16-17=-374/3034, 14-16=-452/3808
WEBS 4-26=0/50, 4-24=-272/1915, 5-24=-1153/221, 5-23=-1167/253, 6-23=-27/478, 6-22=-706/216, 7-22=-58/240, 19-21=0/229, 8-19=-231/1332, 11-17=-448/227, 12-16=-143/1684, 12-17=-891/260, 9-19=-612/249, 9-17=-233/899, 19-22=-179/1624, 7-19=-485/236

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-9-7, Interior (1) 3-9-7 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 1-9-7 from the left end to connect truss(es) to back face of bottom chord, skewed 48.8 deg.to the right, sloping 0.0 deg. down.
10) Fill all nail holes where hanger is in contact with lumber.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 23 lb down and 53 lb up at 1-9-7 on top chord. The design/ selection of such connection device(s) is the responsibility of others.
12) 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 (lb/ft)
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 8-15=-70, 2-20=-20, 16-18=-20, 14-16=-20
Concentrated Loads (lb)
Vert: 26=7 (B)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120793
P220274-P220274-02	E02	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:08 Page: 1
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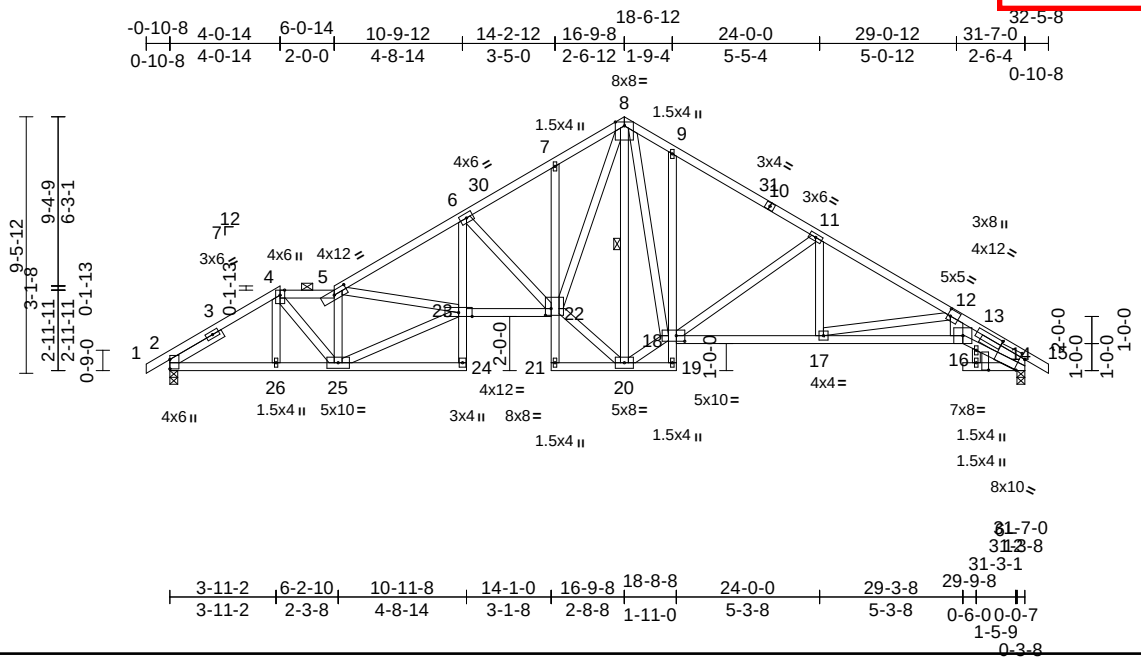


Scale = 1:85.1

Plate Offsets (X, Y): [5:0-6-0,0-1-15], [12:0-1-4,0-3-0], [14:0-2-4,0-1-13], [14:Edge,1-0-2], [14:1-0-6,0-2-0], [18:0-3-12,0-2-8], [22:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.28	22-23	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.50	22-23	>750	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.39	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 215 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 10-15:2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 *Except* 24-6,7-21,19-9:2x4 SPF No.3, 16-14:2x4 SP 1650F 1.5E

WEBS 2x4 SPF No.3 *Except* 25-23:2x4 SP No.2, 16-12:2x6 SPF No.2

SLIDER Left 2x4 SP No.2 -- 2-3-0, Right 2x4 SP No.2 -- 1-11-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-1-13 oc purlins, except 2-0-0 oc purlins (3-6-1 max.): 4-5.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 8-20

REACTIONS (lb/size) 2=1476/0-3-8, 14=1486/0-3-8
Max Horiz 2=256 (LC 11)
Max Uplift 2=-242 (LC 12), 14=-226 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/5, 2-4=-2235/340, 4-5=-2582/421, 5-6=-3468/551, 6-7=-2360/399, 7-8=-2292/476, 8-9=-1785/426, 9-11=-1892/349, 11-12=-2531/359, 12-14=-4532/567, 14-15=0/1

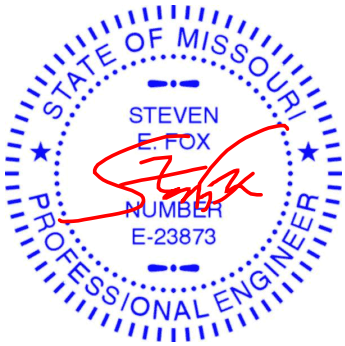
BOT CHORD 2-26=-373/1787, 25-26=-375/1786, 24-25=-5/55, 23-24=0/91, 6-23=-176/1244, 22-23=-449/2921, 21-22=-21/18, 7-22=-162/124, 20-21=-6/38, 19-20=-23/88, 18-19=-50/13, 9-18=-221/186, 17-18=-187/2173, 16-17=-358/3013, 14-16=-433/3787

WEBS 4-26=0/82, 4-25=-164/1293, 5-25=-2065/382, 23-25=-490/2662, 5-23=-4/467, 6-22=-1365/342, 8-20=-1429/104, 11-18=-784/238, 11-17=0/365, 12-17=-853/229, 12-16=-135/1683, 20-22=-86/1523, 8-22=-397/2115, 18-20=-60/1322, 8-18=-220/1311

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 6-0-14, Interior (1) 6-0-14 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120794
P220274-P220274-02	E03	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:09 Page: 1
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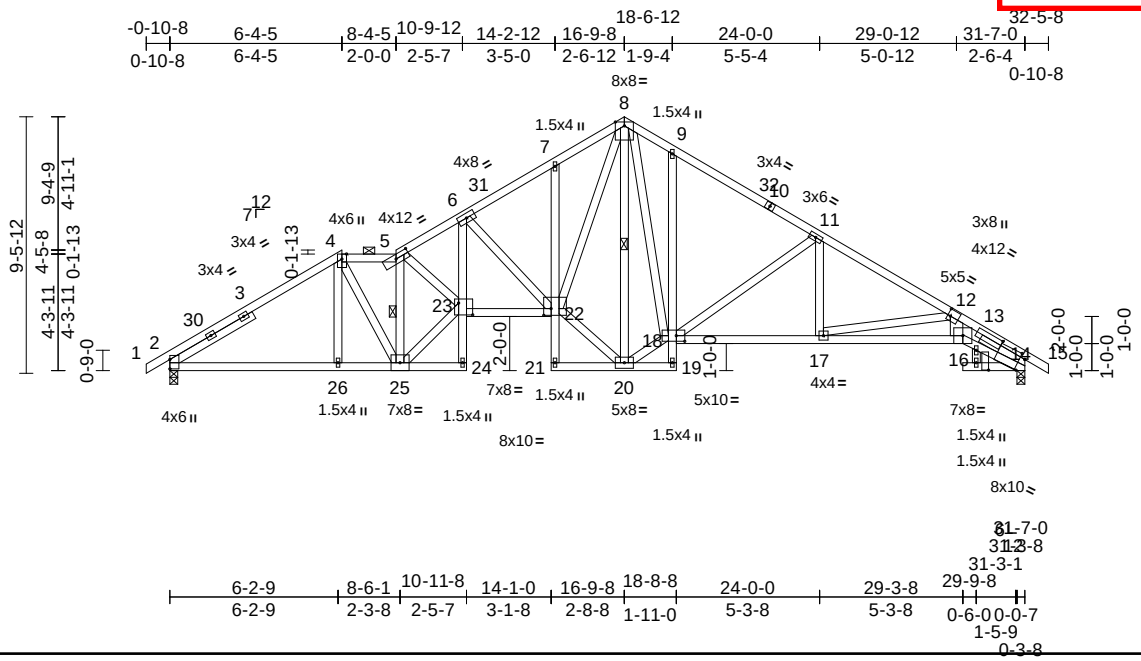


Scale = 1:85.1

Plate Offsets (X, Y): [5:0-6-0,0-1-15], [12:0-1-4,0-3-0], [14:0-2-4,0-1-13], [14:Edge,1-0-2], [14:1-0-6,0-2-0], [18:0-3-12,0-2-8], [22:0-3-4,0-3-0], [23:0-6-4,0-5-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.28	22-23	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.51	22-23	>744	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.42	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 217 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 10-15:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 24-6,7-21,19-9:2x4 SPF No.3, 16-14:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 25-23:2x4 SP No.2, 16-12:2x6 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-6-14, Right 2x4 SP No.2 -- 1-11-1

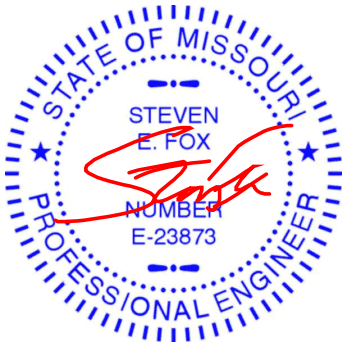
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-3 oc purlins, except 2-0-0 oc purlins (3-11-2 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-25, 8-20

REACTIONS (lb/size) 2=1476/0-3-8, 14=1486/0-3-8
Max Horiz 2=256 (LC 11)
Max Uplift 2=-242 (LC 12), 14=-226 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2203/330, 4-5=-2135/371, 5-6=-3572/583, 6-7=-2354/399, 7-8=-2299/480, 8-9=-1785/429, 9-11=-1892/356, 11-12=-2531/367, 12-14=-4532/567, 14-15=0/1
BOT CHORD 2-26=-334/1771, 25-26=-336/1767, 24-25=-10/54, 23-24=0/62, 6-23=-256/1574, 22-23=-463/3062, 21-22=-22/18, 7-22=-191/142, 20-21=-7/38, 19-20=-23/87, 18-19=-50/13, 9-18=-222/186, 17-18=-194/2173, 16-17=-358/3013, 14-16=-433/3787
WEBS 4-26=0/216, 4-25=-103/790, 5-25=-2673/404, 23-25=-471/2797, 5-23=-141/1229, 6-22=-1549/356, 11-18=-784/238, 11-17=0/365, 12-17=-853/229, 12-16=-135/1683, 8-20=-1428/104, 20-22=-86/1523, 8-22=-401/2124, 18-20=-60/1322, 8-18=-220/1312

LOAD CASE(S) Standard

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-4-5, Exterior(2E) 6-4-5 to 8-4-5, Interior (1) 8-4-5 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 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 1.5x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120795
P220274-P220274-02	E04	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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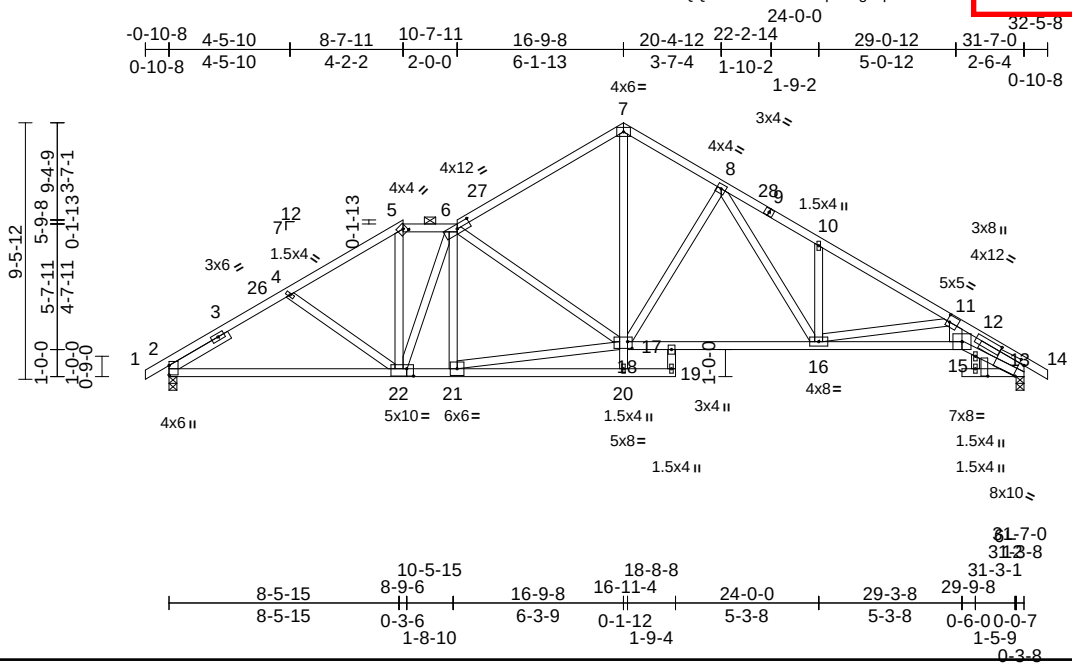


Scale = 1:85.1

Plate Offsets (X, Y): [5:0-1-9,0-2-0], [6:0-6-0,0-1-15], [11:0-1-4,0-3-0], [13:0-2-4,0-1-13], [13:Edge,1-0-2], [13:1-0-6,0-2-0], [18:0-2-0,0-3-0], [22:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.19	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.37	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.24	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 193 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 9-14:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except* 19-17:2x4 SPF No.3, 15-13:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 15-11:2x6 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-6-13, Right 2x4 SP No.2 -- 1-11-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-4-3 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 2=1476/0-3-8, 13=1486/0-3-8
Max Horiz 2=256 (LC 11)
Max Uplift 2=-242 (LC 12), 13=-226 (LC 13)

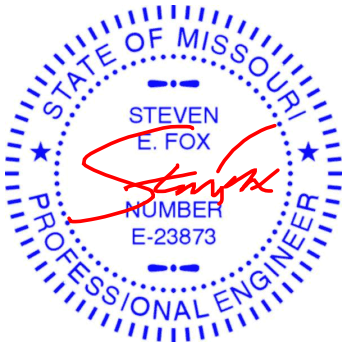
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/5, 2-4=-2195/376, 4-5=-1971/338, 5-6=-1648/328, 6-7=-1704/328, 7-8=-1668/360, 8-10=-2593/479, 10-11=-2524/369, 11-13=-4550/585, 13-14=0/1
BOT CHORD 2-21=-399/1857, 20-21=-44/116, 19-20=-53/65, 17-19=-76/0, 17-18=-63/1625, 16-17=-116/1690, 15-16=-373/3033, 13-15=-451/3808
WEBS 4-22=-147/174, 5-22=-101/730, 6-22=-565/136, 6-21=-245/61, 18-20=0/298, 7-18=-194/1256, 10-16=-456/229, 11-16=-886/258, 11-15=-142/1686, 8-18=-601/245, 8-16=-237/910, 18-21=-248/1768, 6-18=-621/259

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-0, Interior (1) 4-4-0 to 8-7-11, Exterior(2E) 8-7-11 to 10-7-11, Interior (1) 10-7-11 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	E05	Roof Special	1	1	Job Reference (optional) I52120796

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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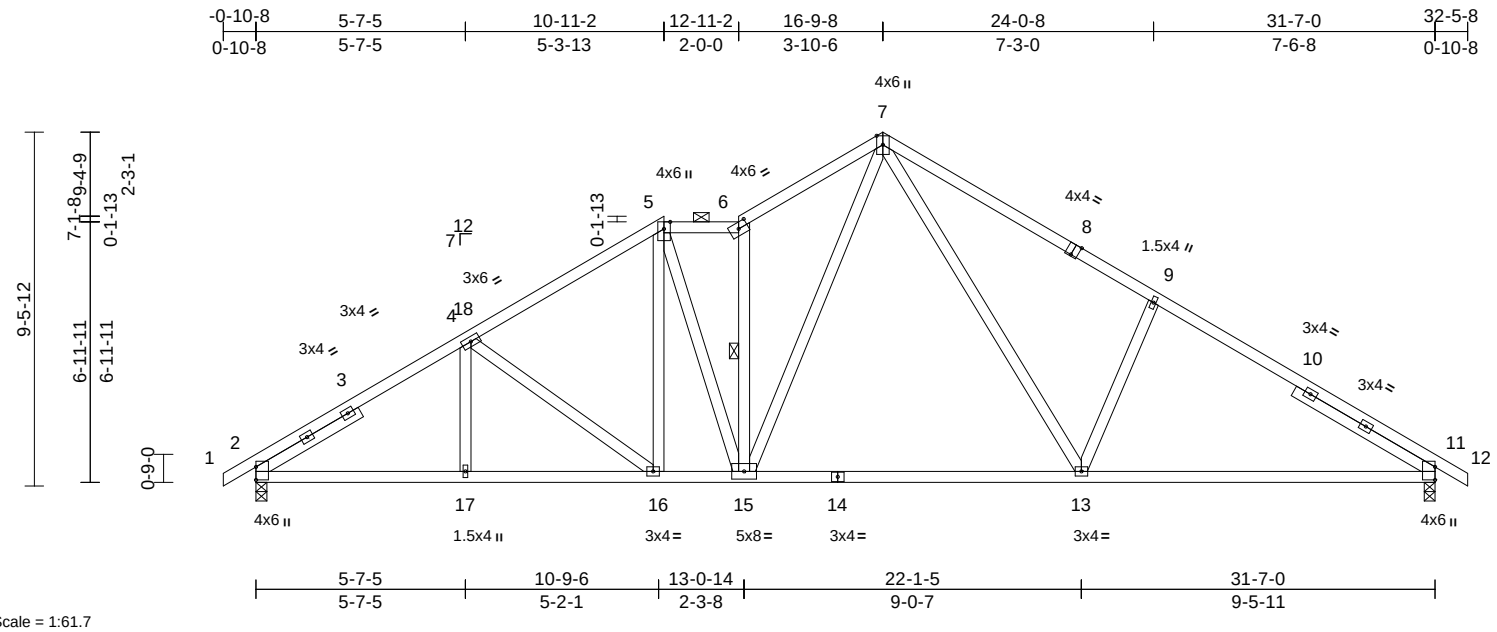

Scale = 1:61.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.18	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.39	11-13	>968	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 177 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-5-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 6-15

REACTIONS (lb/size) 2=1483/0-3-8, 11=1483/0-3-8
Max Horiz 2=-255 (LC 10)
Max Uplift 2=-243 (LC 12), 11=-224 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/5, 2-4=-2235/343, 4-5=-1847/348, 5-6=-1622/344, 6-7=-1898/454, 7-9=-1969/418, 9-11=-2163/342, 11-12=0/5
BOT CHORD	2-17=-360/1790, 16-17=-360/1790, 15-16=-209/1520, 13-15=-84/1239, 11-13=-183/1741
WEBS	4-17=0/231, 4-16=-377/183, 5-16=-88/260, 5-15=-59/361, 6-15=-1065/287, 7-15=-272/953, 7-13=-218/726, 9-13=-456/331

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-11-2, Exterior(2E) 10-11-2 to 12-11-2, Interior (1) 12-11-2 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120797
P220274-P220274-02	E06	Roof Special	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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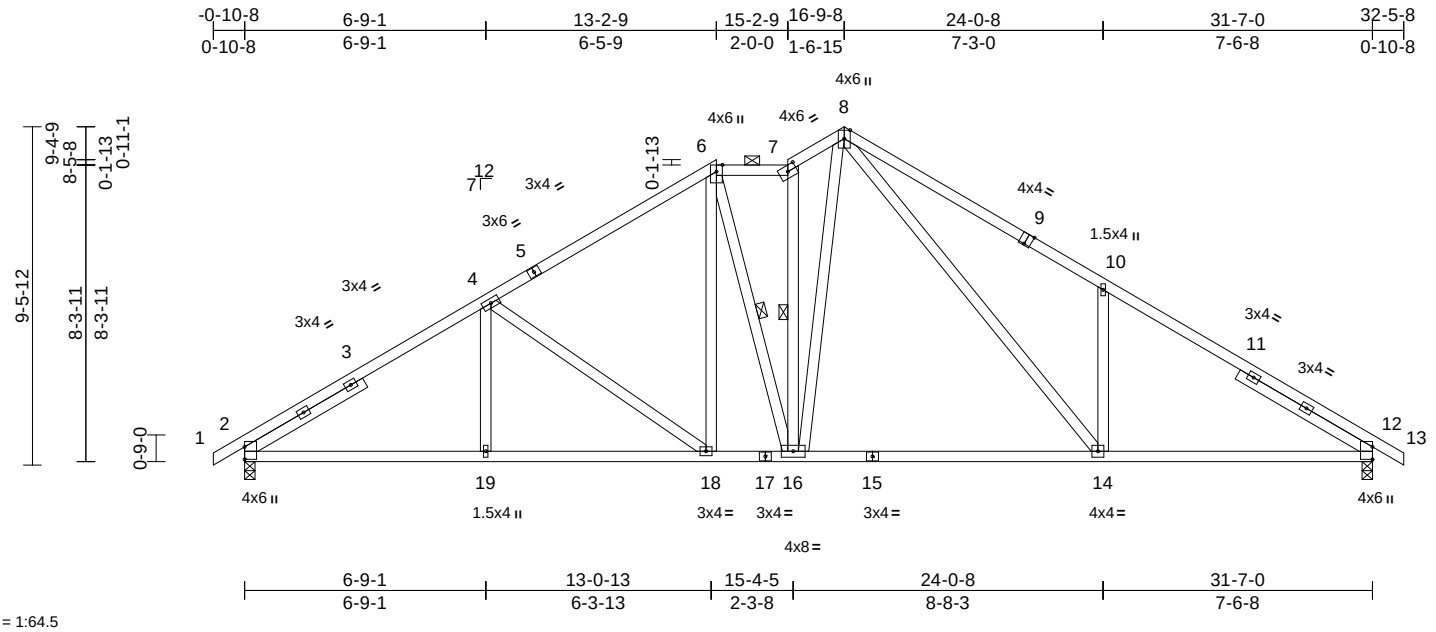


Scale = 1:64.5

Plate Offsets (X, Y): [7:0-3-0,0-1-15], [9:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.14	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.33	14-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 185 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 5-6,8-9:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SP No.2 -- 3-10-10, Right 2x4 SP No.2 -- 4-4-2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-8-2 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-16, 7-16

REACTIONS (lb/size) 2=1483/0-3-8, 12=1483/0-3-8
Max Horiz 2=255 (LC 11)
Max Uplift 2=-243 (LC 12), 12=-224 (LC 13)

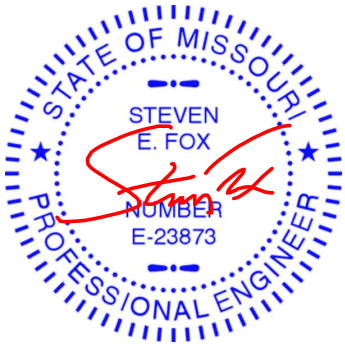
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/5, 2-4=-2206/338, 4-6=-1702/330, 6-7=-1387/324, 7-8=-1563/376, 8-10=-2170/531, 10-12=-2189/313, 12-13=0/5
BOT CHORD	2-19=-342/1774, 18-19=-342/1774, 16-18=-146/1369, 14-16=-79/1250, 12-14=-158/1759
WEBS	4-19=0/286, 4-18=-536/237, 6-18=-102/352, 6-16=-94/218, 7-16=-715/170, 8-16=-210/847, 8-14=-359/878, 10-14=-509/380

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-2-9, Exterior(2E) 13-2-9 to 15-2-9, Interior (1) 15-2-9 to 16-9-8, Exterior(2R) 16-9-8 to 21-9-8, Interior (1) 21-9-8 to 32-5-8 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 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	E07	Hip	1	1	Job Reference (optional) I52120798

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:11 Page: 1
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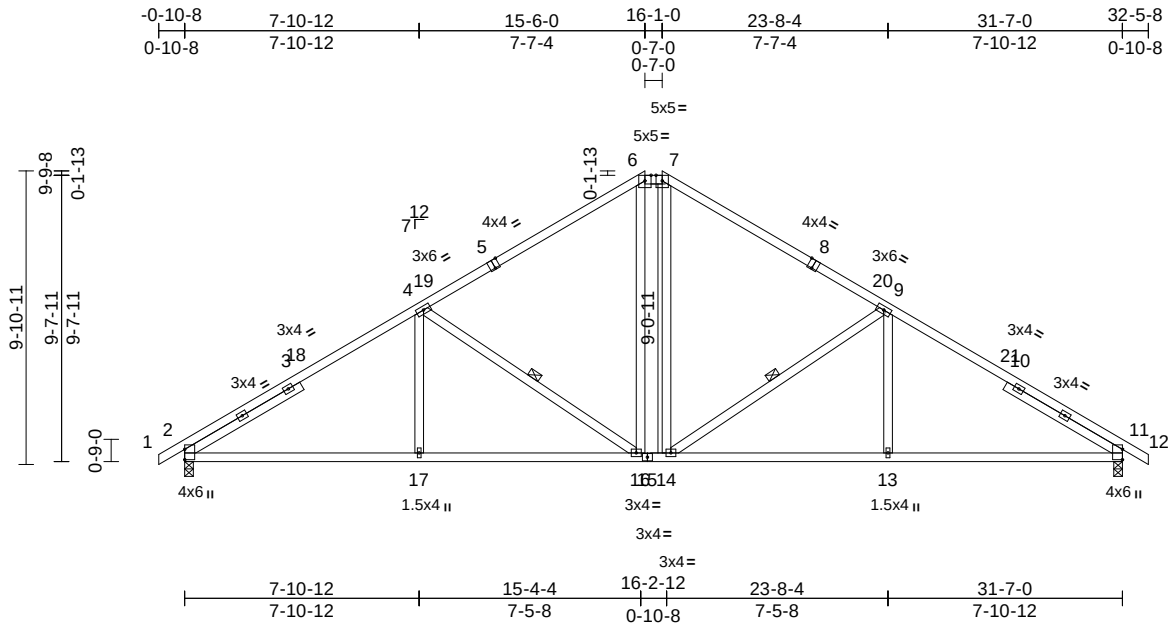


Scale = 1:77.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.11	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.22	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 4-6-9, Right 2x4 SP No.2 -- 4-6-9

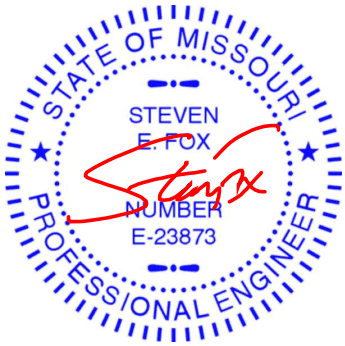
BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-8-2 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 9-14

REACTIONS (lb/size) 2=1483/0-3-8, 11=1483/0-3-8
Max Horiz 2=265 (LC 11)
Max Uplift 2=-229 (LC 12), 11=-229 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2173/311, 4-6=-1552/304, 6-7=-1215/294, 7-9=-1552/304, 9-11=-2172/311, 11-12=0/5
BOT CHORD 2-17=-311/1745, 16-17=-311/1745, 14-16=-60/1215, 13-14=-133/1745, 11-13=-133/1745
WEBS 4-17=0/330, 4-16=-693/303, 6-16=-87/432, 7-14=-87/432, 9-14=-693/304, 9-13=0/330

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 15-6-0, Exterior(2E) 15-6-0 to 16-1-0, Exterior(2R) 16-1-0 to 23-1-14, Interior (1) 23-1-14 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120799
P220274-P220274-02	E08	Common	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:11 Page: 1
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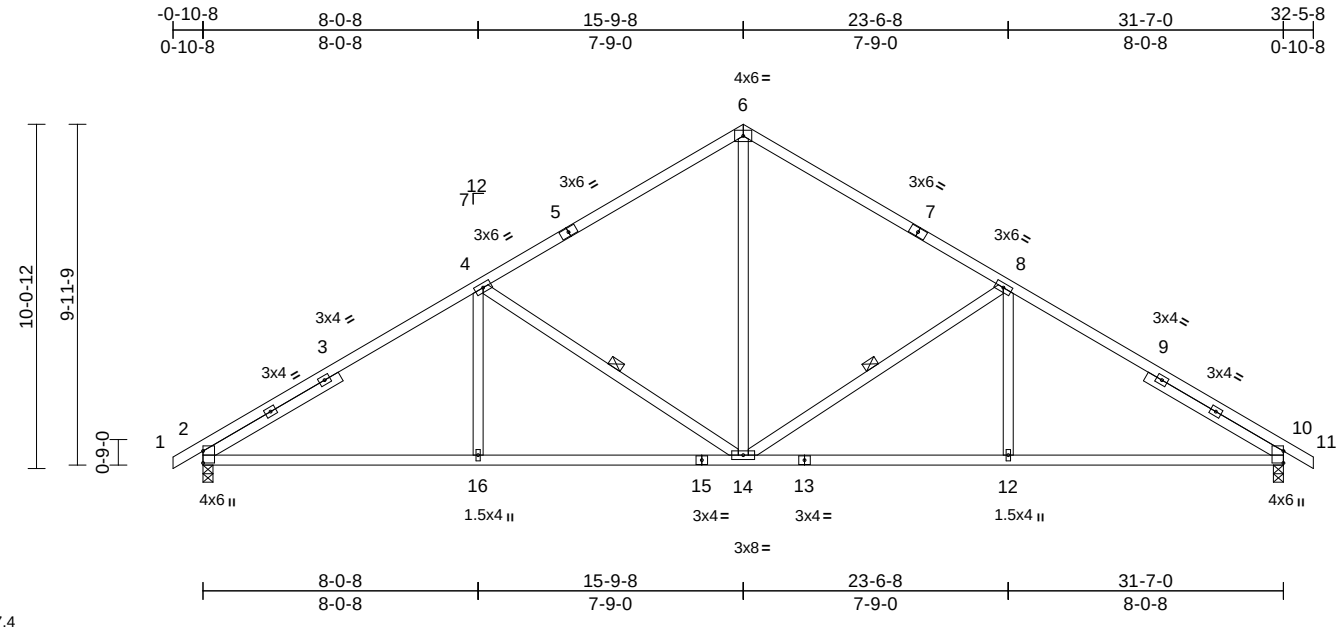


Scale = 1:67.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.11	2-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.24	2-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 161 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 1-5,7-11:2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SPF No.3
SLIDER	Left 2x4 SP No.2 -- 4-7-9, Right 2x4 SP No.2 -- 4-7-9

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-14, 4-14

REACTIONS (lb/size) 2=1483/0-3-8, 10=1483/0-3-8
Max Horiz 2=-272 (LC 10)
Max Uplift 2=-230 (LC 12), 10=-230 (LC 13)

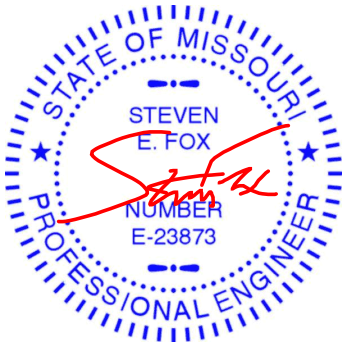
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/5, 2-4=-2167/311, 4-6=-1524/326, 6-8=-1524/326, 8-10=-2167/311, 10-11=0/5
BOT CHORD	2-16=-313/1740, 14-16=-313/1740, 12-14=-151/1740, 10-12=-151/1740
WEBS	6-14=-121/876, 8-14=-709/305, 8-12=0/334, 4-14=-709/305, 4-16=0/334

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 15-9-8, Exterior(2R) 15-9-8 to 20-9-8, Interior (1) 20-9-8 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120800
P220274-P220274-02	E09	Roof Special	5	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 2022 7:22:... Page: 1
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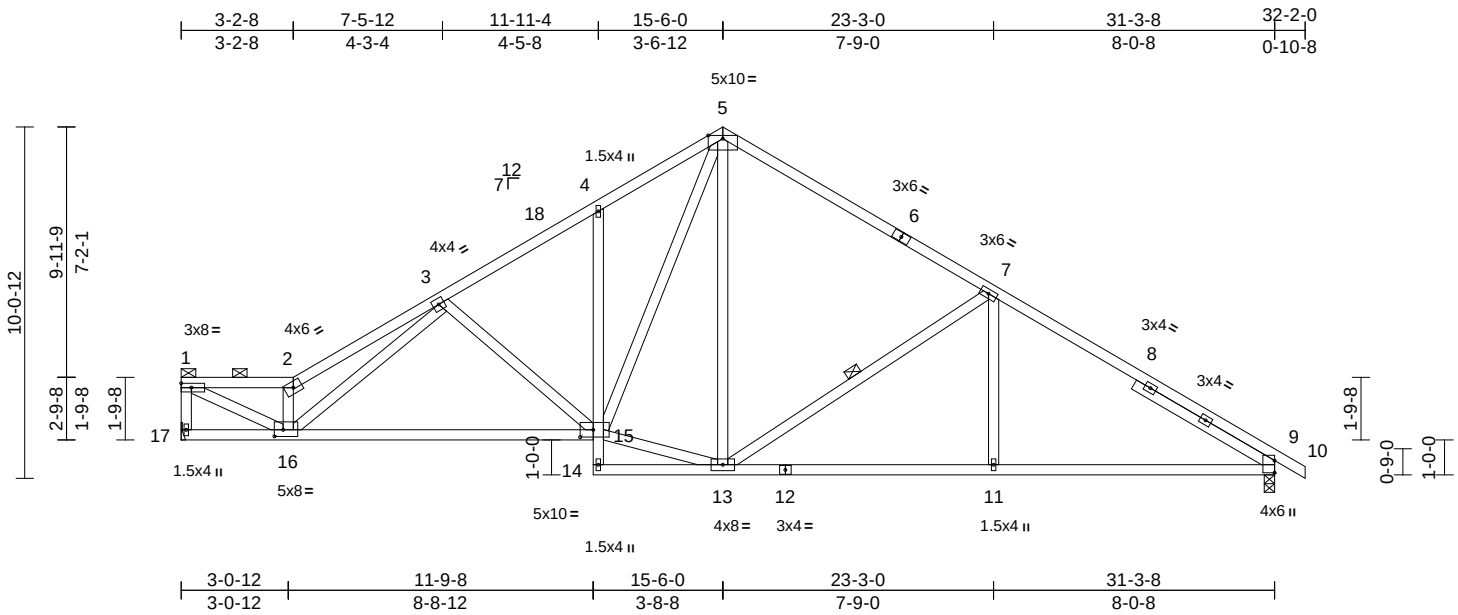


Scale = 1:65.9

Plate Offsets (X, Y): [15:0-4-8,0-2-8], [16:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.21	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.49	15-16	>763	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 177 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 4-14:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 16-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 4-7-9

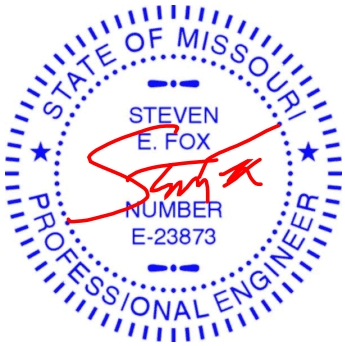
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-2 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 7-13

REACTIONS (lb/size) 9=1464/0-3-8, 17=1401/ Mechanical
Max Horiz 17=-290 (LC 8)
Max Uplift 9=-235 (LC 13), 17=-209 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-1385/192, 1-2=-2510/293, 2-3=-3140/440, 3-4=-1923/332, 4-5=-1865/428, 5-7=-1484/322, 7-9=-2136/318, 9-10=0/5
BOT CHORD 16-17=-235/265, 15-16=-327/1994, 14-15=0/30, 4-15=-267/184, 13-14=-100/0, 11-13=-148/1714, 9-11=-148/1714
WEBS 1-16=-322/2766, 2-16=-1766/321, 3-16=-93/927, 3-15=-542/227, 5-15=-296/1102, 5-13=-131/264, 13-15=0/1214, 7-13=-718/303, 7-11=0/342

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-2-8, Interior (1) 3-2-8 to 15-6-0, Exterior(2R) 15-6-0 to 20-6-0, Interior (1) 20-6-0 to 32-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 209 lb uplift at joint 17.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/02/2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120801
P220274-P220274-02	G01	Hip Girder	1	2	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 2022 07:23:
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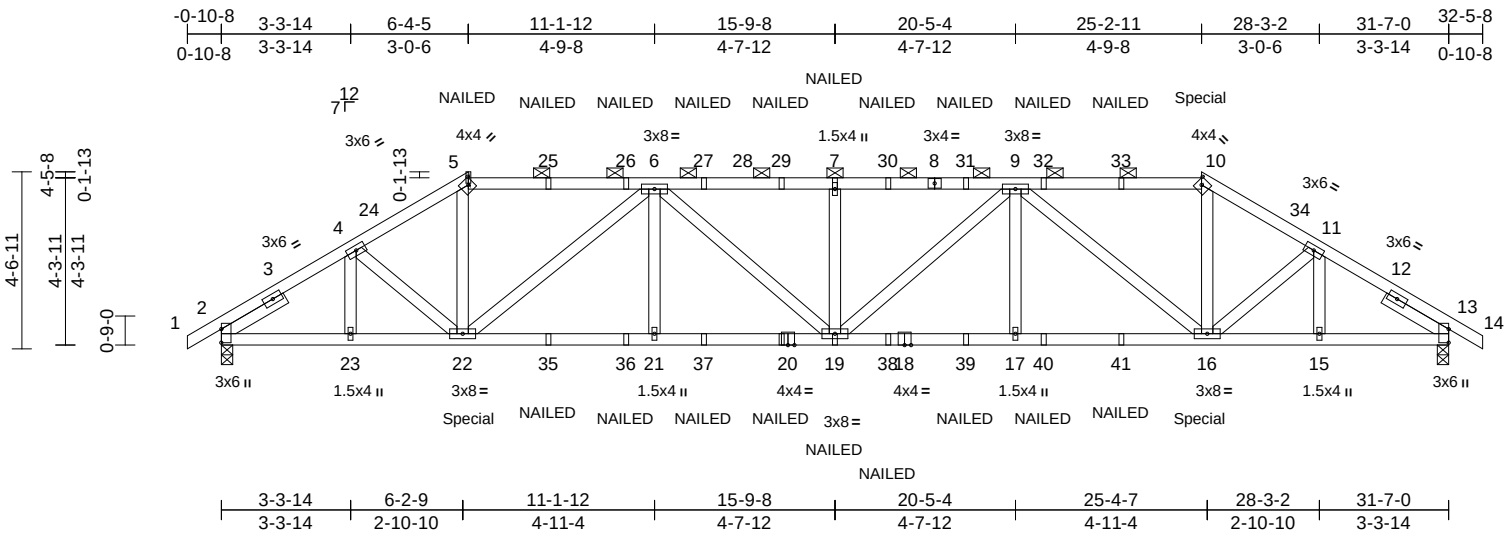


Scale = 1:59.3

Plate Offsets (X, Y): [2:Edge,0-0-0], [5:0-1-9,0-2-0], [10:0-1-9,0-2-0], [13:Edge,0-0-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	0.18	19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.31	17-19	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.11	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 334 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins, except 2-0-0 oc purlins (5-2-4 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 9-10-14 oc bracing.

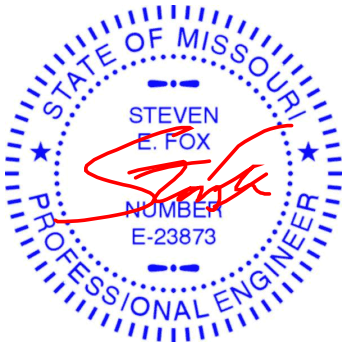
REACTIONS (lb/size) 2=2584/0-3-8, 13=2585/0-3-8
Max Horiz 2=-116 (LC 10)
Max Uplift 2=-787 (LC 12), 13=-787 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-3987/1244, 4-5=-4033/1328, 5-6=-3468/1185, 6-7=-5435/1815, 7-9=-5435/1815, 9-10=-3469/1172, 10-11=-4033/1326, 11-13=-3988/1232, 13-14=0/5
BOT CHORD 2-23=-1056/3180, 22-23=-1056/3180, 21-22=-1691/4967, 19-21=-1691/4967, 17-19=-1638/4969, 16-17=-1638/4969, 15-16=-942/3181, 13-15=-942/3181
WEBS 4-23=-63/61, 4-22=-294/553, 5-22=-402/1500, 6-22=-1982/726, 6-21=0/336, 6-19=-251/658, 7-19=-585/394, 9-19=-253/655, 9-17=0/339, 9-16=-1983/725, 10-16=-395/1501, 11-16=-295/553, 11-15=-62/61

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-4-5, Exterior(2R) 6-4-5 to 13-5-2, Interior (1) 13-5-2 to 25-2-11, Exterior(2E) 25-2-11 to 32-5-8 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
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 136 lb down and 128 lb up at 25-2-11 on top chord, and 392 lb down and 145 lb up at 6-4-5, and 392 lb down and 145 lb up at 25-1-15 on bottom 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 (lb/ft)
Vert: 1-5=-70, 5-10=-70, 10-14=-70, 2-13=-20
Concentrated Loads (lb)
Vert: 5=-93 (F), 20=-45 (F), 22=-386 (F), 19=-45 (F), 7=-93 (F), 16=-386 (F), 10=-93 (F), 25=-93 (F), 26=-93 (F), 27=-93 (F), 29=-93 (F), 30=-93 (F), 31=-93 (F), 32=-93 (F), 33=-93 (F), 35=-45 (F), 36=-45 (F), 37=-45 (F), 38=-45 (F), 39=-45 (F), 40=-45 (F), 41=-45 (F)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120802
P220274-P220274-02	G02	Hip	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:24 Page: 1
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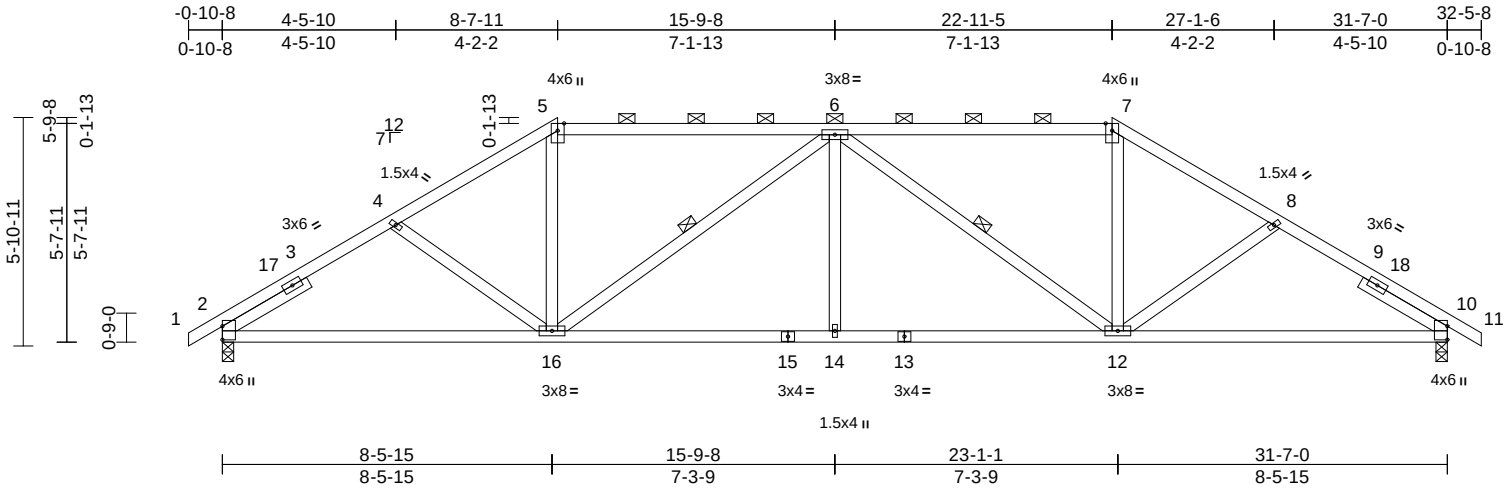


Scale = 1:59.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.13	2-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.29	2-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 2-6-13, Right 2x4 SP No.2 -- 2-6-13

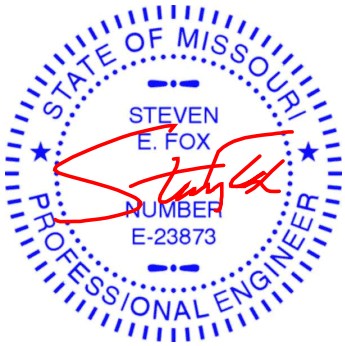
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except 2-0-0 oc purlins (3-2-2 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 6-12

REACTIONS (lb/size) 2=1482/0-3-8, 10=1483/0-3-8
Max Horiz 2=-153 (LC 10)
Max Uplift 2=-167 (LC 12), 10=-167 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2205/291, 4-5=-1988/251, 5-6=-1678/251, 6-7=-1678/251, 7-8=-1988/251, 8-10=-2205/291, 10-11=0/5
BOT CHORD 2-16=-280/1751, 14-16=-299/2174, 12-14=-299/2174, 10-12=-181/1751
WEBS 4-16=-167/188, 5-16=-32/576, 6-16=-718/238, 6-14=0/263, 6-12=-718/237, 7-12=-32/576, 8-12=-167/188

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-0, Interior (1) 4-4-0 to 8-7-11, Exterior(2R) 8-7-11 to 15-9-8, Interior (1) 15-9-8 to 22-11-5, Exterior(2R) 22-11-5 to 30-0-2, Interior (1) 30-0-2 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	G03	Hip	1	1	Job Reference (optional)	I52120803

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:24 Page: 1
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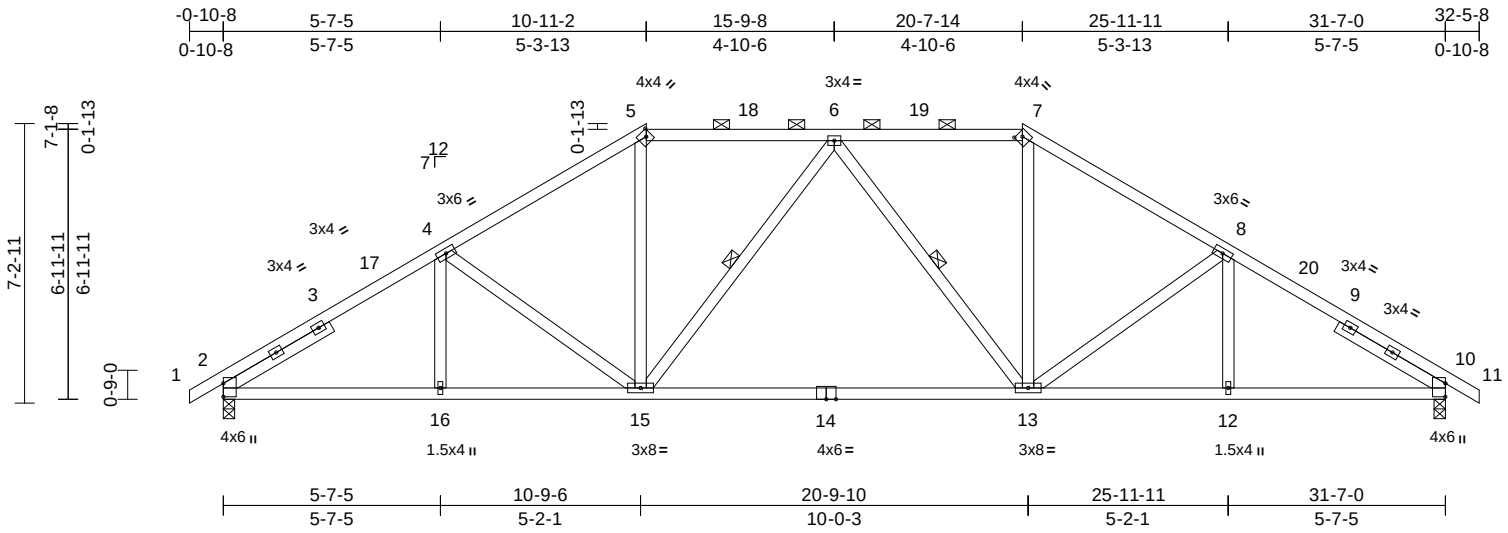


Scale = 1:59.5

Plate Offsets (X, Y): [5:0-1-9,0-2-0], [7:0-1-9,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.25	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.53	13-15	>712	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 167 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 3-2-11, Right 2x4 SP No.2 -- 3-2-11

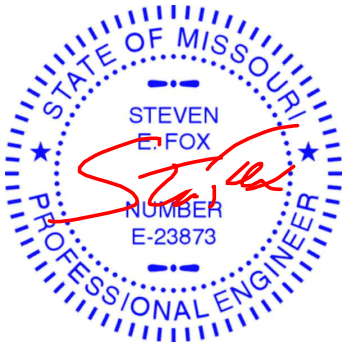
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-11 oc purlins, except 2-0-0 oc purlins (4-5-13 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-15, 6-13

REACTIONS (lb/size) 2=1482/0-3-8, 10=1483/0-3-8
Max Horiz 2=-191 (LC 10)
Max Uplift 2=-192 (LC 12), 10=-192 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2226/278, 4-5=-1867/278, 5-6=-1533/285, 6-7=-1533/288, 7-8=-1867/282, 8-10=-2226/285, 10-11=0/5
BOT CHORD 2-16=-247/1783, 15-16=-247/1783, 13-15=-153/1680, 12-13=-177/1783, 10-12=-177/1783
WEBS 4-16=0/160, 4-15=-365/214, 5-15=-36/550, 6-15=-374/208, 6-13=-374/208, 7-13=-34/550, 8-13=-365/214, 8-12=0/160

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-11-2, Exterior(2R) 10-11-2 to 18-0-0, Interior (1) 18-0-0 to 20-7-14, Exterior(2R) 20-7-14 to 27-8-11, Interior (1) 27-8-11 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120804
P220274-P220274-02	G04	Hip	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:24 Page: 1
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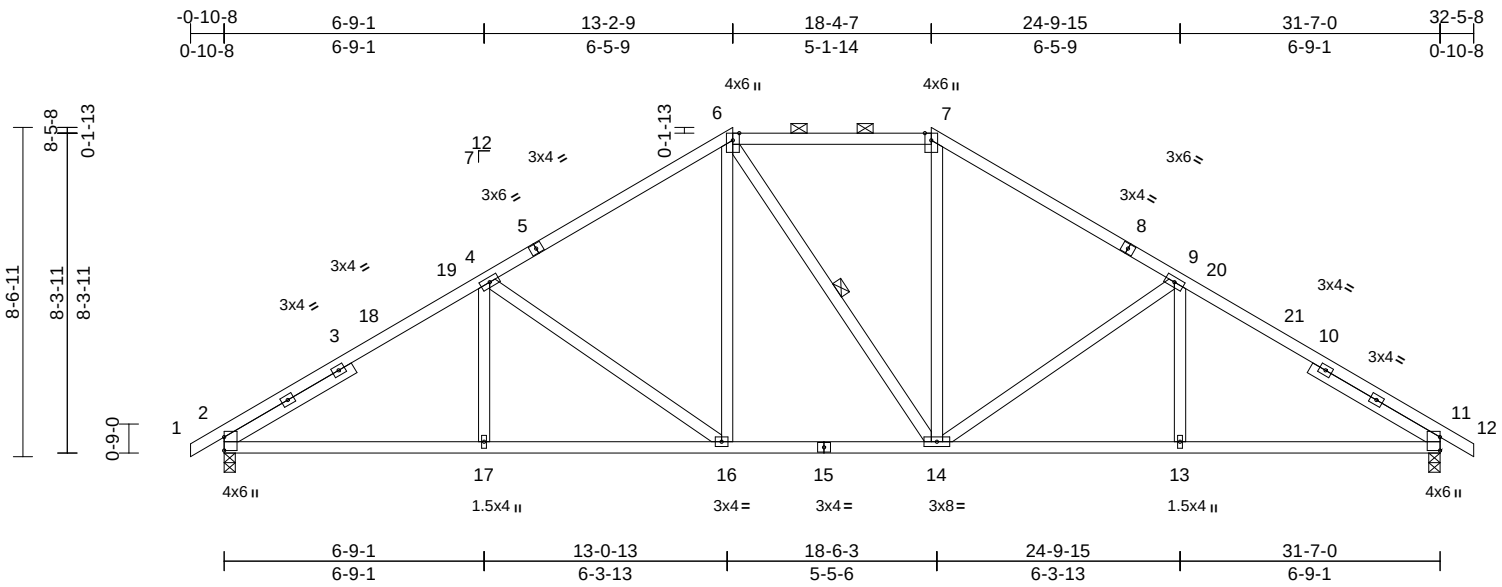


Scale = 1:59.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.09	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.18	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 3-10-10, Right 2x4 SP No.2 -- 3-10-10

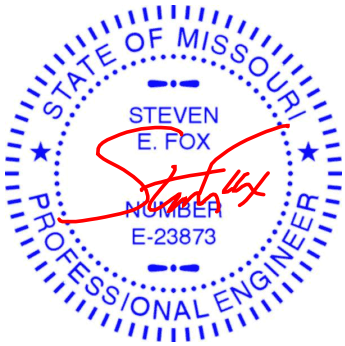
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-7-6 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-14

REACTIONS (lb/size) 2=1482/0-3-8, 11=1483/0-3-8
Max Horiz 2=-228 (LC 10)
Max Uplift 2=-212 (LC 12), 11=-212 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2205/285, 4-6=-1705/276, 6-7=-1371/278, 7-9=-1706/271, 9-11=-2204/286, 11-12=0/5
BOT CHORD 2-17=-280/1774, 16-17=-280/1774, 14-16=-75/1370, 13-14=-126/1774, 11-13=-126/1774
WEBS 4-17=0/275, 4-16=-542/247, 6-16=-71/422, 6-14=-177/179, 7-14=-45/408, 9-14=-541/248, 9-13=0/274

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-2-9, Exterior(2E) 13-2-9 to 18-4-7, Exterior(2R) 18-4-7 to 25-5-5, Interior (1) 25-5-5 to 32-5-8 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 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	G05	Hip	1	1	Job Reference (optional)	I52120805

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:15 Page: 1
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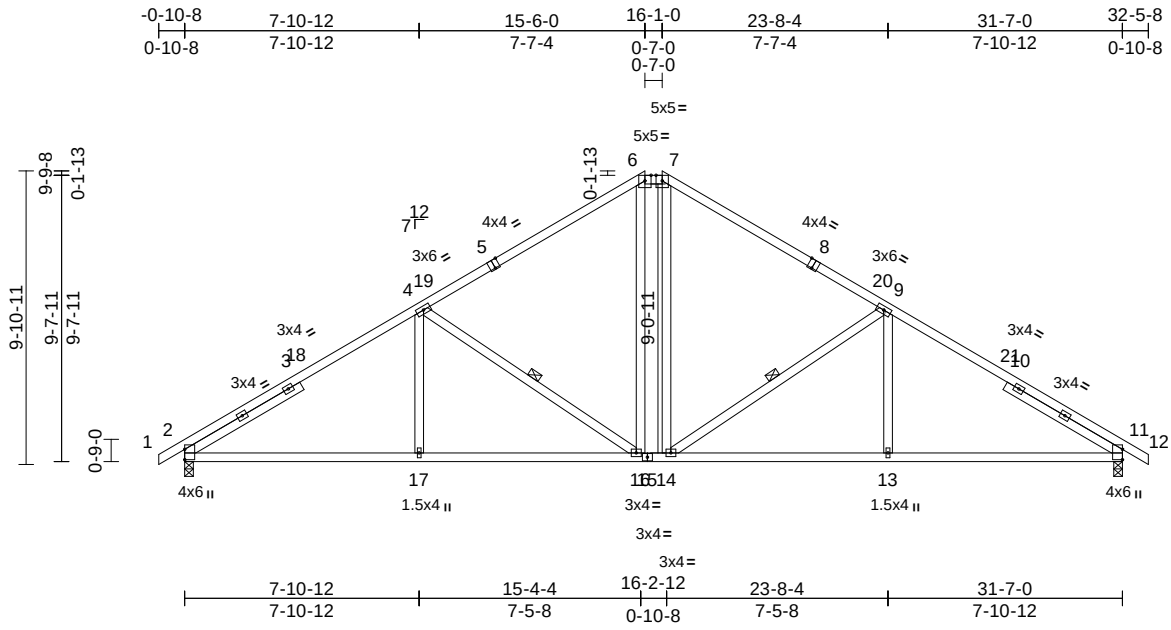


Scale = 1:77.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.11	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.22	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
SLIDER Left 2x4 SP No.2 -- 4-6-9, Right 2x4 SP No.2 -- 4-6-9

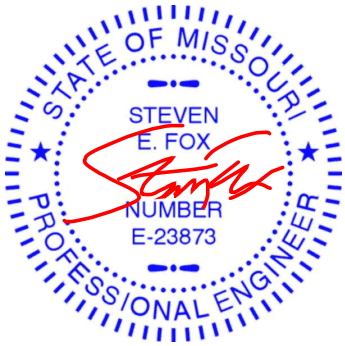
BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-8-2 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 9-14

REACTIONS (lb/size) 2=1483/0-3-8, 11=1483/0-3-8
Max Horiz 2=265 (LC 11)
Max Uplift 2=-229 (LC 12), 11=-229 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-2173/311, 4-6=-1552/304, 6-7=-1215/294, 7-9=-1552/304, 9-11=-2172/311, 11-12=0/5
BOT CHORD 2-17=-311/1745, 16-17=-311/1745, 14-16=-60/1215, 13-14=-133/1745, 11-13=-133/1745
WEBS 4-17=0/330, 4-16=-693/303, 6-16=-87/432, 7-14=-87/432, 9-14=-693/304, 9-13=0/330

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 15-6-0, Exterior(2E) 15-6-0 to 16-1-0, Exterior(2R) 16-1-0 to 23-1-14, Interior (1) 23-1-14 to 32-5-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	H01	Common Supported Gable	1	1	Job Reference (optional) I52120806

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:25 Page: 1
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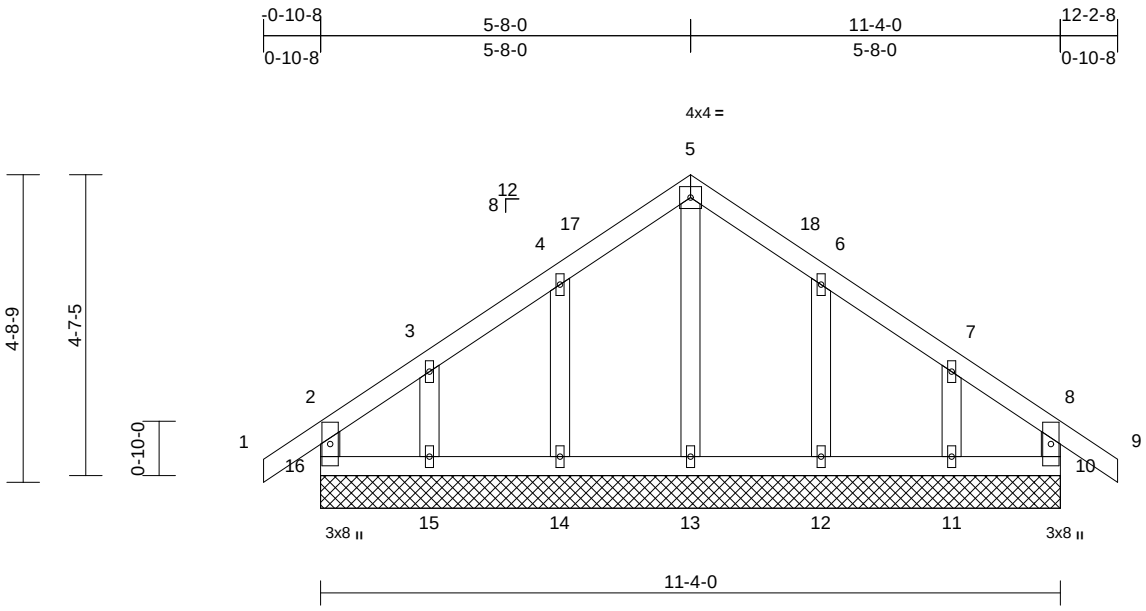


Scale = 1:35.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 56 lb	FT = 20%

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

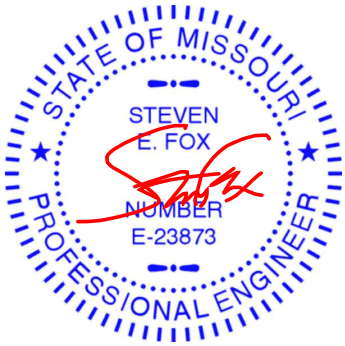
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 10=145/11-4-0, 11=143/11-4-0, 12=196/11-4-0, 13=171/11-4-0, 14=196/11-4-0, 15=143/11-4-0, 16=145/11-4-0
Max Horiz 16=-147 (LC 10)
Max Uplift 10=-30 (LC 12), 11=-93 (LC 13), 12=-79 (LC 13), 14=-78 (LC 12), 15=-97 (LC 12), 16=-49 (LC 8)
Max Grav 10=147 (LC 26), 11=176 (LC 20), 12=202 (LC 20), 13=174 (LC 22), 14=201 (LC 19), 15=183 (LC 19), 16=151 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-132/119, 1-2=0/40, 2-3=-85/81, 3-4=-61/115, 4-5=-109/212, 5-6=-109/213, 6-7=-59/113, 7-8=-61/61, 8-9=0/40, 8-10=-132/121
BOT CHORD 15-16=-66/88, 14-15=-66/88, 13-14=-66/88, 12-13=-66/88, 11-12=-66/88, 10-11=-66/88
WEBS 5-13=-139/16, 4-14=-163/177, 3-15=-134/162, 6-12=-163/177, 7-11=-130/162

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 5-8-0, Corner(3R) 5-8-0 to 10-8-0, Exterior(2N) 10-8-0 to 12-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 16, 30 lb uplift at joint 10, 78 lb uplift at joint 14, 97 lb uplift at joint 15, 79 lb uplift at joint 12 and 93 lb uplift at joint 11.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	H02	Common Girder	1	2	Job Reference (optional) I52120807

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:16 Page: 1
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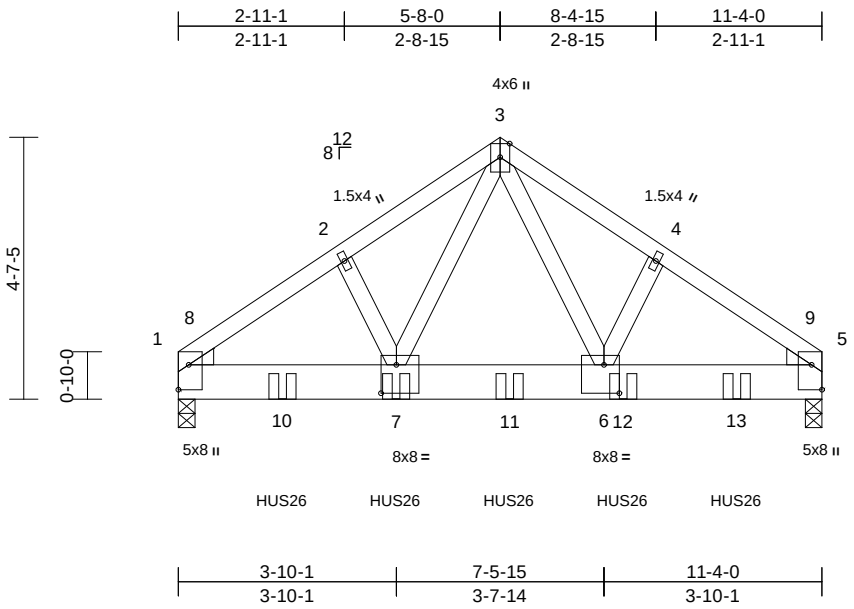


Scale = 1:40.6

Plate Offsets (X, Y): [1:Edge,0-2-3], [5:Edge,0-2-3], [6:0-3-4,0-6-0], [7:0-3-4,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.04	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.07	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 126 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x4 SPF No.3
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

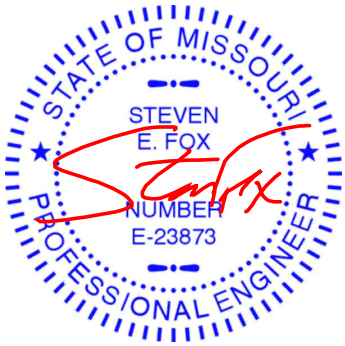
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=3844/0-3-8, 5=4053/0-3-8
Max Horiz 1=115 (LC 11)
Max Uplift 1=-604 (LC 12), 5=-638 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4800/850, 2-3=-4594/883, 3-4=-4622/888, 4-5=-4828/855
BOT CHORD 1-7=-606/3650, 6-7=-396/2741, 5-6=-599/3673
WEBS 3-6=-487/2680, 4-6=-116/481, 3-7=-478/2623, 2-7=-115/480

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 5-8-0, Exterior(2R) 5-8-0 to 10-8-0, Interior (1) 10-8-0 to 11-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-10-0 from the left end to 9-10-0 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 7=-1381 (B), 10=-1381 (B), 11=-1381 (B), 12=-1381 (B), 13=-1381 (B)



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J01	Jack-Open	1	1	Job Reference (optional)

I52120808

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:16 Page: 1
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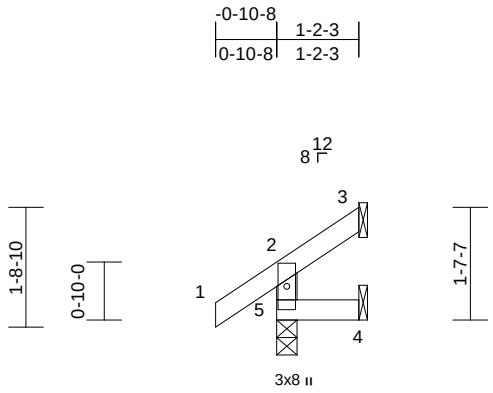


Scale = 1:33.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 6 lb	FT = 20%

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

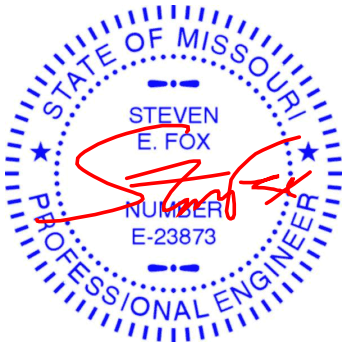
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=9/ Mechanical, 4=1/ Mechanical, 5=153/0-3-8
Max Horiz 5=46 (LC 12)
Max Uplift 3=-23 (LC 12), 4=-5 (LC 12), 5=-17 (LC 12)
Max Grav 3=17 (LC 19), 4=17 (LC 3), 5=153 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-134/122, 1-2=0/40, 2-3=-35/23
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 4 and 23 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J02	Jack-Open	1	1	Job Reference (optional) I52120809

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:16 Page: 1
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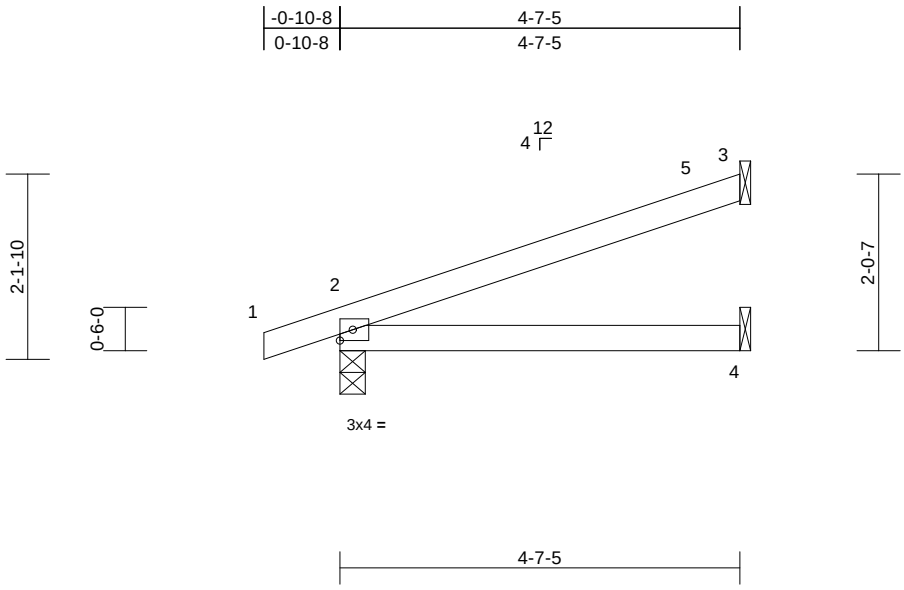


Scale = 1:26.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.02	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

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

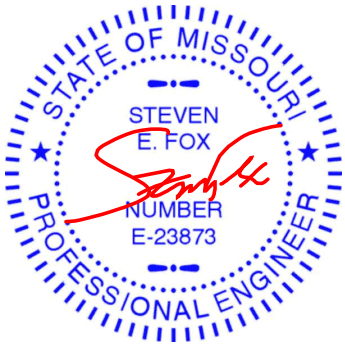
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=278/0-3-8, 3=146/ Mechanical, 4=44/ Mechanical
Max Horiz 2=80 (LC 8)
Max Uplift 2=-81 (LC 8), 3=-81 (LC 12)
Max Grav 2=278 (LC 1), 3=146 (LC 1), 4=88 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-90/42
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-6-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J03	Jack-Open	3	1	Job Reference (optional)

I52120810

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:16 Page: 1
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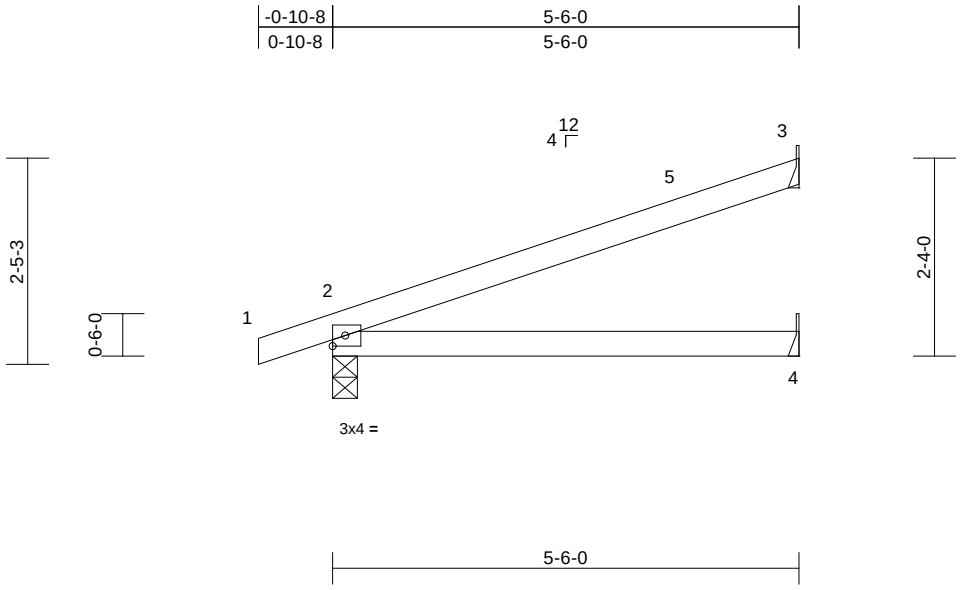


Scale = 1:27.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.05	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	2-4	>675	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

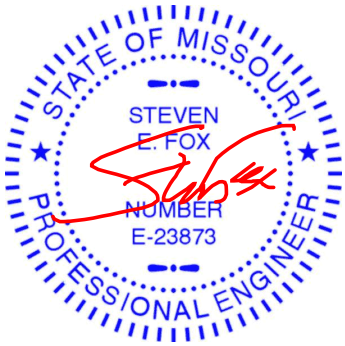
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=316/0-3-8, 3=178/ Mechanical, 4=53/ Mechanical
Max Horiz 2=93 (LC 8)
Max Uplift 2=-87 (LC 8), 3=-98 (LC 12)
Max Grav 2=316 (LC 1), 3=178 (LC 1), 4=106 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-102/50
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J04	Jack-Open	5	1	Job Reference (optional) I52120811

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:16 Page: 1
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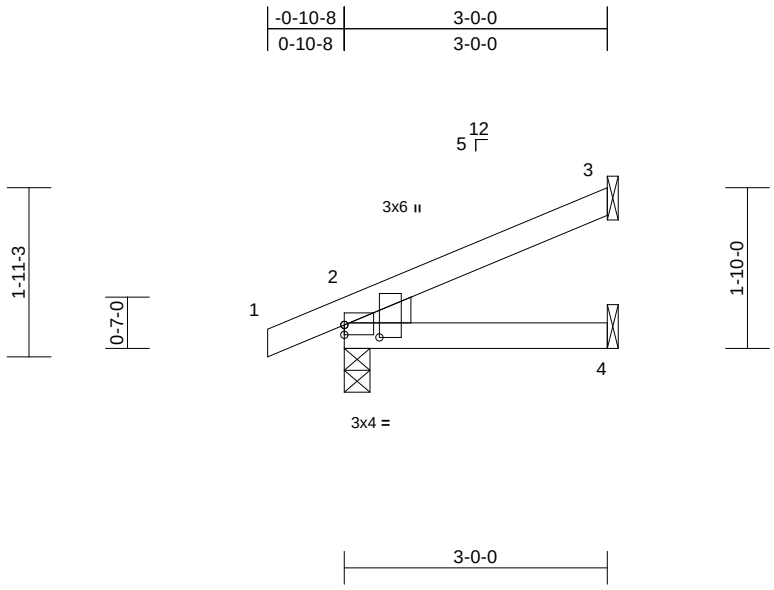


Scale = 1:26.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	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
WEDGE Left: 2x4 SP No.2

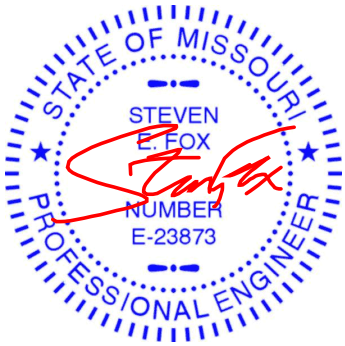
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=210/0-3-8, 3=85/ Mechanical, 4=28/ Mechanical
Max Horiz 2=69 (LC 12)
Max Uplift 2=-40 (LC 12), 3=-57 (LC 12)
Max Grav 2=210 (LC 1), 3=85 (LC 1), 4=56 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-68/37
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J05	Jack-Open	4	1	Job Reference (optional)

I52120812

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:1 Page: 1
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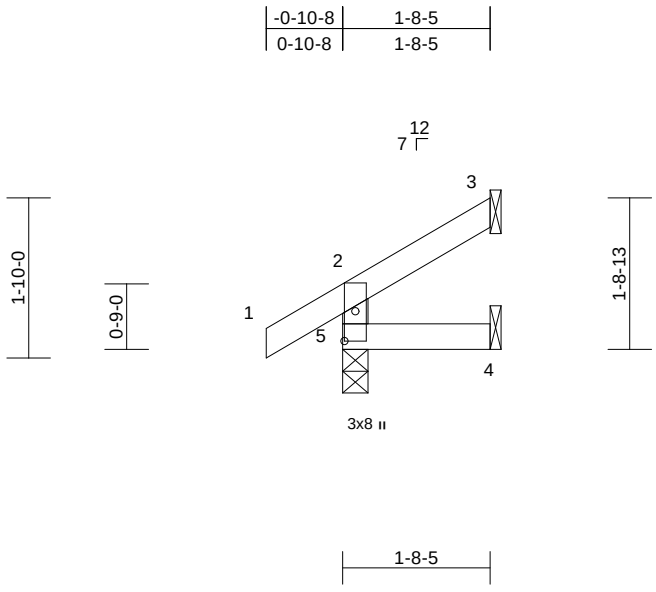


Scale = 1:26.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 8 lb	FT = 20%

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

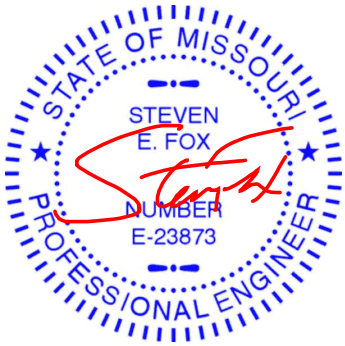
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-8-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=35/ Mechanical, 4=10/ Mechanical, 5=164/0-3-8
Max Horiz 5=53 (LC 12)
Max Uplift 3=-33 (LC 12), 5=-23 (LC 12)
Max Grav 3=41 (LC 19), 4=27 (LC 3), 5=164 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-144/113, 1-2=0/36, 2-3=-39/25
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J06	Jack-Open	3	1	I52120813

Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:1 Page: 1
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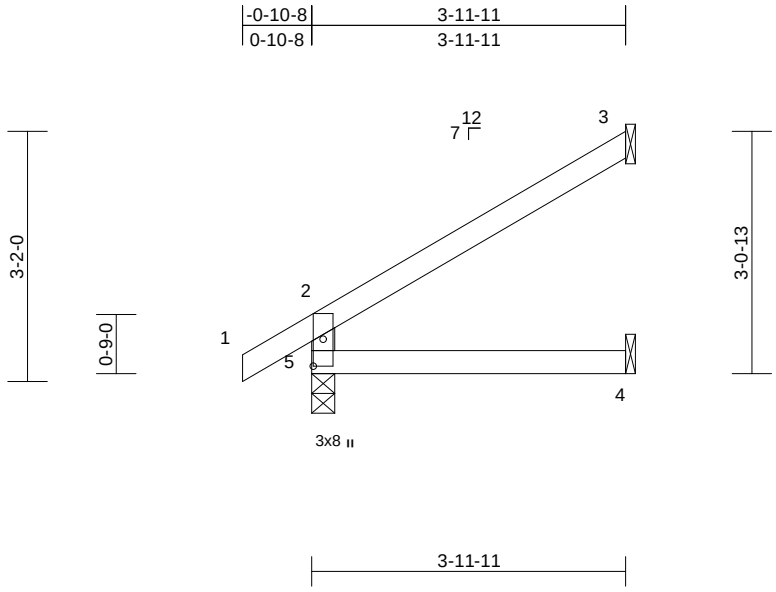


Scale = 1:29.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	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

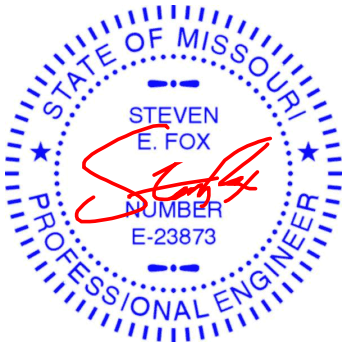
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=115/ Mechanical, 4=44/ Mechanical, 5=251/0-3-8
Max Horiz 5=110 (LC 12)
Max Uplift 3=-80 (LC 12), 5=-24 (LC 12)
Max Grav 3=123 (LC 19), 4=71 (LC 3), 5=251 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-220/131, 1-2=0/36, 2-3=-88/51
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120814
P220274-P220274-02	J07	Jack-Open	3	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:1 Page: 1
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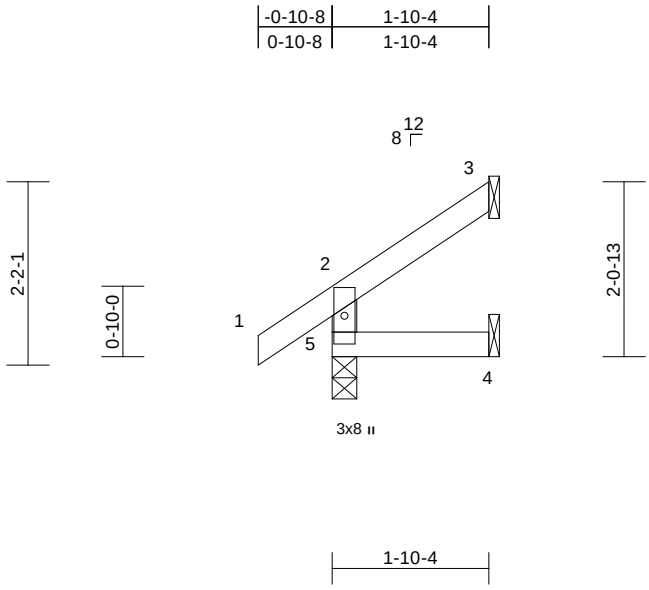


Scale = 1:27.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 8 lb	FT = 20%

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

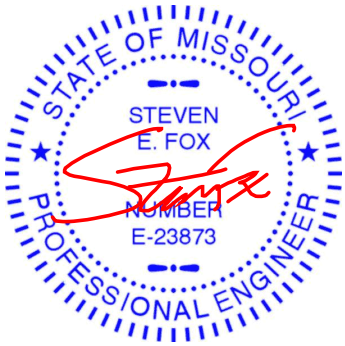
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=42/ Mechanical, 4=13/ Mechanical, 5=169/0-3-8
Max Horiz 5=66 (LC 12)
Max Uplift 3=-42 (LC 12), 4=-3 (LC 12), 5=-14 (LC 12)
Max Grav 3=50 (LC 19), 4=31 (LC 3), 5=169 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-148/115, 1-2=0/40, 2-3=-50/32
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 4 and 42 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J08	Jack-Open	3	1	Job Reference (optional) I52120815

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:1 Page: 1
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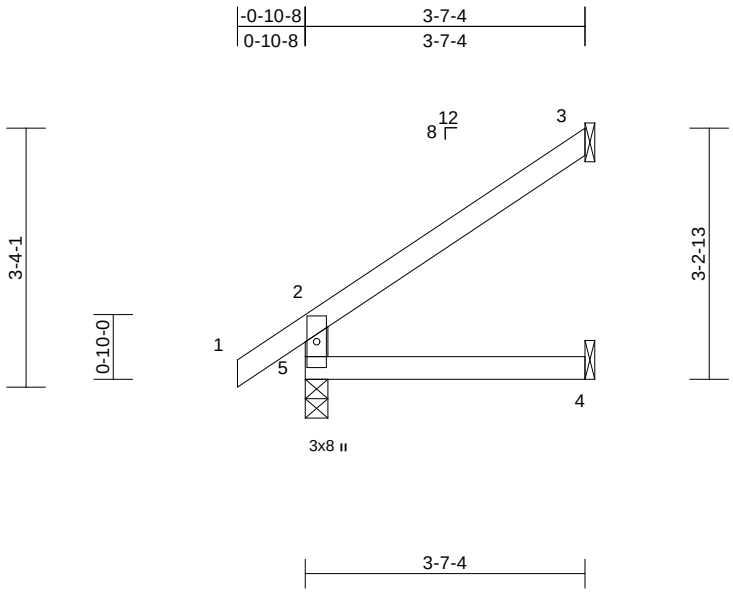


Scale = 1:29.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 14 lb	FT = 20%

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

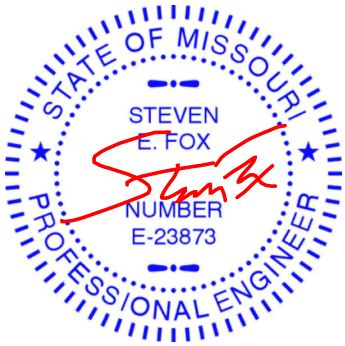
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=103/ Mechanical, 4=39/ Mechanical, 5=235/0-3-8
Max Horiz 5=115 (LC 12)
Max Uplift 3=-82 (LC 12), 5=-11 (LC 12)
Max Grav 3=113 (LC 19), 4=64 (LC 3), 5=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-206/126, 1-2=0/40, 2-3=-96/55
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
I52120816
06/02/2022

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J09	Jack-Open	19	1	Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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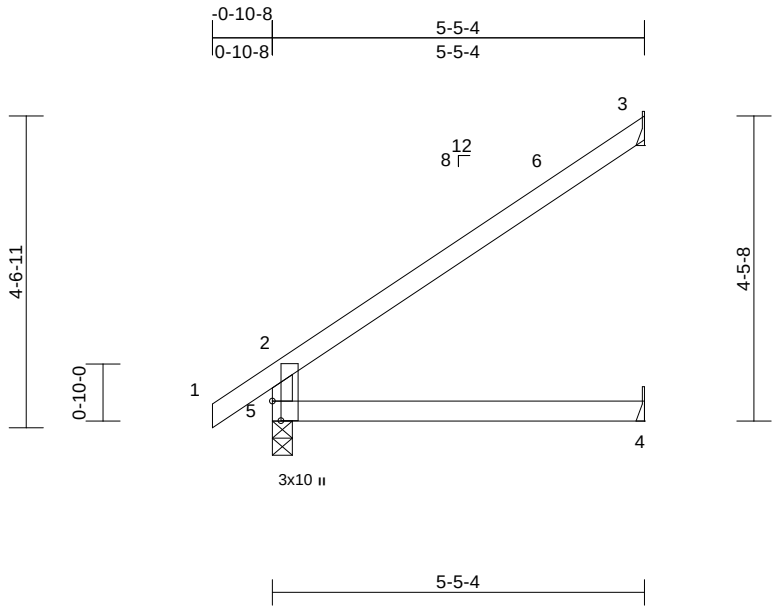

Scale = 1:33.7

Plate Offsets (X, Y): [5:0-3-7,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	0.06	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.08	4-5	>791	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.04	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 20 lb	FT = 20%

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

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

REACTIONS (lb/size) 3=163/ Mechanical, 4=65/ Mechanical, 5=314/0-3-8
Max Horiz 5=168 (LC 12)
Max Uplift 3=-122 (LC 12), 5=-11 (LC 12)
Max Grav 3=176 (LC 19), 4=100 (LC 3), 5=314 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-275/147, 1-2=0/40, 2-3=-137/81
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-4-8 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard

STATE OF MISSOURI
STEVEN E. FOX
NUMBER E-23873
PROFESSIONAL ENGINEER
May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120817
P220274-P220274-02	J10	Jack-Open	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:18 Page: 1
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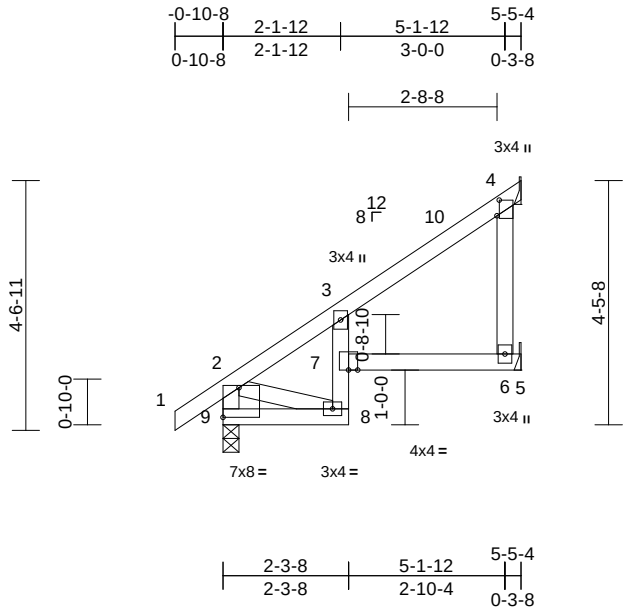


Scale = 1:42.1

Plate Offsets (X, Y): [4:0-3-7,0-0-8], [9:Edge,0-6-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	0.07	6-7	>857	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.08	6-7	>759	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 8-3:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 9-2:2x4 SP No.2

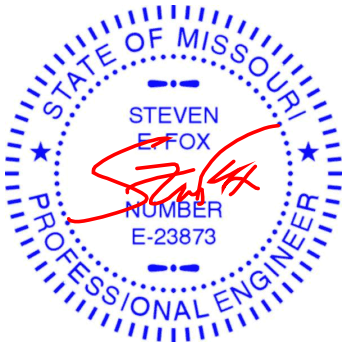
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=143/ Mechanical, 6=81/ Mechanical, 9=304/0-3-8
Max Horiz 9=162 (LC 12)
Max Uplift 4=-98 (LC 12), 6=-12 (LC 12), 9=-11 (LC 12)
Max Grav 4=155 (LC 19), 6=97 (LC 3), 9=304 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-9=-291/105, 1-2=0/40, 2-3=-201/0, 3-4=-101/76
BOT CHORD 8-9=-246/150, 7-8=-41/41, 3-7=-11/70, 6-7=0/0, 5-6=0/0
WEBS 2-8=-30/127, 4-6=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-1-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 4 and 12 lb uplift at joint 6.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

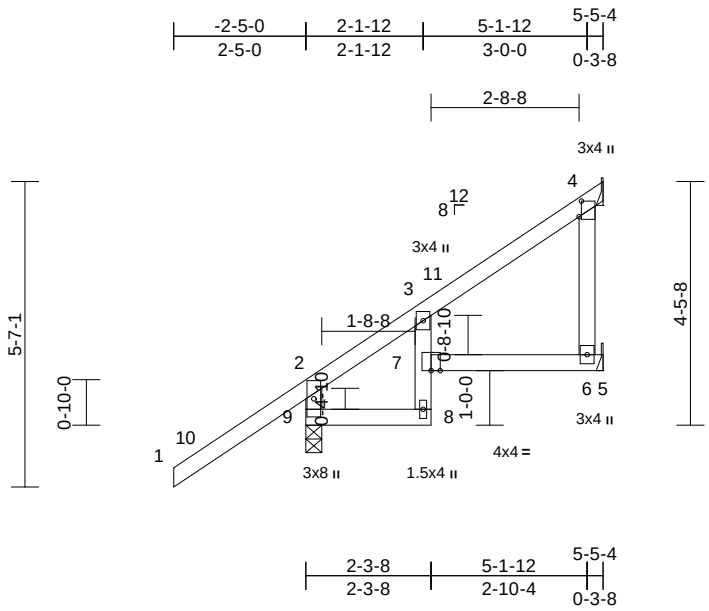
LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120818
P220274-P220274-02	J11	Jack-Open	1	1	Job Reference (optional)	



Scale = 1:42.2

Plate Offsets (X, Y): [4:0-3-7,0-0-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	6-7	>871	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 8-3:2x4 SPF No.3
WEBS 2x4 SPF No.3

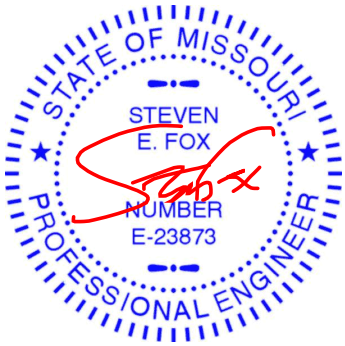
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 7-8.

REACTIONS (lb/size) 4=126/ Mechanical, 6=59/ Mechanical, 9=450/0-3-8
Max Horiz 9=200 (LC 12)
Max Uplift 4=-89 (LC 12), 6=-3 (LC 12), 9=-68 (LC 12)
Max Grav 4=139 (LC 19), 6=91 (LC 3), 9=450 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-9=-397/245, 1-2=0/100, 2-3=-142/0, 3-4=-94/72
BOT CHORD 8-9=-86/133, 7-8=-13/34, 3-7=-6/72, 6-7=0/0, 5-6=0/0
WEBS 4-6=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-5-0 to 2-7-0, Interior (1) 2-7-0 to 5-1-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 4 and 3 lb uplift at joint 6.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120819
P220274-P220274-02	J12	Jack-Open	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:18 Page: 1
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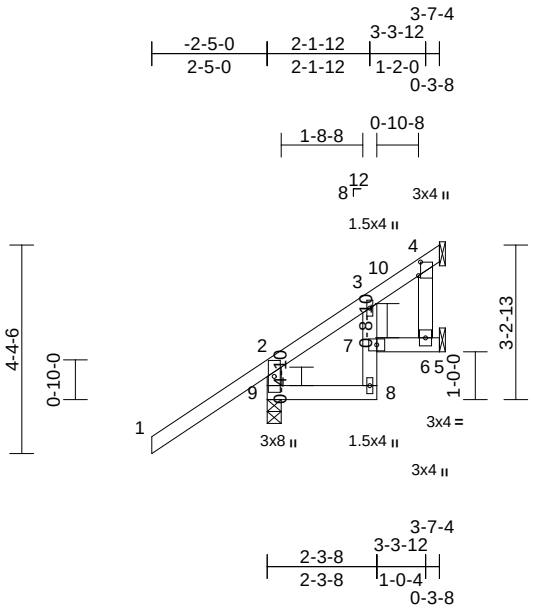


Scale = 1:48.2

Plate Offsets (X, Y): [4:0-3-7,0-0-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.01	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 8-3:2x4 SPF No.3
WEBS 2x4 SPF No.3

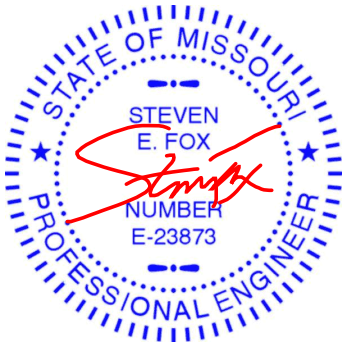
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 4=63/ Mechanical, 6=13/ Mechanical, 9=394/0-3-8
Max Horiz 9=147 (LC 12)
Max Uplift 4=-41 (LC 12), 6=-3 (LC 12), 9=-80 (LC 12)
Max Grav 4=70 (LC 19), 6=51 (LC 3), 9=394 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-9=-345/280, 1-2=0/99, 2-3=-82/9, 3-4=-45/41
BOT CHORD 8-9=-25/70, 7-8=-10/32, 3-7=-21/39, 6-7=0/0, 5-6=0/0
WEBS 4-6=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-5-0 to 2-7-0, Interior (1) 2-7-0 to 3-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 4 and 3 lb uplift at joint 6.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J13	Jack-Open	1	1	Job Reference (optional) I52120820

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:18 Page: 1
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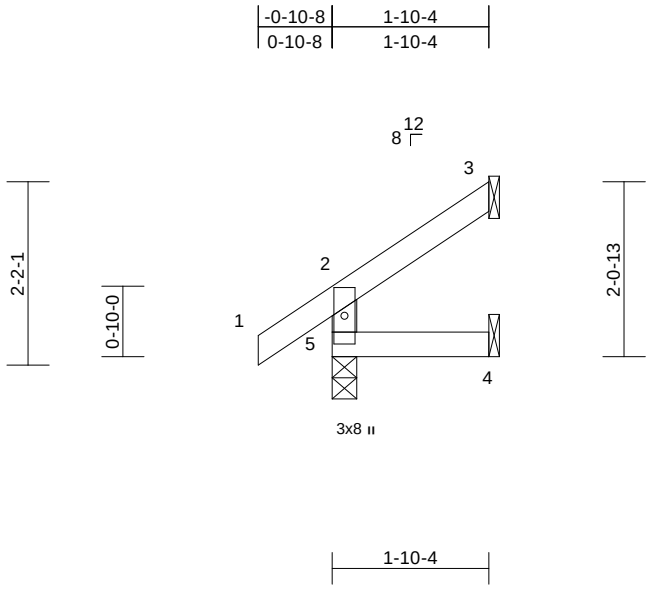


Scale = 1:27.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 8 lb	FT = 20%

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

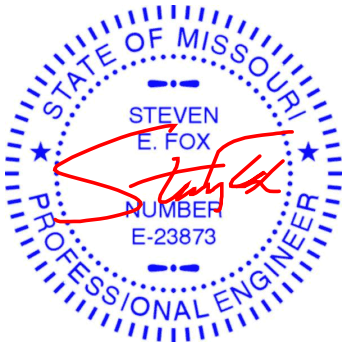
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=42/ Mechanical, 4=13/ Mechanical, 5=169/0-3-8
Max Horiz 5=66 (LC 12)
Max Uplift 3=-42 (LC 12), 4=-3 (LC 12), 5=-14 (LC 12)
Max Grav 3=50 (LC 19), 4=31 (LC 3), 5=169 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-148/115, 1-2=0/40, 2-3=-50/32
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 4 and 42 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

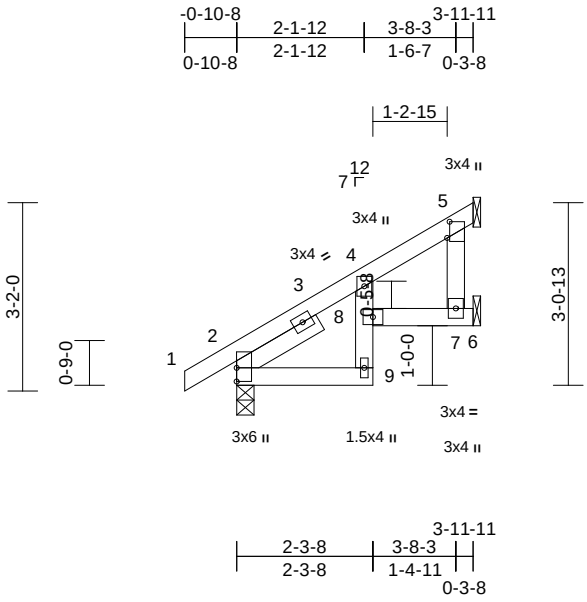
LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120821
P220274-P220274-02	J14	Jack-Open	1	1	Job Reference (optional)	



Scale = 1:38.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.01	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 20 lb	FT = 20%

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

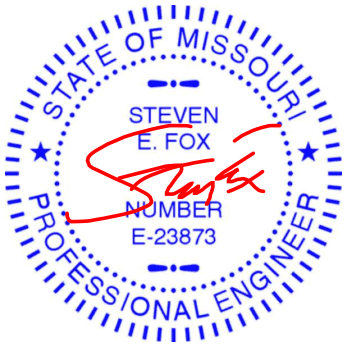
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=234/0-3-8, 5=96/ Mechanical, 7=69/ Mechanical
Max Horiz 2=116 (LC 12)
Max Uplift 2=-22 (LC 12), 5=-54 (LC 12), 7=-15 (LC 12)
Max Grav 2=234 (LC 1), 5=101 (LC 19), 7=73 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-164/0, 4-5=-48/47
BOT CHORD 2-9=-63/84, 8-9=0/47, 4-8=-4/50, 7-8=0/0, 6-7=0/0
WEBS 5-7=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5 and 15 lb uplift at joint 7.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	J15	Jack-Open	1	1	I52120822

Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:19 Page: 1
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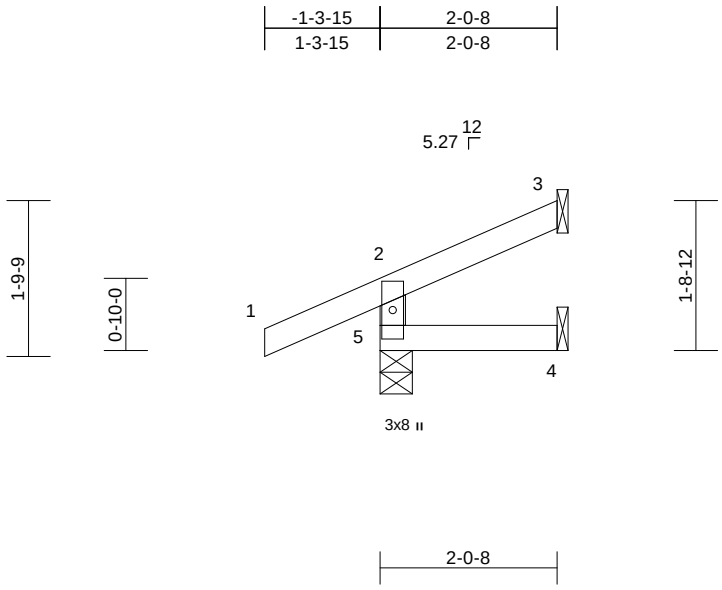


Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 9 lb	FT = 20%

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

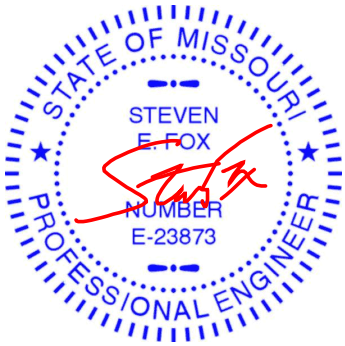
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=33/ Mechanical, 4=8/ Mechanical, 5=227/0-4-7
Max Horiz 5=51 (LC 9)
Max Uplift 3=-29 (LC 12), 5=-49 (LC 12)
Max Grav 3=33 (LC 1), 4=31 (LC 3), 5=227 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-198/220, 1-2=0/41, 2-3=-38/20
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 3.
5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120823
P220274-P220274-02	LG01	Lay-In Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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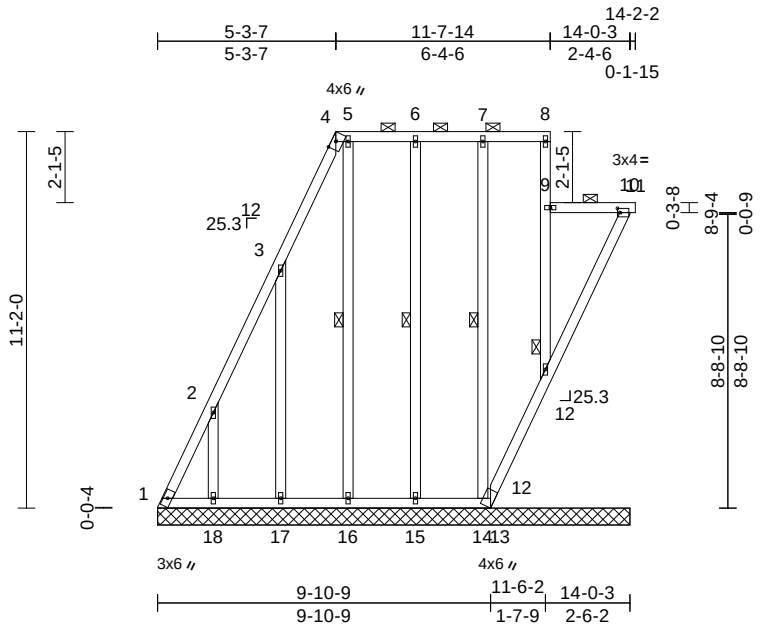


Scale = 1:68.4

Plate Offsets (X, Y): [4:0-2-13,Edge], [10:0-0-13,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	-0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 116 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

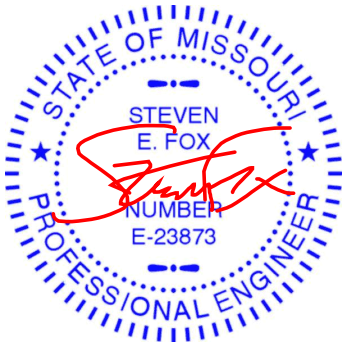
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8, 9-12, 9-11. Except:
1 Row at midpt 9-12
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 12-13.
WEBS 1 Row at midpt 7-14, 6-15, 5-16

REACTIONS (lb/size) 1=49/14-0-3, 10=114/14-0-3, 12=197/14-0-3, 13=-17/14-0-3, 14=192/14-0-3, 15=180/14-0-3, 16=177/14-0-3, 17=181/14-0-3, 18=172/14-0-3
Max Horiz 1=568 (LC 12)
Max Uplift 1=-453 (LC 10), 10=-293 (LC 12), 12=-101 (LC 10), 13=-31 (LC 10), 14=-39 (LC 8), 15=-54 (LC 8), 16=-201 (LC 12), 17=-442 (LC 12), 18=-403 (LC 12)
Max Grav 1=914 (LC 12), 10=218 (LC 19), 12=282 (LC 21), 13=20 (LC 12), 14=193 (LC 26), 15=186 (LC 26), 16=219 (LC 19), 17=345 (LC 19), 18=318 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1043/850, 2-3=-647/531, 3-4=-186/150, 4-5=-52/53, 5-6=-52/53, 6-7=-52/53, 7-8=-52/53, 9-12=-149/167, 8-9=-58/79, 9-10=-72/85, 10-11=0/2
BOT CHORD 1-18=-87/70, 17-18=-87/70, 16-17=-87/70, 15-16=-87/70, 14-15=-87/70, 13-14=-87/70, 12-13=-93/80, 10-12=-319/263
WEBS 7-14=-144/142, 6-15=-146/142, 5-16=-236/307, 3-17=-450/484, 2-18=-401/429

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-2-12 to 14-2-4 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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 12 and 293 lb uplift at joint 10.
10) N/A
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12, 10.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120824
P220274-P220274-02	LG02	Lay-In Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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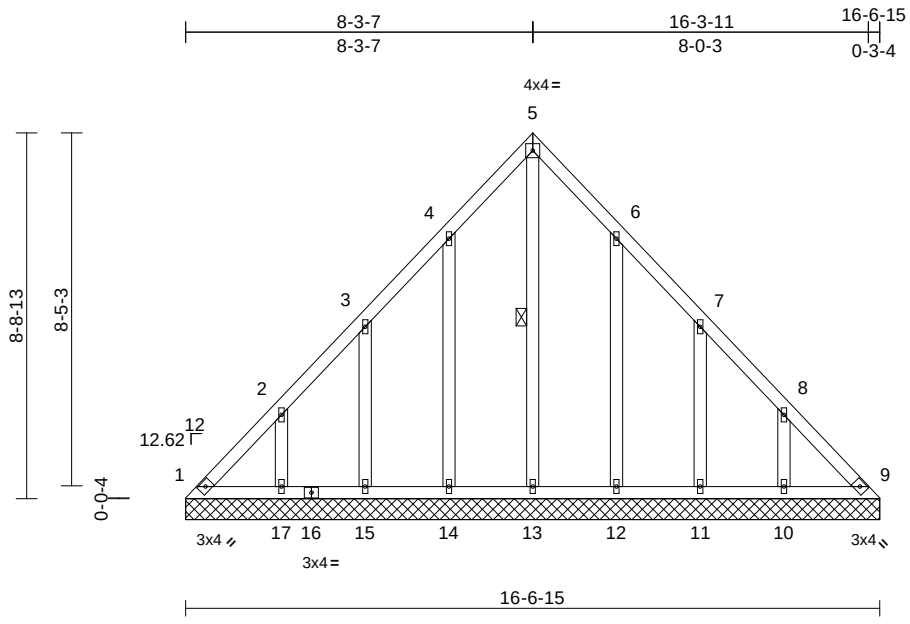


Scale = 1:55

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 96 lb	FT = 20%

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

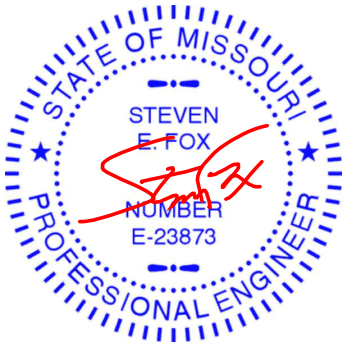
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS (lb/size) 1=96/16-6-15, 9=96/16-6-15, 10=202/16-6-15, 11=174/16-6-15, 12=187/16-6-15, 13=117/16-6-15, 14=187/16-6-15, 15=174/16-6-15, 17=202/16-6-15
Max Horiz 1=-237 (LC 8)
Max Uplift 1=-88 (LC 10), 9=-50 (LC 11), 10=-151 (LC 13), 11=-135 (LC 13), 12=-135 (LC 13), 14=-138 (LC 12), 15=-134 (LC 12), 17=-151 (LC 12)
Max Grav 1=207 (LC 12), 9=181 (LC 13), 10=231 (LC 20), 11=199 (LC 20), 12=216 (LC 20), 13=200 (LC 13), 14=218 (LC 19), 15=198 (LC 19), 17=231 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-308/197, 2-3=-170/141, 3-4=-141/107, 4-5=-174/174, 5-6=-174/164, 6-7=-102/70, 7-8=-144/89, 8-9=-273/187
BOT CHORD 1-17=-149/223, 15-17=-149/223, 14-15=-149/223, 13-14=-149/223, 12-13=-149/223, 11-12=-149/223, 10-11=-149/223, 9-10=-149/223
WEBS 5-13=-176/121, 4-14=-187/161, 3-15=-188/160, 2-17=-203/170, 6-12=-187/159, 7-11=-188/161, 8-10=-203/170

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 8-3-11, Exterior(2R) 8-3-11 to 13-3-11, Interior (1) 13-3-11 to 16-3-5 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
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) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 1, 50 lb uplift at joint 9, 138 lb uplift at joint 14, 134 lb uplift at joint 15, 151 lb uplift at joint 17, 135 lb uplift at joint 12, 135 lb uplift at joint 11 and 151 lb uplift at joint 10.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120825
P220274-P220274-02	LG03	Lay-In Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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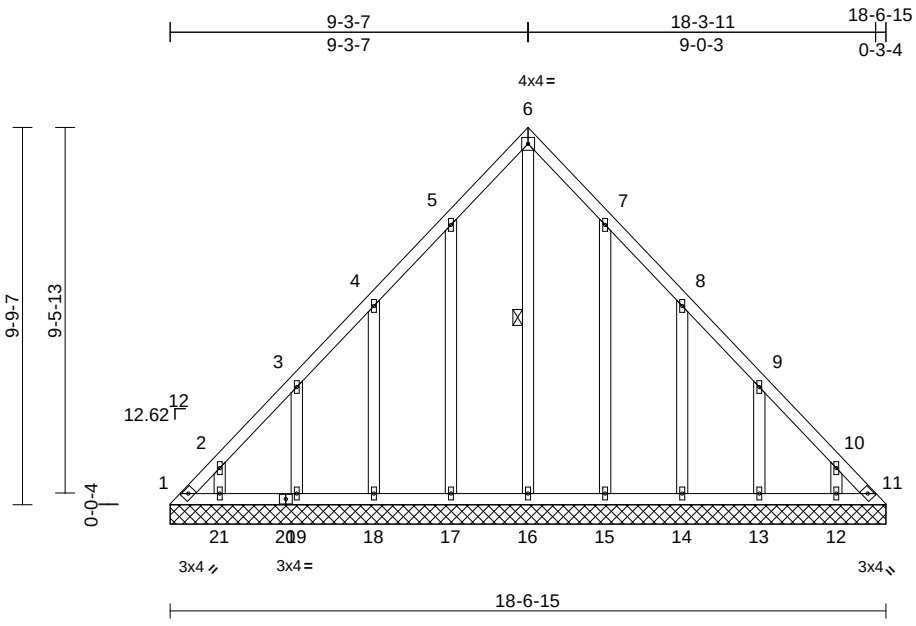


Scale = 1:59.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 113 lb	FT = 20%

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

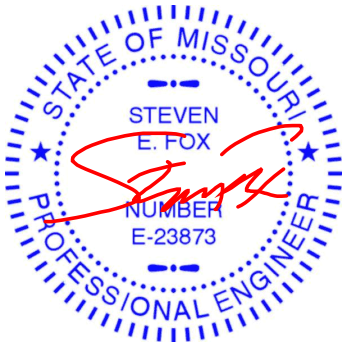
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16

REACTIONS (lb/size) 1=46/18-6-15, 11=46/18-6-15, 12=153/18-6-15, 13=185/18-6-15, 14=178/18-6-15, 15=186/18-6-15, 16=117/18-6-15, 17=186/18-6-15, 18=178/18-6-15, 19=185/18-6-15, 21=153/18-6-15
Max Horiz 1=-267 (LC 8)
Max Uplift 1=-149 (LC 10), 11=-106 (LC 11), 12=-116 (LC 13), 13=-139 (LC 13), 14=-140 (LC 13), 15=-132 (LC 13), 17=-134 (LC 12), 18=-139 (LC 12), 19=-139 (LC 12), 21=-116 (LC 12)
Max Grav 1=279 (LC 12), 11=251 (LC 13), 12=176 (LC 20), 13=212 (LC 20), 14=205 (LC 20), 15=214 (LC 20), 16=229 (LC 13), 17=217 (LC 19), 18=203 (LC 19), 19=212 (LC 19), 21=176 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-391/242, 2-3=-287/196, 3-4=-173/144, 4-5=-145/129, 5-6=-191/195, 6-7=-191/183, 7-8=-101/89, 8-9=-132/85, 9-10=-248/158, 10-11=-352/242
BOT CHORD 1-21=-168/253, 19-21=-168/253, 18-19=-168/253, 17-18=-168/253, 16-17=-168/253, 15-16=-168/253, 14-15=-168/253, 13-14=-168/253, 12-13=-168/253, 11-12=-168/253
WEBS 6-16=-205/145, 5-17=-182/158, 4-18=-189/162, 3-19=-191/164, 2-21=-156/133, 7-15=-182/156, 8-14=-189/163, 9-13=-191/164, 10-12=-156/133

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-3-11, Interior (1) 5-3-11 to 9-3-11, Exterior(2R) 9-3-11 to 14-3-11, Interior (1) 14-3-11 to 18-3-5 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
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) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 1, 106 lb uplift at joint 11, 134 lb uplift at joint 17, 139 lb uplift at joint 18, 139 lb uplift at joint 19, 116 lb uplift at joint 21, 132 lb uplift at joint 15, 140 lb uplift at joint 14, 139 lb uplift at joint 13 and 116 lb uplift at joint 12.
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.

LOAD CASE(S) Standard



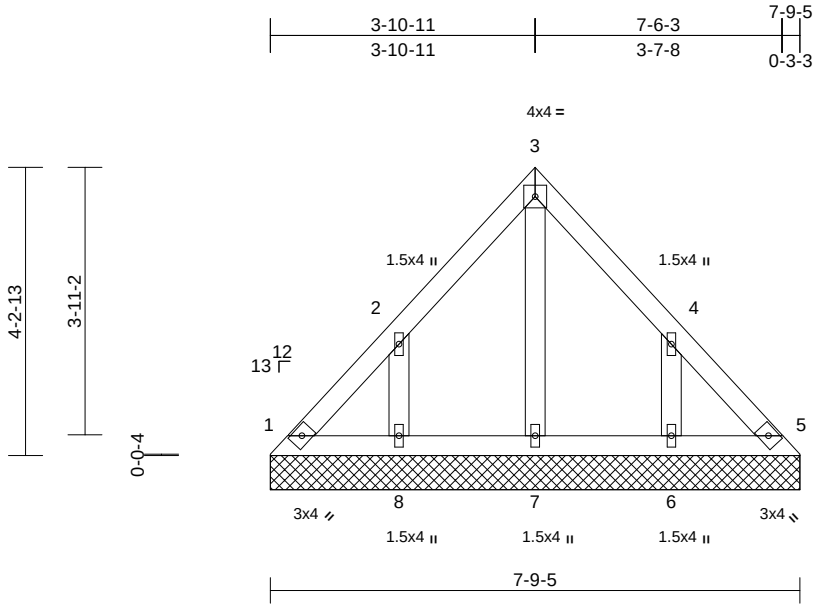
May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	
P220274-P220274-02	LG04	Lay-In Gable	1	1	Job Reference (optional)	I52120826

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:20 Page: 1
ID:_u63TnBt7rqdQ0liu3KHL0zQQLQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J42JC?f



Scale = 1:33.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

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

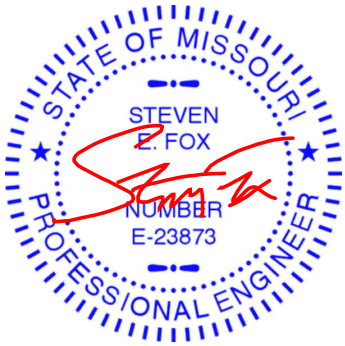
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=72/7-9-5, 5=72/7-9-5, 6=197/7-9-5, 7=106/7-9-5, 8=197/7-9-5
Max Horiz 1=-111 (LC 8)
Max Uplift 1=-26 (LC 8), 5=-9 (LC 9), 6=-160 (LC 13), 8=-160 (LC 12)
Max Grav 1=99 (LC 21), 5=91 (LC 22), 6=228 (LC 20), 7=118 (LC 22), 8=229 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-123/91, 2-3=-102/80, 3-4=-96/76, 4-5=-108/76
BOT CHORD 1-8=-65/97, 7-8=-65/97, 6-7=-65/97, 5-6=-65/97
WEBS 3-7=-78/20, 2-8=-235/184, 4-6=-235/184

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1, 9 lb uplift at joint 5, 160 lb uplift at joint 8 and 160 lb uplift at joint 6.
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.

LOAD CASE(S) Standard



May 24,2022

Job	Truss	Truss Type	Qty	Ply	Roof	I52120827
P220274-P220274-02	V01	Valley	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:20 Page: 1
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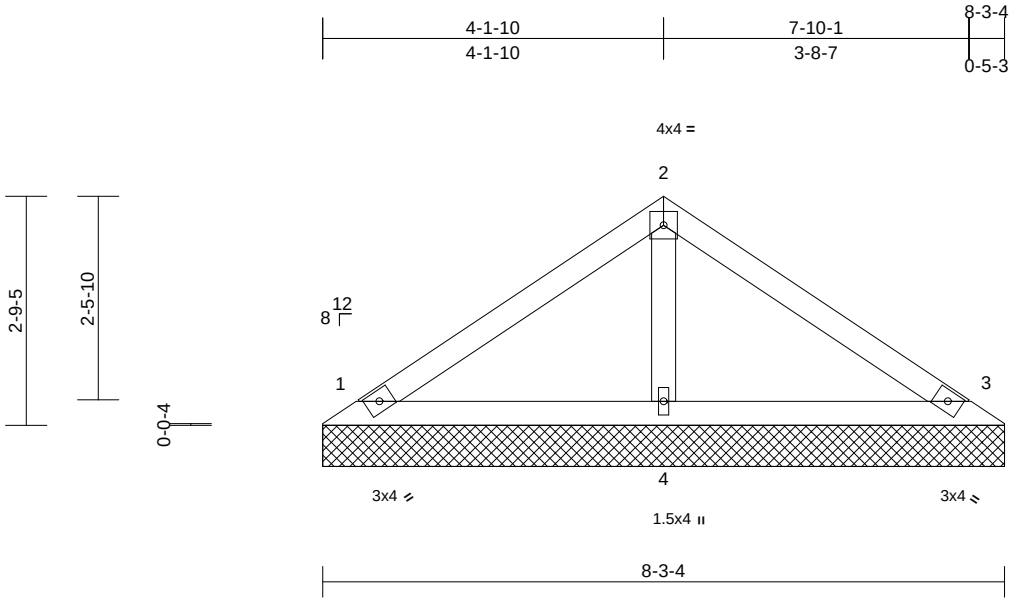


Scale = 1:27.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

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

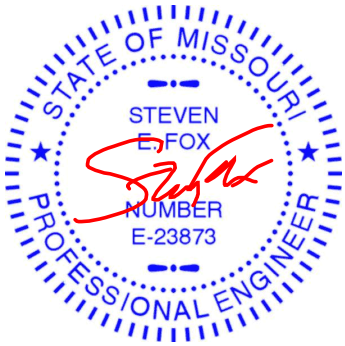
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=183/8-3-4, 3=183/8-3-4, 4=298/8-3-4
Max Horiz 1=69 (LC 9)
Max Uplift 1=-46 (LC 12), 3=-55 (LC 13), 4=-3 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/64, 2-3=-104/64
BOT CHORD 1-4=-14/50, 3-4=-14/50
WEBS 2-4=-206/104

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 1, 55 lb uplift at joint 3 and 3 lb uplift at joint 4.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof	I52120828
P220274-P220274-02	V02	Valley	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:20 Page: 1
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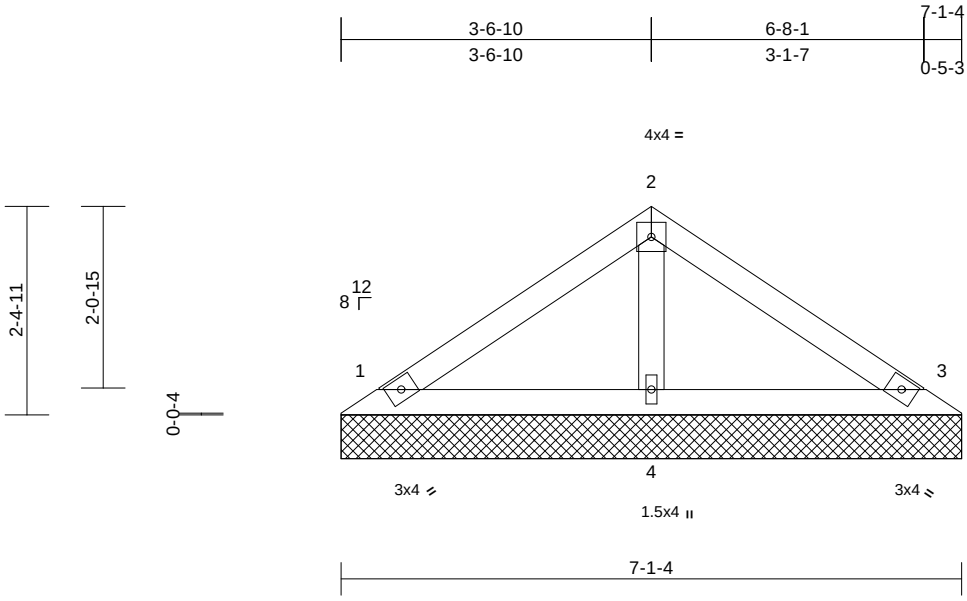


Scale = 1:26.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	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
OTHERS 2x4 SPF No.3

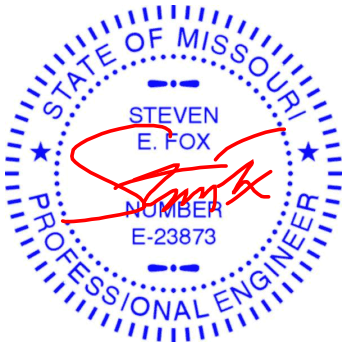
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=154/7-1-4, 3=154/7-1-4, 4=251/7-1-4
Max Horiz 1=58 (LC 11)
Max Uplift 1=-39 (LC 12), 3=-46 (LC 13), 4=-2 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-94/58, 2-3=-88/58
BOT CHORD 1-4=-12/42, 3-4=-12/42
WEBS 2-4=-173/97

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 1, 46 lb uplift at joint 3 and 2 lb uplift at joint 4.
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.

LOAD CASE(S) Standard



May 24,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roof
P220274-P220274-02	V03	Valley	1	1	Job Reference (optional)

I52120829

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 23 20:27:20 Page: 1
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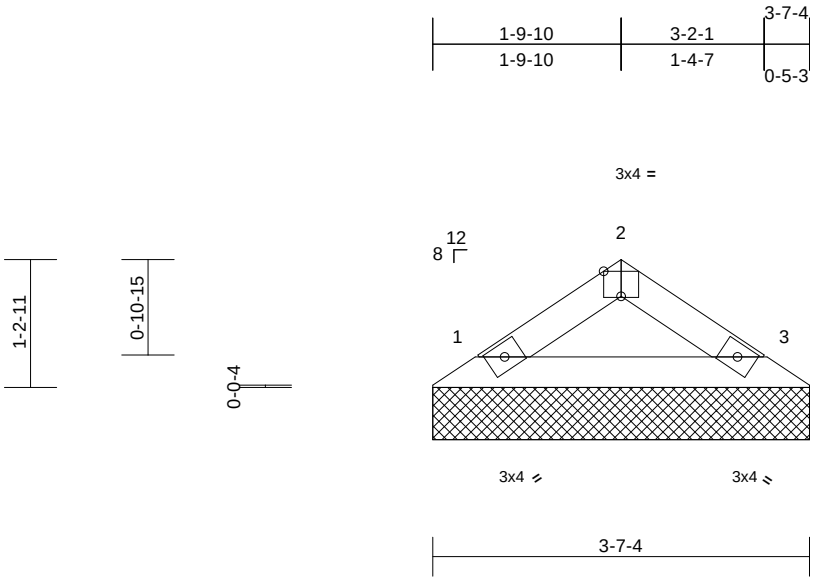


Scale = 1:22

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	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

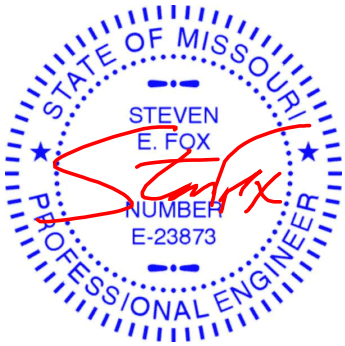
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=122/3-7-4, 3=122/3-7-4
Max Horiz 1=25 (LC 11)
Max Uplift 1=-17 (LC 12), 3=-17 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-106/73, 2-3=-106/73
BOT CHORD 1-3=-27/71

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 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.

LOAD CASE(S) Standard

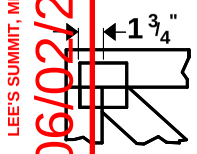


May 24,2022

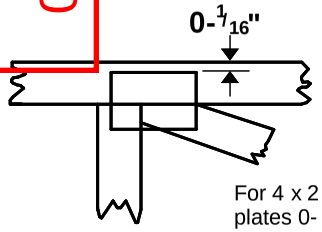
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

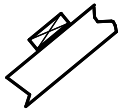
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

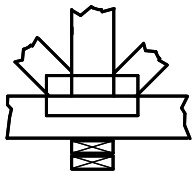
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

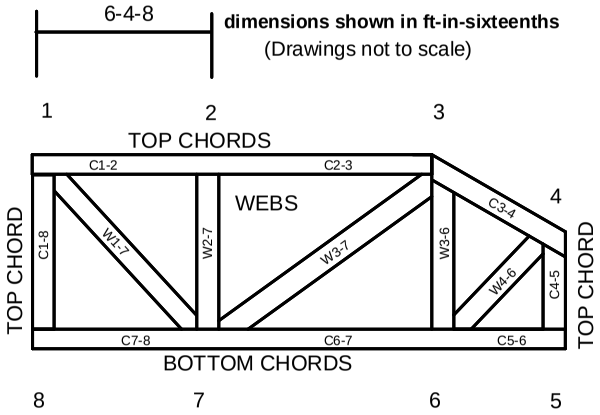


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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