Job	Truss	Truss Type	Qty	Ply	
2975058	A1E	Common Supported Gable	2	1	I49386640 Job Reference (optional)

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Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:31 Page: 1
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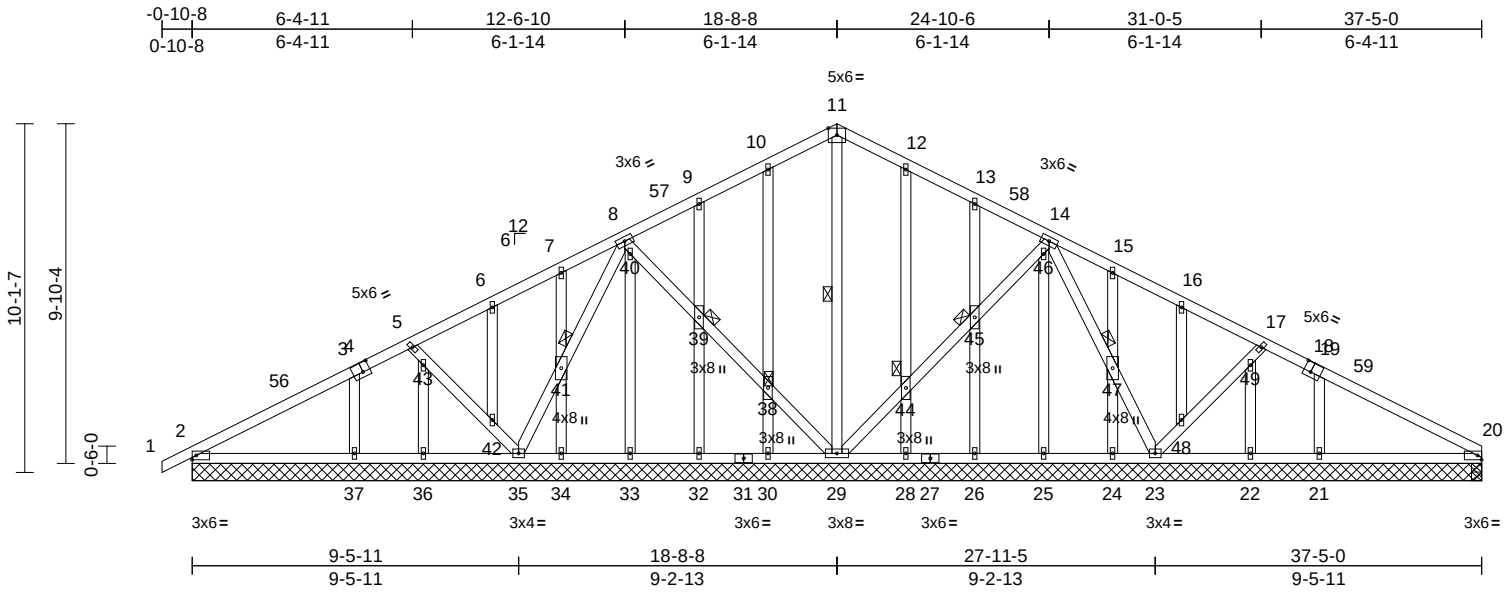

Scale = 1:66.9

Plate Offsets (X, Y): [4:0-2-8,0-3-4], [18:0-2-8,0-3-4]

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	0.17	Vert(LL)	-0.01	21-55	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	21-55	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	53	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	21-55	>999	240		
BCDL	10.0										Weight: 228 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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 11-29
JOINTS 1 Brace at Jt(s): 38, 39, 41, 44, 45, 47

REACTIONS (lb/size) 2=257/37-5-0, 20=204/37-5-0, 21=349/37-5-0, 22=81/37-5-0, 23=170/37-5-0, 24=155/37-5-0, 25=99/37-5-0, 26=159/37-5-0, 28=162/37-5-0, 29=178/37-5-0, 30=162/37-5-0, 32=159/37-5-0, 33=99/37-5-0, 34=155/37-5-0, 35=175/37-5-0, 36=87/37-5-0, 37=338/37-5-0, 50=257/37-5-0, 53=204/37-5-0
Max Horiz 2=83 (LC 13), 50=83 (LC 13)
Max Uplift 21=-9 (LC 17), 24=-17 (LC 17), 26=-10 (LC 17), 28=-2 (LC 17), 30=-3 (LC 16), 32=-9 (LC 16), 34=-18 (LC 16), 37=-11 (LC 16)
Max Grav 2=298 (LC 2), 20=234 (LC 2), 21=399 (LC 38), 22=92 (LC 2), 23=195 (LC 2), 24=181 (LC 2), 25=110 (LC 2), 26=216 (LC 24), 28=234 (LC 24), 29=205 (LC 2), 30=232 (LC 23), 32=210 (LC 23), 33=110 (LC 2), 34=181 (LC 2), 35=202 (LC 2), 36=100 (LC 2), 37=387 (LC 37), 50=298 (LC 2), 53=234 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-177/49, 3-5=-157/96, 5-6=-111/96, 6-7=-84/130, 7-8=-99/170, 8-9=-76/124, 9-10=-75/163, 10-11=-88/197, 11-12=-88/199, 12-13=-76/165, 13-14=-74/126, 14-15=-108/183, 15-16=-92/143, 16-17=-120/109, 17-19=-169/110, 19-20=-186/30
BOT CHORD 2-37=-60/121, 36-37=-9/121, 35-36=-9/121, 34-35=0/106, 33-34=0/106, 32-33=0/106, 30-32=0/106, 29-30=0/106, 28-29=0/106, 26-28=0/106, 25-26=0/106, 24-25=0/106, 23-24=0/106, 22-23=0/110, 21-22=0/110, 20-21=-64/110
WEBS 11-29=-103/8, 29-44=-59/85, 44-45=-59/85, 45-46=-57/89, 14-46=-112/89, 14-47=-60/21, 23-47=-60/20, 23-48=-124/74, 48-49=-34/38, 17-49=-92/51, 8-40=-107/81, 39-40=-52/82, 38-39=-55/78, 29-38=-54/78, 35-41=-48/18, 8-41=-48/19, 5-43=-93/51, 42-43=-32/37, 35-42=-122/73, 10-38=-190/108, 30-38=-192/107, 9-39=-176/87, 32-39=-171/92, 33-40=-66/5, 7-41=-162/68, 34-41=-160/68, 6-42=-121/49, 36-43=-87/20, 3-37=-269/134, 12-44=-192/108, 28-44=-194/107, 13-45=-181/87, 26-45=-177/92, 25-46=-66/4, 15-47=-162/69, 24-47=-161/69, 16-48=-120/48, 22-49=-82/18, 19-21=-274/162

NOTES
1) Unbalanced roof live loads have been considered for this design.

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2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-10-8 to 2-10-6, Exterior (2) 2-10-6 to 18-8-8, Corner (3) 18-8-8 to 22-8-8, Exterior (2) 22-8-8 to 37-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30, 32, 34, 37, 28, 26, 24, and 21. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
2975058	A2	Common	12	1	I49386641 Job Reference (optional)

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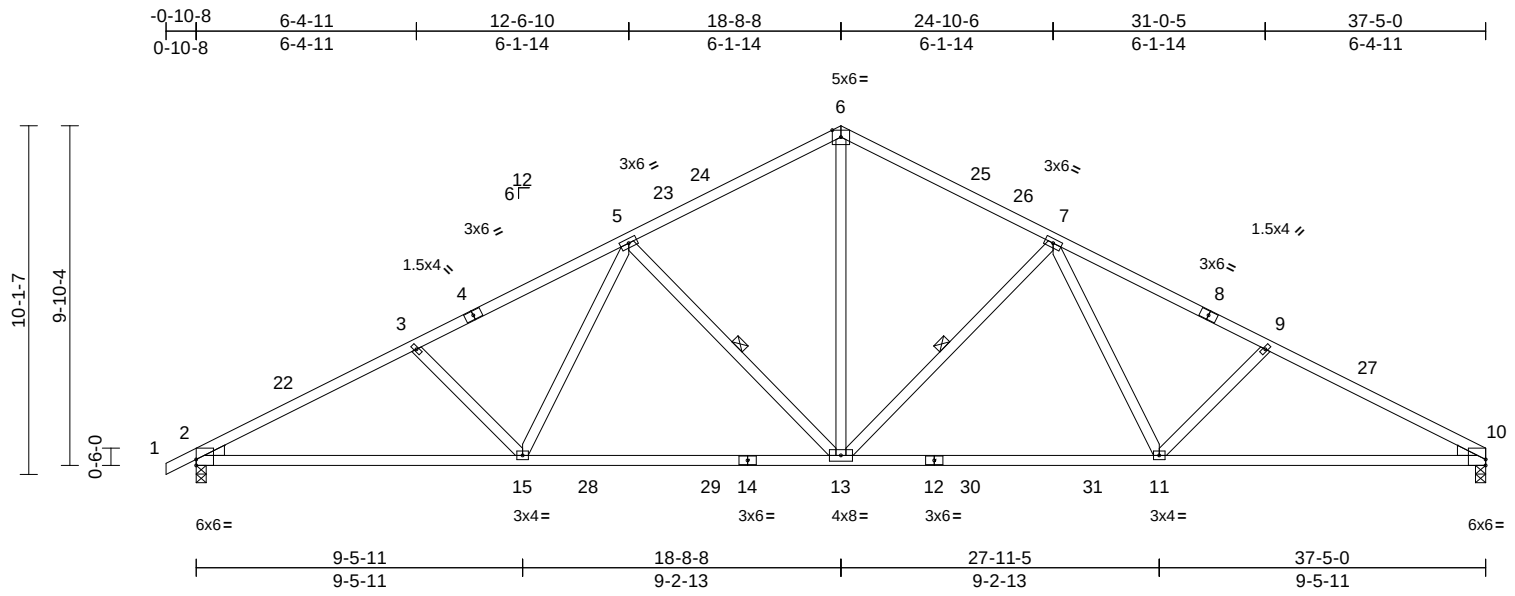

Scale = 1:66.9

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

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	0.46	Vert(LL)	-0.31	13-15	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.53	13-15	>852	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.13	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	13-15	>999	240		
BCDL	10.0										Weight: 149 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-8-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-13, 5-13

REACTIONS (lb/size) 2=1520/0-3-8, 10=1468/0-3-8
Max Horiz 2=83 (LC 13)
Max Grav 2=1746 (LC 2), 10=1683 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/27, 2-3=-3085/92, 3-5=-2785/96, 5-6=-1981/140, 6-7=-1981/142, 7-9=-2790/106, 9-10=-3091/105
BOT CHORD	2-15=-70/2668, 13-15=0/2198, 11-13=0/2199, 10-11=-90/2674
WEBS	6-13=-17/1289, 7-13=-774/94, 7-11=0/517, 9-11=-389/111, 5-13=-772/93, 5-15=0/513, 3-15=-385/102

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-10-6, Interior (1) 2-10-6 to 18-8-8, Exterior (2) 18-8-8 to 22-5-6, Interior (1) 22-5-6 to 37-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	
2975058	A2E	Common Supported Gable	1	1	I49386642 Job Reference (optional)

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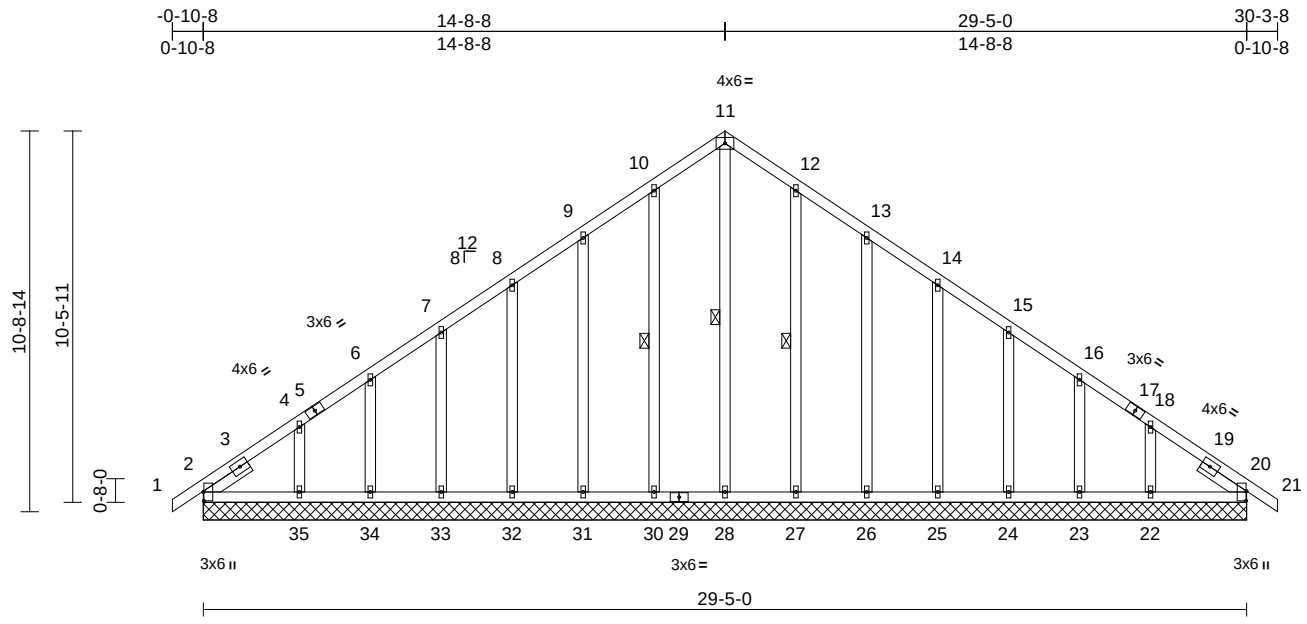

Scale = 1:65

Plate Offsets (X, Y): [2:0-3-0,0-0-3], [20:0-3-5,0-0-3]

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	20	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 1-6-0, Right 2x4 SPF No.2 -- 1-6-0

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 11-28, 10-30, 12-27

REACTIONS (lb/size) 2=171/29-5-0, 20=171/29-5-0, 22=201/29-5-0, 23=143/29-5-0, 24=161/29-5-0, 25=156/29-5-0, 26=157/29-5-0, 27=161/29-5-0, 28=112/29-5-0, 30=161/29-5-0, 31=157/29-5-0, 32=156/29-5-0, 33=161/29-5-0, 34=143/29-5-0, 35=201/29-5-0, 36=171/29-5-0, 40=171/29-5-0
Max Horiz 2=161 (LC 13), 36=161 (LC 13)
Max Uplift 2=-25 (LC 10), 22=-37 (LC 15), 23=-5 (LC 15), 24=-15 (LC 15), 25=-12 (LC 15), 26=-16 (LC 15), 27=-7 (LC 15), 30=-9 (LC 14), 31=-15 (LC 14), 32=-12 (LC 14), 33=-15 (LC 14), 34=-3 (LC 14), 35=-42 (LC 14), 36=-25 (LC 10)
Max Grav 2=211 (LC 27), 20=200 (LC 2), 22=236 (LC 27), 23=164 (LC 2), 24=184 (LC 31), 25=179 (LC 2), 26=180 (LC 2), 27=188 (LC 31), 28=157 (LC 29), 30=188 (LC 30), 31=180 (LC 2), 32=179 (LC 2), 33=184 (LC 30), 34=164 (LC 2), 35=243 (LC 26), 36=211 (LC 27), 40=200 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-144/123, 4-6=-136/91, 6-7=-127/85, 7-8=-120/84, 8-9=-117/110, 9-10=-157/159, 10-11=-192/199, 11-12=-192/199, 12-13=-157/159, 13-14=-117/110, 14-15=-80/65, 15-16=-86/34, 16-18=-96/37, 18-20=-96/82, 20-21=0/34
BOT CHORD 2-35=-76/124, 34-35=-76/124, 33-34=-76/124, 32-33=-76/124, 31-32=-76/124, 30-31=-76/124, 28-30=-76/124, 27-28=-76/124, 26-27=-76/124, 25-26=-76/124, 24-25=-76/124, 23-24=-76/124, 22-23=-76/124, 20-22=-76/124
WEBS 11-28=-173/110, 10-30=-148/49, 9-31=-140/63, 8-32=-140/57, 7-33=-142/60, 6-34=-132/53, 4-35=-172/80, 12-27=-148/49, 13-26=-140/63, 14-25=-140/57, 15-24=-142/60, 16-23=-132/53, 18-22=-168/80

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 14-8-8, Corner (3) 14-8-8 to 17-8-8, Exterior (2) 17-8-8 to 30-3-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 MT20 unless otherwise indicated.

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7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	A3	Roof Special	3	1	I49386643 Job Reference (optional)

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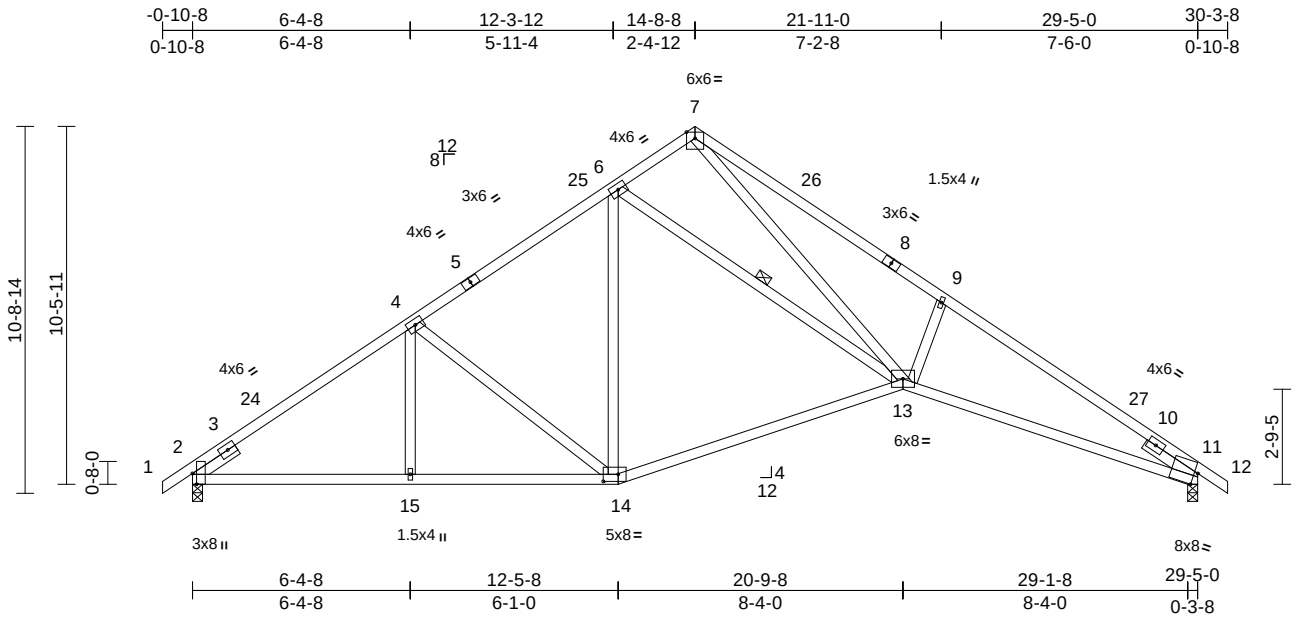

Scale = 1:67.4

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

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	0.74	Vert(LL)	-0.23	13-14	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.54	13-14	>651	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.25	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	13-14	>999	240		
BCDL	10.0										Weight: 136 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 7-8,8-12:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 1-6-0, Right 2x4 SPF No.2 -- 1-10-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-13

REACTIONS (lb/size) 2=1206/0-3-8, 11=1206/0-3-8
Max Horiz 2=161 (LC 13)
Max Grav 2=1385 (LC 2), 11=1385 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1880/50, 4-6=-1470/102, 6-7=-1103/98, 7-9=-3043/91, 9-11=-3226/20, 11-12=0/34
BOT CHORD 2-15=-70/1480, 14-15=0/1480, 13-14=0/1202, 11-13=-53/2722
WEBS 4-15=0/227, 4-14=-467/72, 6-14=0/223, 6-13=-412/84, 7-13=-34/2396, 9-13=-395/154

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 14-8-8, Exterior (2) 14-8-8 to 17-8-8, Interior (1) 17-8-8 to 30-3-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	A4	Roof Special	4	1	I49386644
					Job Reference (optional)

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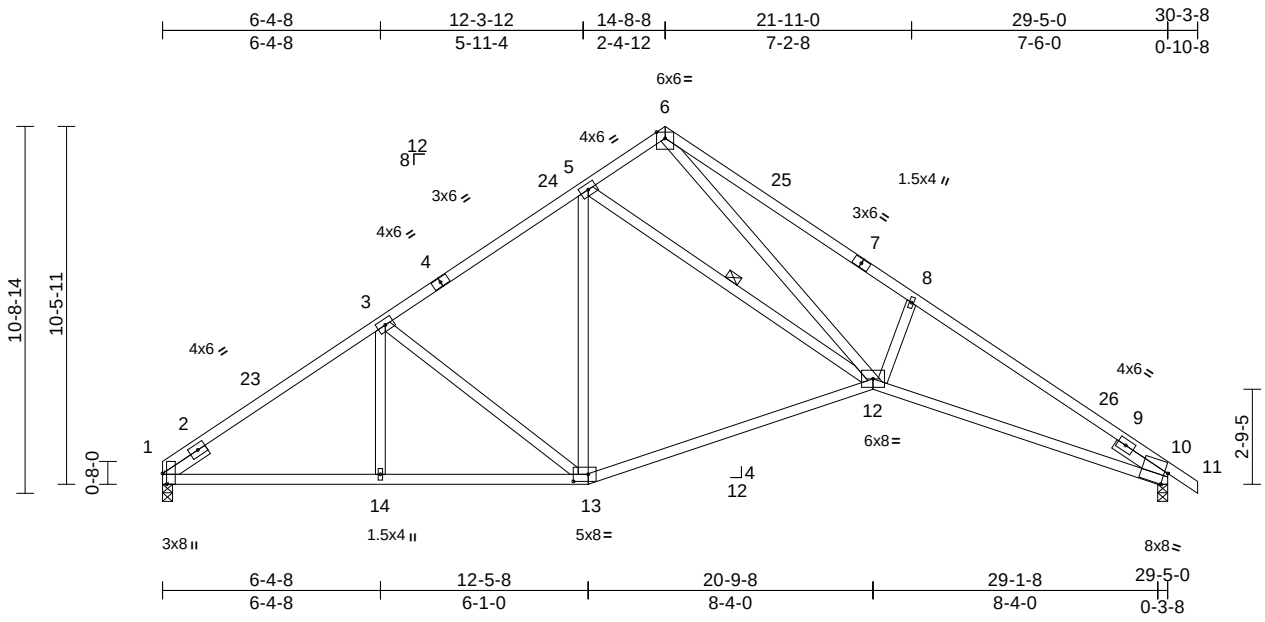

Scale = 1:67.4

Plate Offsets (X, Y): [1:0-3-13,Edge], [10:0-1-3,Edge], [13:0-5-4,0-2-8]

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	0.74	Vert(LL)	-0.23	12-13	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.54	12-13	>651	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.25	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	12-13	>999	240		
BCDL	10.0										Weight: 135 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E *Except* 6-7,7-11:2x4 SP 2400F 2.0E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -- 1-6-0, Right 2x4 SPF No.2 -- 1-10-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-12

REACTIONS (lb/size) 1=1154/0-3-8, 10=1207/0-3-8
Max Horiz 1=-158 (LC 10)
Max Grav 1=1323 (LC 2), 10=1386 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-1886/56, 3-5=-1472/104, 5-6=-1104/99, 6-8=-3045/94, 8-10=-3229/22, 10-11=0/34
BOT CHORD	1-14=-72/1487, 13-14=0/1487, 12-13=0/1204, 10-12=-54/2724
WEBS	3-14=0/228, 3-13=-473/78, 5-13=0/224, 5-12=-413/84, 6-12=-36/2398, 8-12=-395/153

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 14-8-8, Exterior (2) 14-8-8 to 17-8-8, Interior (1) 17-8-8 to 30-3-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B1	Roof Special	8	1	I49386645 Job Reference (optional)

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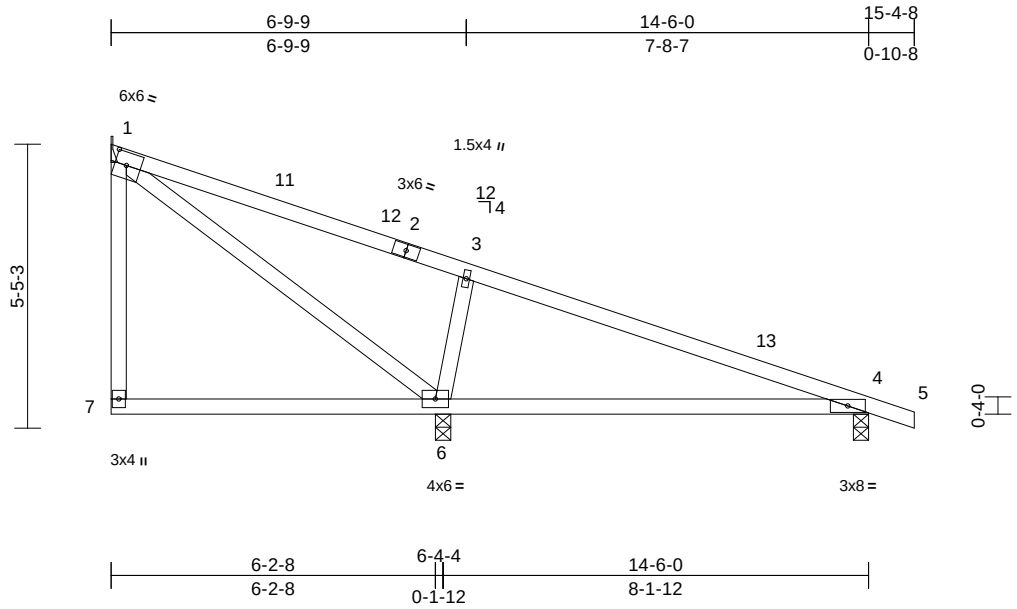

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Plate Offsets (X, Y): [1:0-2-11,0-3-0]

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	0.56	Vert(LL)	-0.10	6-10	>992	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.22	6-10	>452	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.05	6-10	>999	240		
BCDL	10.0										Weight: 52 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 1=188/ Mechanical, 4=333/0-3-8, 6=657/0-3-8
Max Horiz 1=-123 (LC 14)
Max Uplift 4=-6 (LC 13)
Max Grav 1=248 (LC 24), 4=385 (LC 2), 6=753 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=0/89, 1-3=-108/90, 3-4=-178/52, 4-5=0/19
BOT CHORD 6-7=-52/65, 4-6=0/159
WEBS 1-6=-46/85, 3-6=-558/118

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 14-4-4 to 17-4-4, Interior (1) 17-4-4 to 29-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B1G	Roof Special Girder	1	1	I49386646
					Job Reference (optional)

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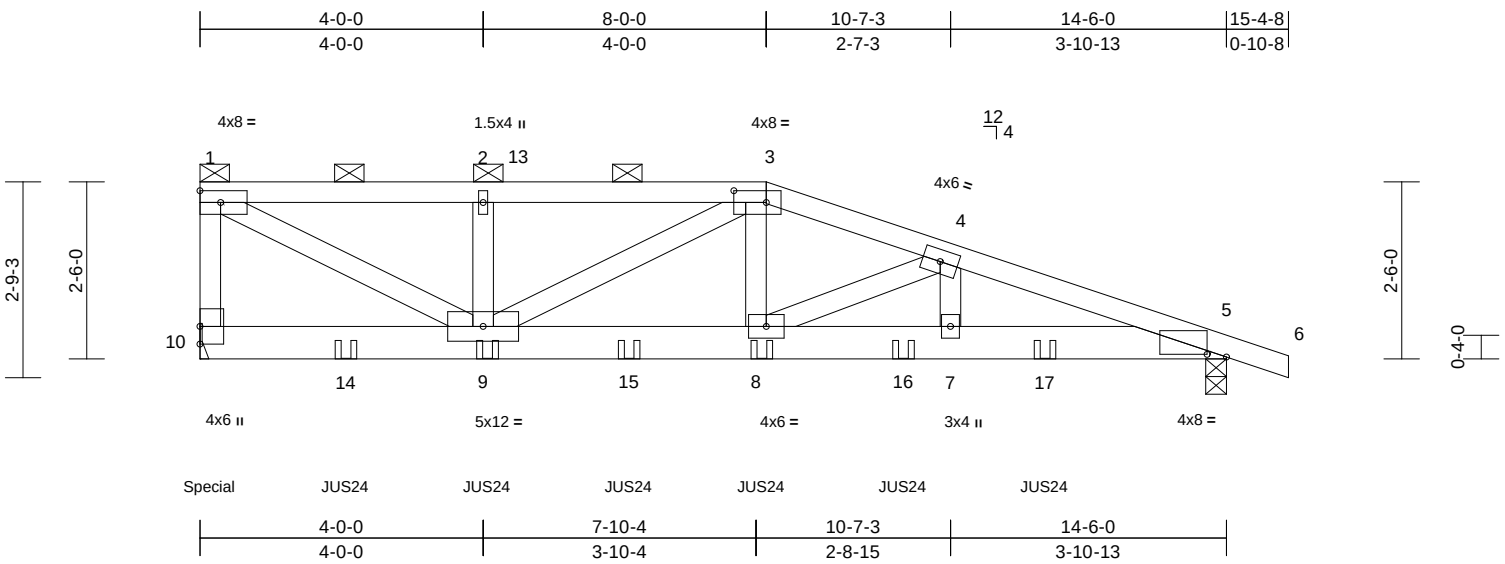

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Plate Offsets (X, Y): [3:0-5-8,0-2-0], [5:0-3-5,0-0-7]

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	0.39	Vert(LL)	-0.09	7-8	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.15	7-8	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	7-8	>999	240		
BCDL	10.0										Weight: 63 lb	FT = 20%

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

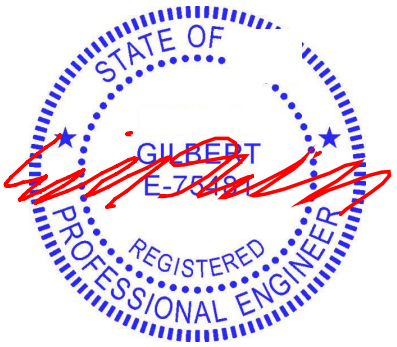
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-11 max.): 1-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=1371/0-3-8, 10=1587/ Mechanical
Max Horiz 10=-57 (LC 8)
Max Grav 5=1511 (LC 32), 10=1738 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-1308/0, 1-2=-2140/0, 2-3=-2140/0, 3-4=-2766/0, 4-5=-3501/0, 5-6=0/30
BOT CHORD 9-10=0/76, 8-9=0/2669, 7-8=0/3301, 5-7=0/3301
WEBS 1-9=0/2377, 2-9=-392/49, 3-9=-678/0, 3-8=0/934, 4-8=-917/0, 4-7=0/403

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 11-11-4 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 273 lb down at 0-1-12 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-59, 3-6=-59, 5-10=-20
Concentrated Loads (lb)
Vert: 10=-257 (F), 9=-246 (F), 8=-246 (F), 14=-246 (F), 15=-246 (F), 16=-237 (F), 17=-303 (F)



December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B2	Roof Special	5	1	I49386647 Job Reference (optional)

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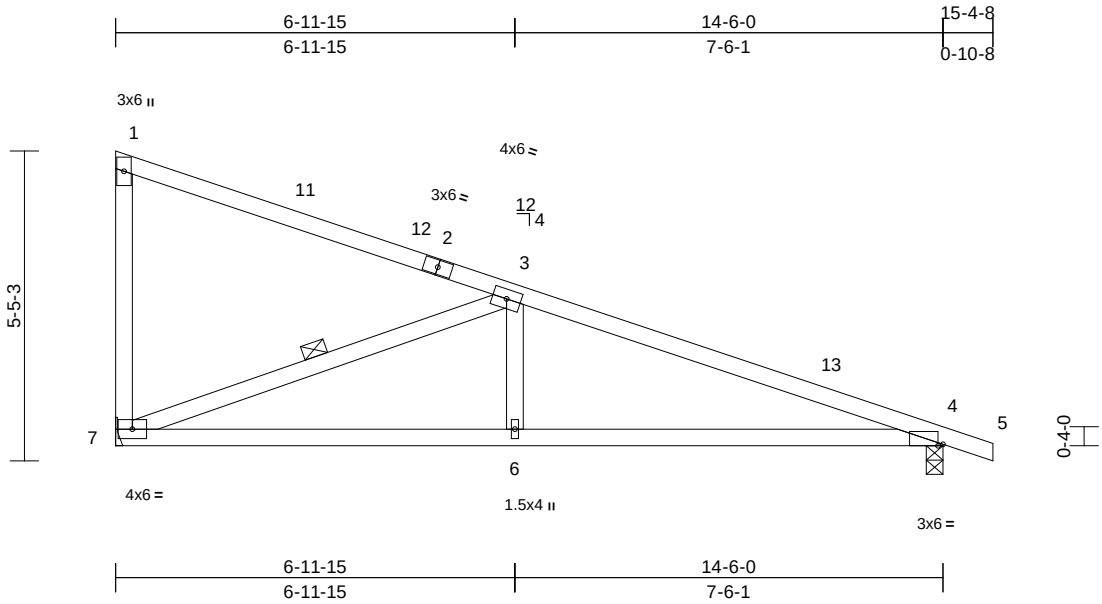

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Plate Offsets (X, Y): [4:0-1-1,Edge]

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	0.52	Vert(LL)	-0.10	6-10	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.20	6-10	>858	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.05	6-10	>999	240		
BCDL	10.0										Weight: 51 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 4=616/0-3-8, 7=562/ Mechanical
Max Horiz 7=-123 (LC 14)
Max Grav 4=709 (LC 2), 7=652 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-223/81, 1-3=-131/58, 3-4=-1209/35, 4-5=0/19
BOT CHORD 6-7=0/1107, 4-6=0/1107
WEBS 3-7=-1156/51, 3-6=0/331

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 15-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B3	Roof Special	1	1	I49386648
					Job Reference (optional)

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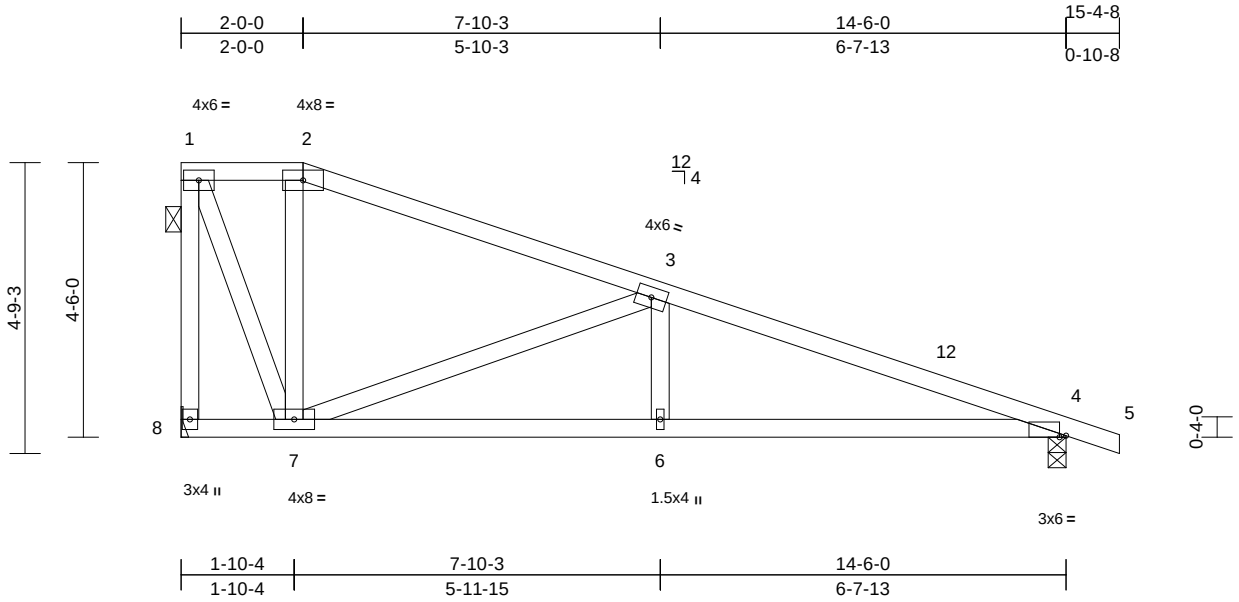

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Plate Offsets (X, Y): [4:0-1-5,Edge]

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	0.50	Vert(LL)	-0.10	6-11	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.17	6-11	>996	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	6-11	>999	240		
BCDL	10.0										Weight: 58 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=616/0-3-8, 8=562/ Mechanical
Max Horiz 8=-108 (LC 14)
Max Grav 4=877 (LC 36), 8=695 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-686/25, 1-2=-290/55, 2-3=-412/47, 3-4=-1571/33, 4-5=0/25
BOT CHORD 7-8=-92/140, 6-7=0/1442, 4-6=0/1442
WEBS 1-7=-22/765, 2-7=-207/81, 3-7=-1224/39, 3-6=0/277

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 2-0-0, Interior (1) 2-0-0 to 15-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B4	Roof Special	1	1	I49386649
					Job Reference (optional)

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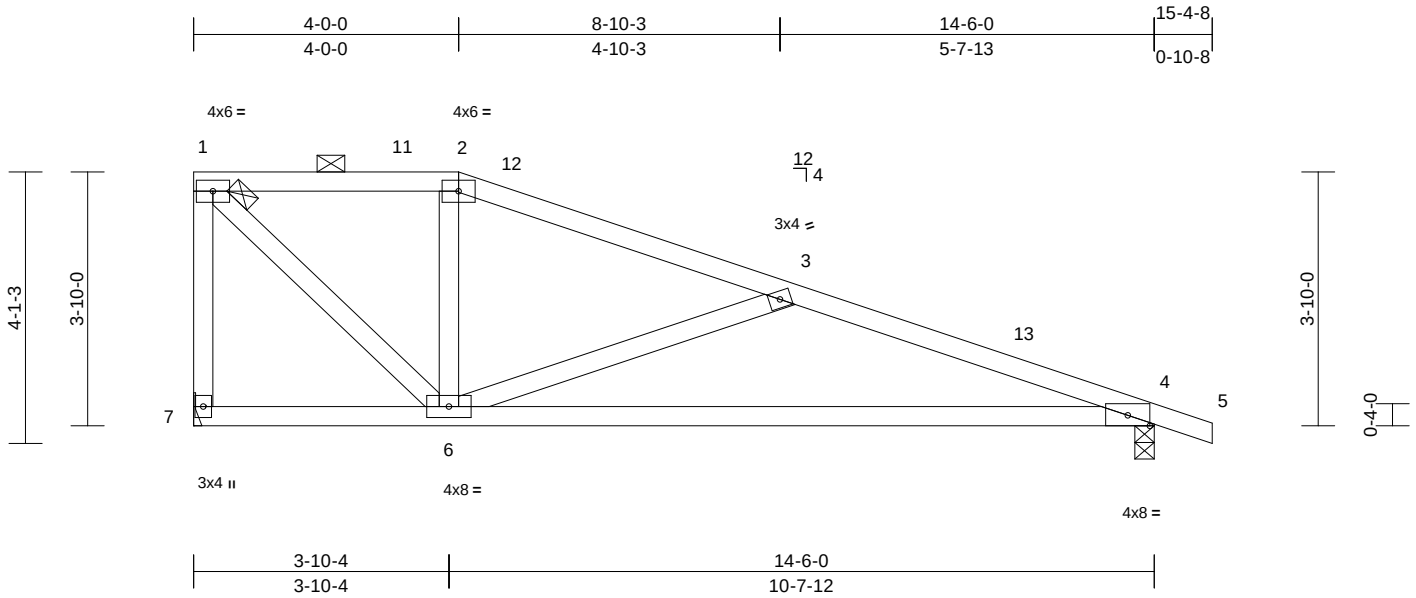

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.22	6-10	>794	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.46	6-10	>374	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	6-10	>999	240		
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 4=616/0-3-8, 7=562/ Mechanical
Max Horiz 7=-91 (LC 14)
Max Grav 4=853 (LC 36), 7=644 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-652/40, 1-2=-589/32, 2-3=-711/24, 3-4=-1538/76, 4-5=0/25
BOT CHORD 6-7=-77/114, 4-6=-11/1436
WEBS 1-6=-6/814, 2-6=-104/86, 3-6=-895/89

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 15-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	B5	Roof Special	1	1	I49386650 Job Reference (optional)

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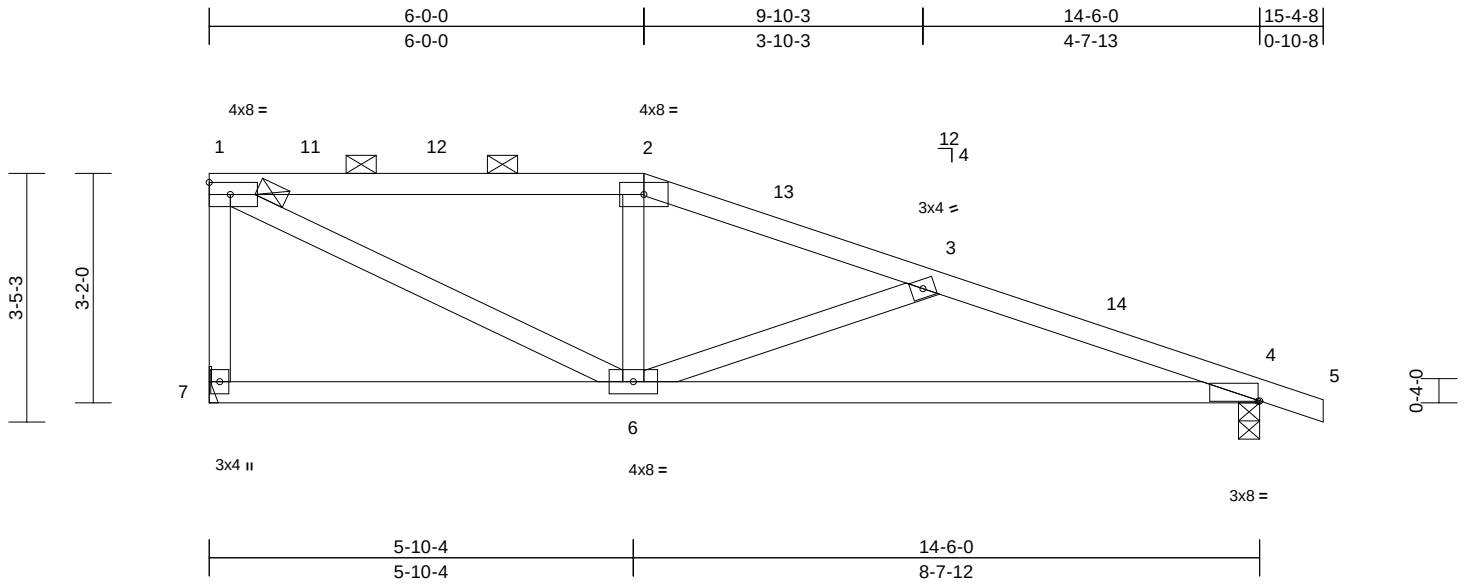

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Plate Offsets (X, Y): [4:0-0-5,0-0-1]

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	0.54	Vert(LL)	-0.09	6-10	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.21	6-10	>834	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	6-10	>999	240		
BCDL	10.0										Weight: 52 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=616/0-3-8, 7=562/ Mechanical
Max Horiz 7=-75 (LC 14)
Max Grav 4=812 (LC 36), 7=649 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-604/66, 1-2=-828/34, 2-3=-923/28, 3-4=-1536/64, 4-5=0/25
BOT CHORD 6-7=-43/90, 4-6=-7/1438
WEBS 1-6=-20/879, 2-6=-106/111, 3-6=-687/65

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 15-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C1	Roof Special	3	1	I49386651 Job Reference (optional)

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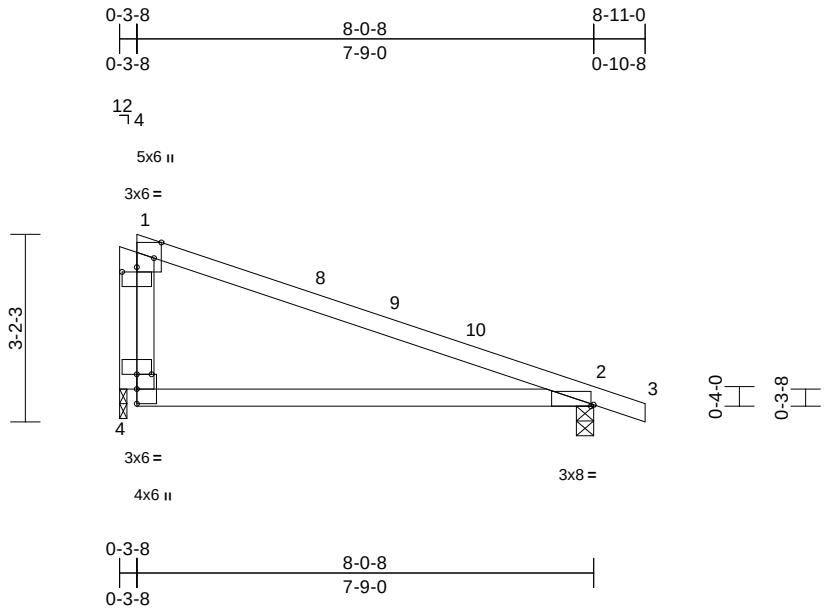

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Plate Offsets (X, Y): [1:0-3-3,Edge], [1:0-3-0,0-0-15], [2:0-0-9,Edge], [4:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.12	4-7	>773	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	4-7	>371	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.06	4-7	>999	240		
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=358/0-3-8, 4=301/0-1-8
Max Horiz 4=-67 (LC 14)
Max Uplift 2=-3 (LC 13)
Max Grav 2=413 (LC 2), 4=345 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-223/105, 1-2=-205/33, 2-3=0/19
BOT CHORD 2-4=0/180

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 8-0-8 to 12-3-7, Interior (1) 12-3-7 to 16-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C1E	Roof Special Supported Gable	1	1	I49386652 Job Reference (optional)

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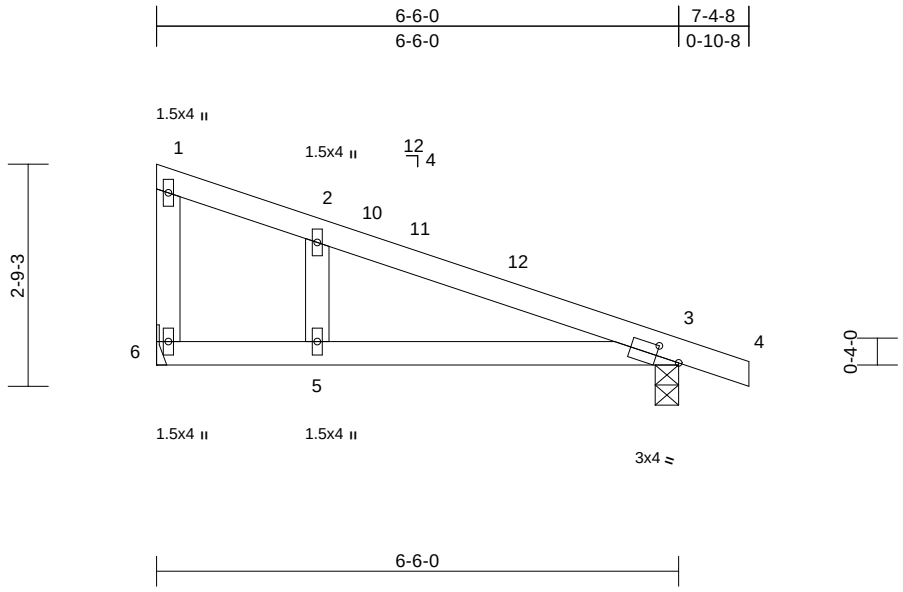

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Plate Offsets (X, Y): [3:0-3-9,0-1-8]

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	0.38	Vert(LL)	-0.11	5-9	>707	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.20	5-9	>384	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.09	5-9	>827	240		
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS (lb/size) 3=304/0-3-8, 6=246/ Mechanical
Max Horiz 6=-57 (LC 14)
Max Uplift 3=-6 (LC 13)
Max Grav 3=351 (LC 2), 6=282 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-149/91, 1-2=-55/60, 2-3=-151/57, 3-4=0/19
BOT CHORD 5-6=-67/146, 3-5=-67/146
WEBS 2-5=-83/105

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) 6-4-4 to 9-4-4, Exterior (2) 9-4-4 to 13-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C1G	Half Hip Girder	1	1	I49386653 Job Reference (optional)

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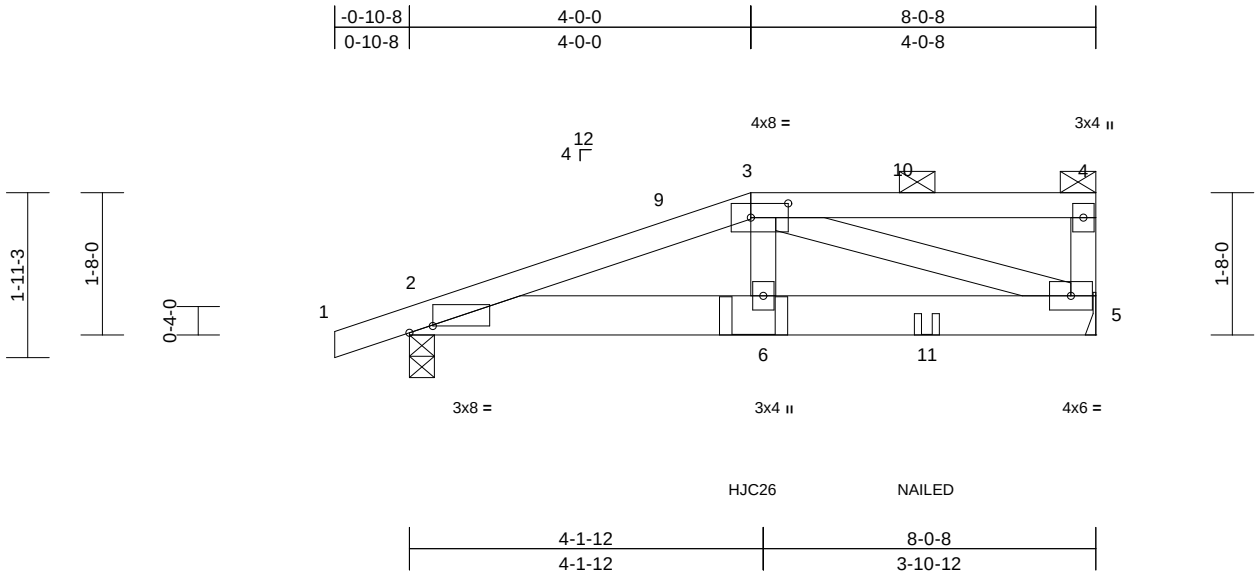

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Plate Offsets (X, Y): [2:0-3-5,0-0-15], [3:0-5-4,0-2-0]

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	0.28	Vert(LL)	-0.02	6	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	6	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.00	6-8	>999	240		
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 3-4:2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=554/0-3-8, 5=565/ Mechanical
Max Horiz 2=36 (LC 9)
Max Grav 2=659 (LC 32), 5=638 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-1199/0, 3-4=-112/1, 4-5=-188/16
BOT CHORD 2-6=0/1117, 5-6=0/1173
WEBS 3-6=0/501, 3-5=-1129/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-59, 3-4=-59, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-320 (F), 11=-131 (F)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C2	Half Hip	1	1	I49386654 Job Reference (optional)

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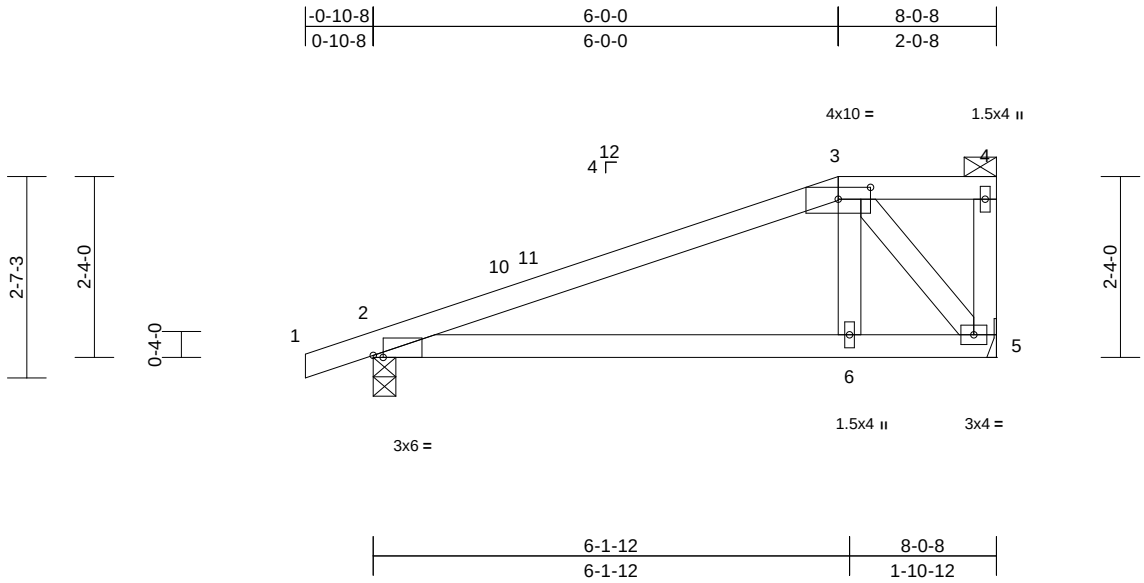

Scale = 1:29.7

Plate Offsets (X, Y): [2:0-1-9,Edge], [3:0-5-0,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.07	6-9	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.11	6-9	>846	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	6-9	>999	240		
BCDL	10.0										Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=364/0-3-8, 5=307/ Mechanical
Max Horiz 2=54 (LC 15)
Max Uplift 2=-4 (LC 12)
Max Grav 2=512 (LC 36), 5=352 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-468/42, 3-4=-23/31, 4-5=-60/46
BOT CHORD 2-6=-98/392, 5-6=-95/408
WEBS 3-6=0/249, 3-5=-616/113

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-0-0, Exterior (2) 6-0-0 to 7-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
11) 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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C2G	Roof Special Girder	1	1	I49386655 Job Reference (optional)

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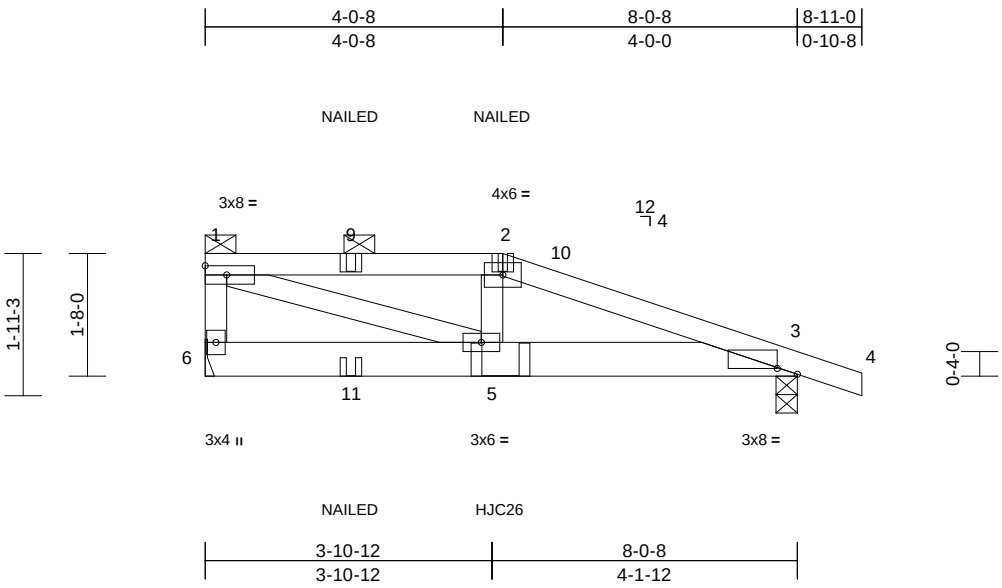

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Plate Offsets (X, Y): [3:0-3-5,0-0-15]

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	0.35	Vert(LL)	-0.02	5-8	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	5-8	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	5-8	>999	240		
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 2-4:2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF 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 (5-6-3 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=515/0-3-8, 6=495/ Mechanical
Max Horiz 6=-36 (LC 8)
Max Grav 3=627 (LC 32), 6=551 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-468/0, 1-2=-968/0, 2-3=-1038/0, 3-4=0/30
BOT CHORD 5-6=0/99, 3-5=0/966
WEBS 1-5=0/926, 2-5=0/100

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 4-0-2 from the left end to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-59, 2-4=-59, 3-6=-20
Concentrated Loads (lb)
Vert: 2=-43 (F), 5=-222 (F), 9=-43 (F), 11=-32 (F)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C3	Roof Special	1	1	I49386656 Job Reference (optional)

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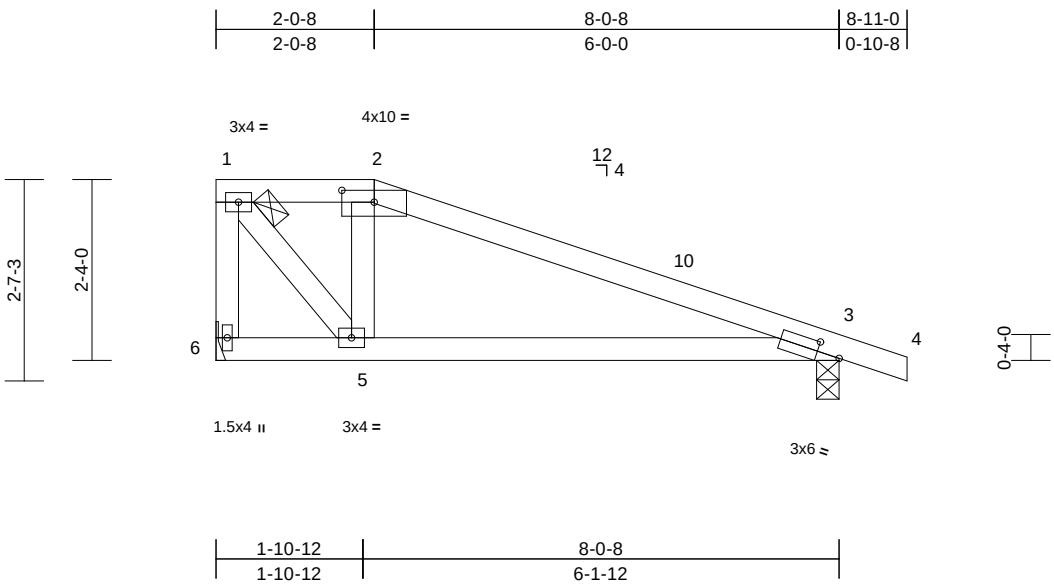

Scale = 1:29.7

Plate Offsets (X, Y): [2:0-5-0,0-1-13], [3:0-3-9,0-1-8]

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	0.41	Vert(LL)	-0.07	5-9	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.11	5-9	>846	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.02	5-9	>999	240		
BCDL	10.0										Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF 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.): 1-2.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 3=364/0-3-8, 6=307/ Mechanical
Max Horiz 6=-54 (LC 14)
Max Uplift 3=-4 (LC 13)
Max Grav 3=512 (LC 36), 6=352 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-407/42, 1-2=-376/39, 2-3=-468/32, 3-4=0/25
BOT CHORD 5-6=-59/74, 3-5=0/392
WEBS 1-5=-31/595, 2-5=-231/74

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 2-0-8, Interior (1) 2-0-8 to 8-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
10) 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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C3G	Roof Special Girder	2	1	I49386657 Job Reference (optional)

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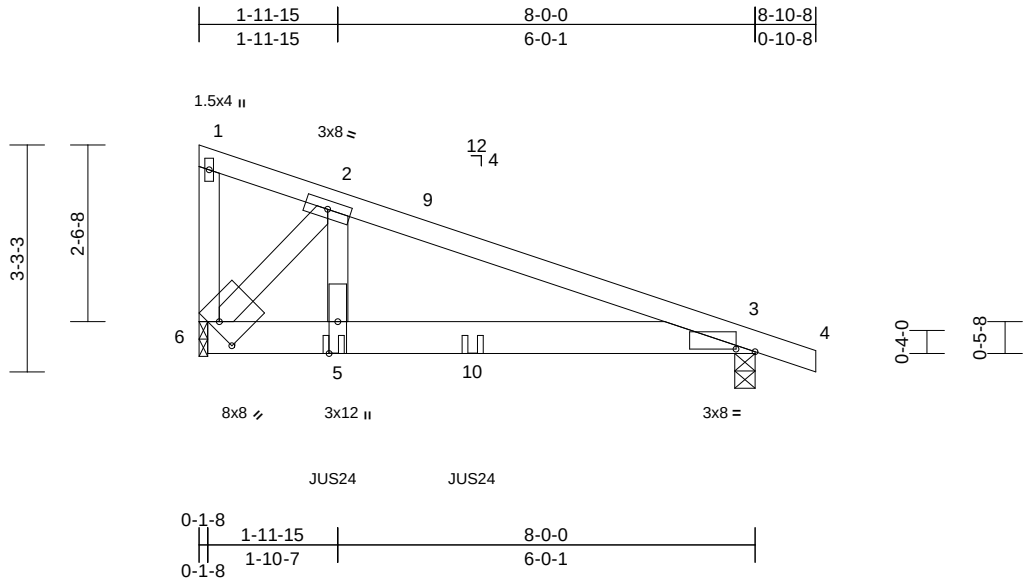

Scale = 1:33.2

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

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	0.28	Vert(LL)	-0.05	5-8	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.10	5-8	>948	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	5-8	>999	240		
BCDL	10.0										Weight: 32 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 3=700/0-3-8, 6=806/0-1-8
Max Horiz 6=-68 (LC 8)
Max Grav 3=764 (LC 2), 6=864 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=0/18, 1-2=-52/15, 2-3=-1129/0, 3-4=0/23
BOT CHORD 5-6=0/1042, 3-5=0/1042
WEBS 2-6=-1521/0, 2-5=0/1104

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
9) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-7-12 from the left end to 11-7-12 to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-59, 3-6=-20
Concentrated Loads (lb)
Vert: 5=-316 (B), 10=-525 (B)

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C4	Roof Special	18	1	I49386658
					Job Reference (optional)

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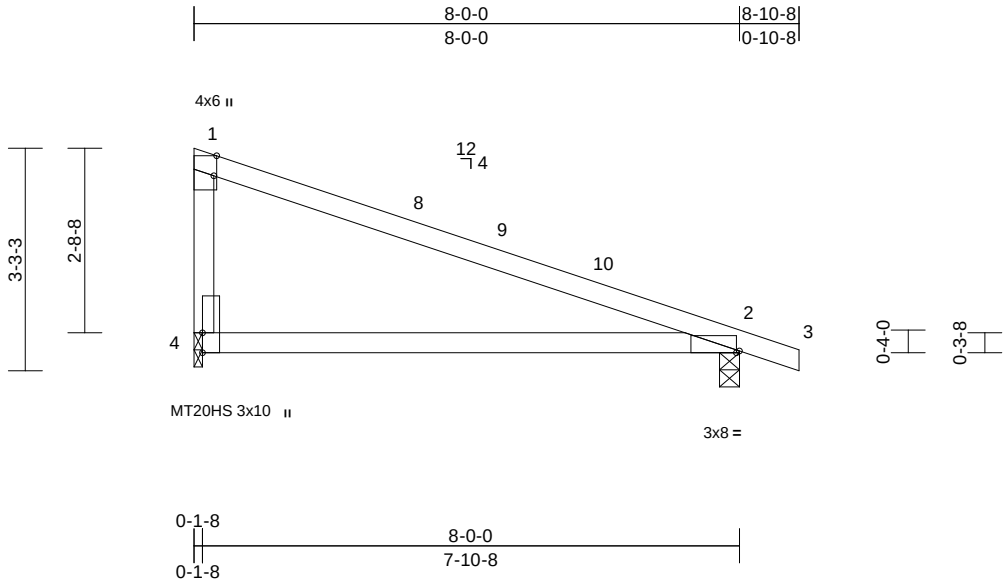

Scale = 1:33.8

Plate Offsets (X, Y): [1:0-3-8,Edge], [2:0-0-9,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	0.60	Vert(LL)	-0.14	4-7	>686	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.29	4-7	>328	240	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	4-7	>999	240		
BCDL	10.0										Weight: 22 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=362/0-3-8, 4=305/0-1-8
Max Horiz 4=-69 (LC 14)
Max Uplift 2=-3 (LC 13)
Max Grav 2=418 (LC 2), 4=350 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-227/105, 1-2=-188/33, 2-3=0/19
BOT CHORD 2-4=0/181

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 7-10-4 to 12-1-3, Interior (1) 12-1-3 to 16-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
10) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C5	Roof Special	4	1	I49386659
					Job Reference (optional)

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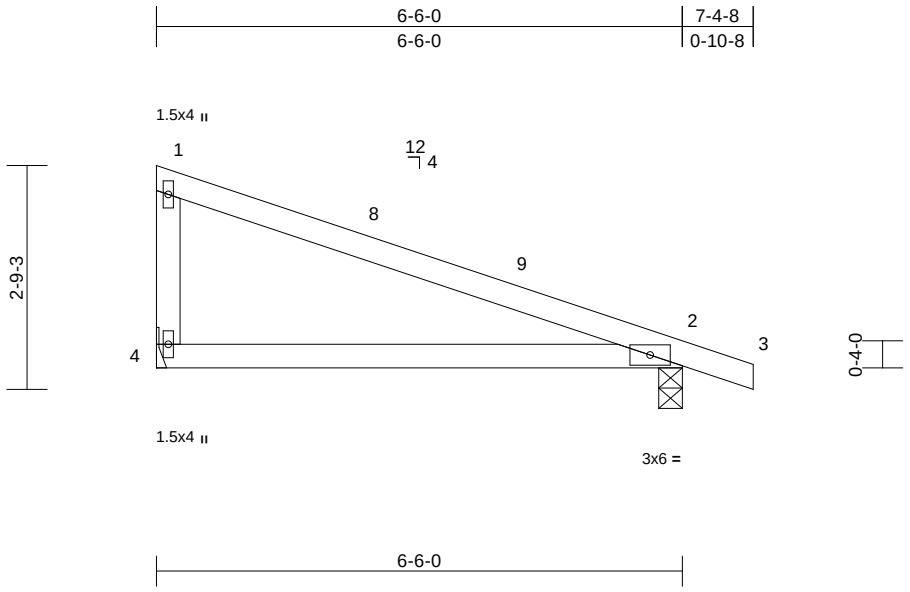

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.09	4-7	>880	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.18	4-7	>433	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.05	4-7	>999	240		
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=304/0-3-8, 4=246/ Mechanical
Max Horiz 4=-57 (LC 14)
Max Uplift 2=-6 (LC 13)
Max Grav 2=351 (LC 2), 4=282 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-192/93, 1-2=-140/55, 2-3=0/19
BOT CHORD 2-4=-60/129

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 6-4-4 to 10-7-3, Interior (1) 10-7-3 to 13-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C6	Roof Special	1	1	I49386660 Job Reference (optional)

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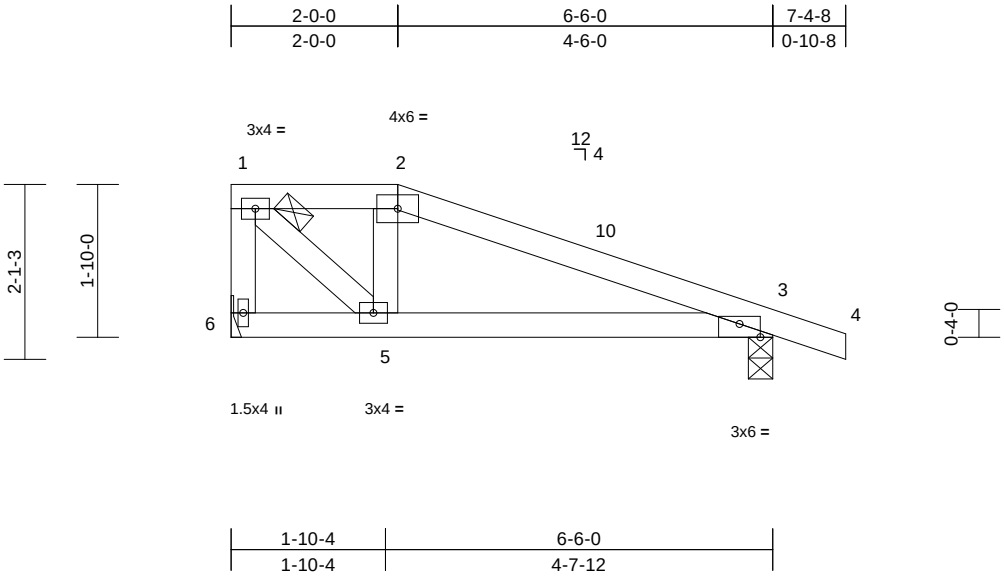

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Plate Offsets (X, Y): [3:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.03	5-9	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.04	5-9	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	5-9	>999	240		
BCDL	10.0										Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF 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.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=304/0-3-8, 6=246/ Mechanical
Max Horiz 6=-41 (LC 14)
Max Uplift 3=-7 (LC 13)
Max Grav 3=424 (LC 36), 6=282 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-304/50, 1-2=-283/31, 2-3=-353/25, 3-4=0/25
BOT CHORD 5-6=-44/60, 3-5=0/292
WEBS 1-5=-29/381, 2-5=-101/53

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 2-0-0, Interior (1) 2-0-0 to 7-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
10) 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

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	C7	Roof Special	1	1	I49386661
					Job Reference (optional)

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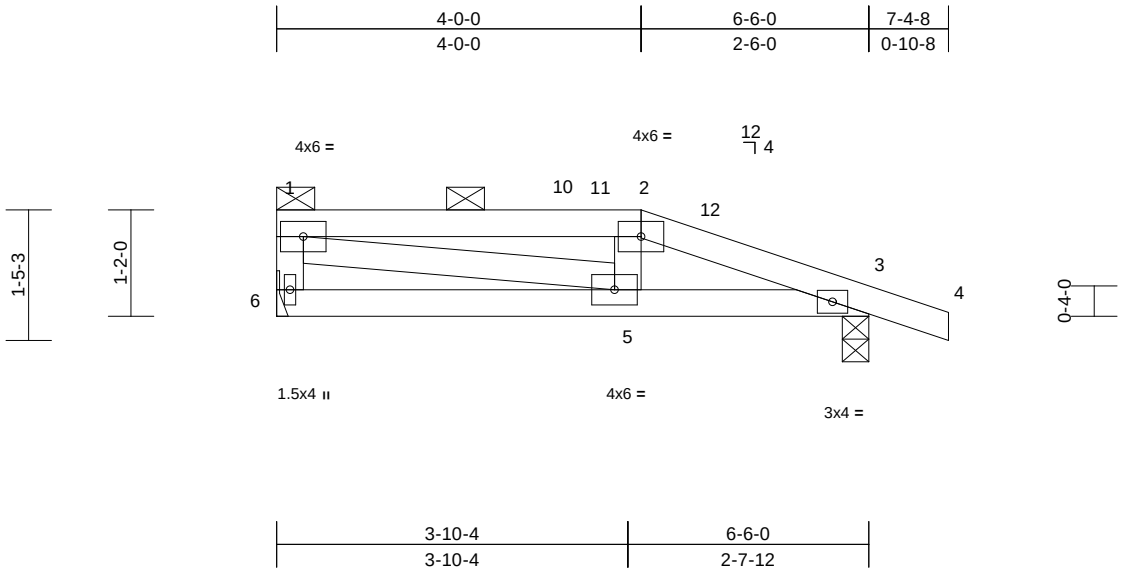

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-6	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.00	5	>999	240		
BCDL	10.0										Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

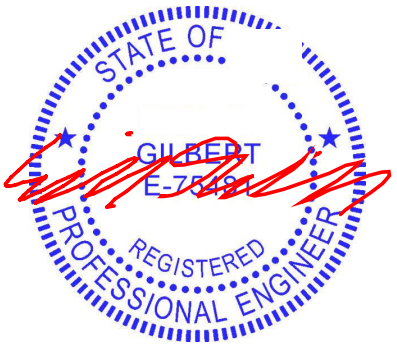
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=304/0-3-8, 6=246/ Mechanical
Max Horiz 6=-25 (LC 14)
Max Uplift 3=-8 (LC 13)
Max Grav 3=370 (LC 36), 6=323 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-287/72, 1-2=-474/29, 2-3=-521/35, 3-4=0/25
BOT CHORD 5-6=-26/36, 3-5=-10/480
WEBS 1-5=-39/487, 2-5=-46/62

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 7-4-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
10) 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



December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	D1	Roof Special	2	1	I49386662
					Job Reference (optional)

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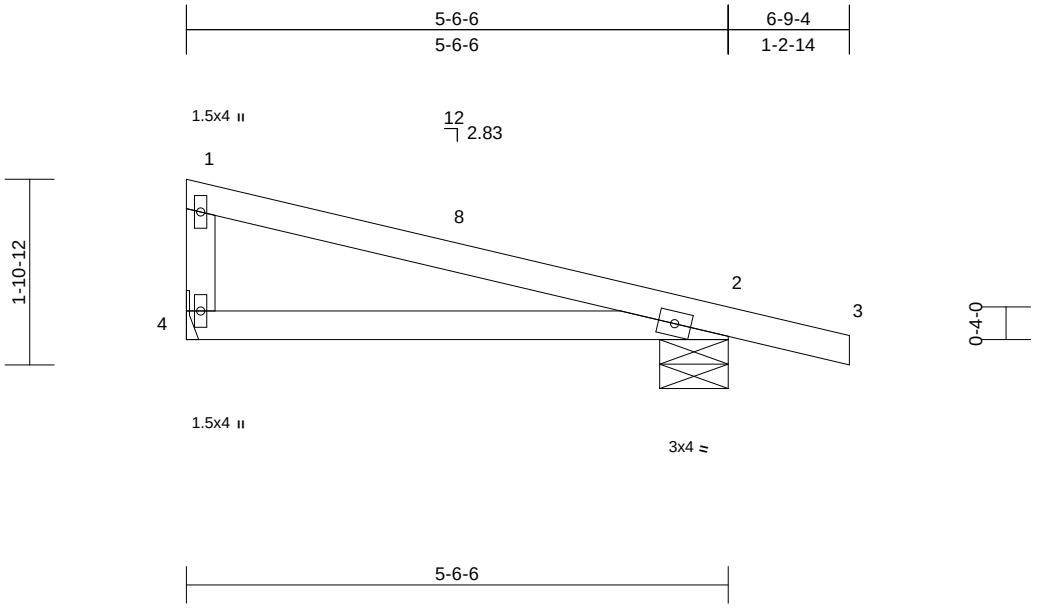

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.04	4-7	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.09	4-7	>750	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.03	4-7	>999	240		
BCDL	10.0										Weight: 16 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=292/0-8-6, 4=203/ Mechanical
Max Horiz 4=-34 (LC 14)
Max Uplift 2=-17 (LC 13)
Max Grav 2=339 (LC 2), 4=232 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-157/71, 1-2=-134/33, 2-3=0/20
BOT CHORD 2-4=-39/118

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	E1	Roof Special	2	1	I49386663 Job Reference (optional)

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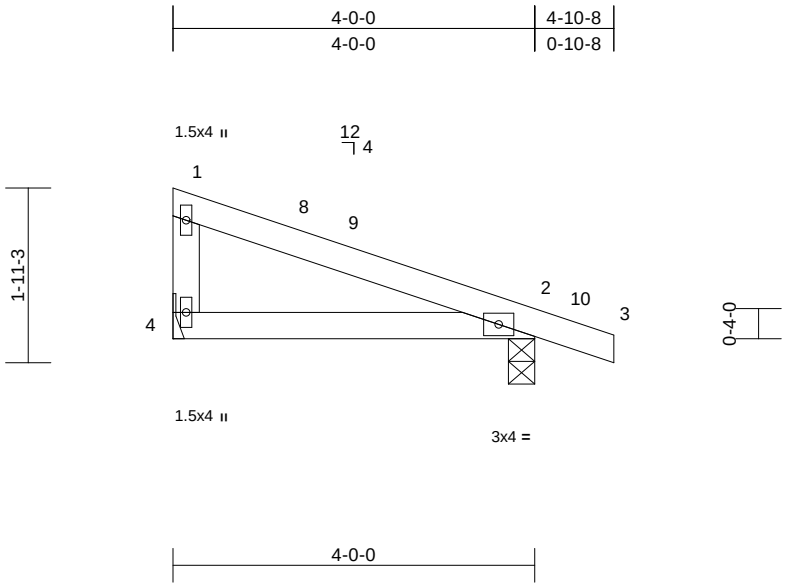

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	4-7	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-7	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	4-7	>999	240		
BCDL	10.0										Weight: 12 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=208/0-3-8, 4=145/ Mechanical
Max Horiz 4=-36 (LC 14)
Max Uplift 2=-11 (LC 13)
Max Grav 2=242 (LC 2), 4=166 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-112/59, 1-2=-75/34, 2-3=0/19
BOT CHORD 2-4=-39/80

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 3-10-4 to 8-1-3, Interior (1) 8-1-3 to 8-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	EJ1	Jack-Open	2	1	I49386664 Job Reference (optional)

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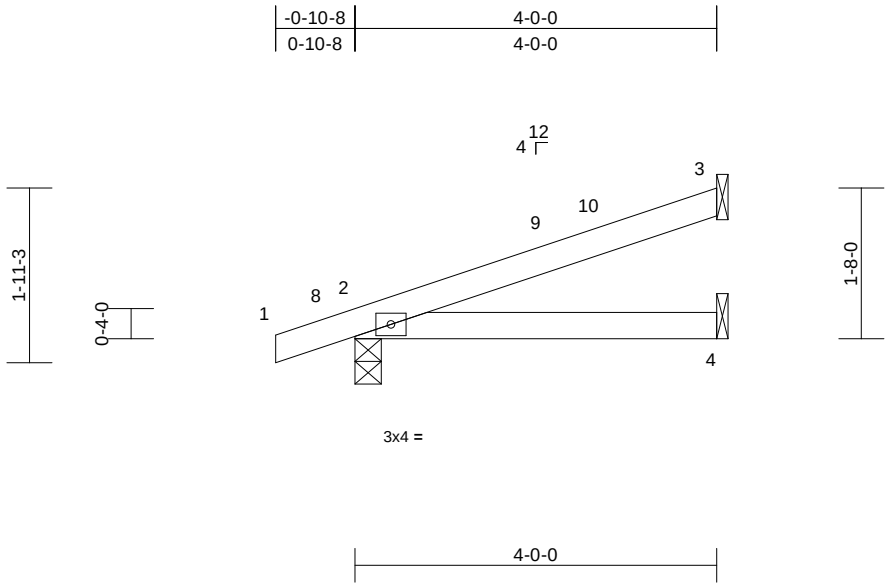

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-7	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.03	4-7	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP		Wind(LL)	0.01	4-7	>999	240		
BCDL	10.0										Weight: 11 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

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

REACTIONS (lb/size) 2=211/0-3-8, 3=97/ Mechanical, 4=52/ Mechanical
Max Horiz 2=37 (LC 12)
Max Uplift 2=-8 (LC 12), 3=-13 (LC 16)
Max Grav 2=245 (LC 2), 3=114 (LC 2), 4=71 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-77/29
BOT CHORD 2-4=-30/62

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 3.
9) One RT7 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
10) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	M1	Monopitch	10	1	I49386665 Job Reference (optional)

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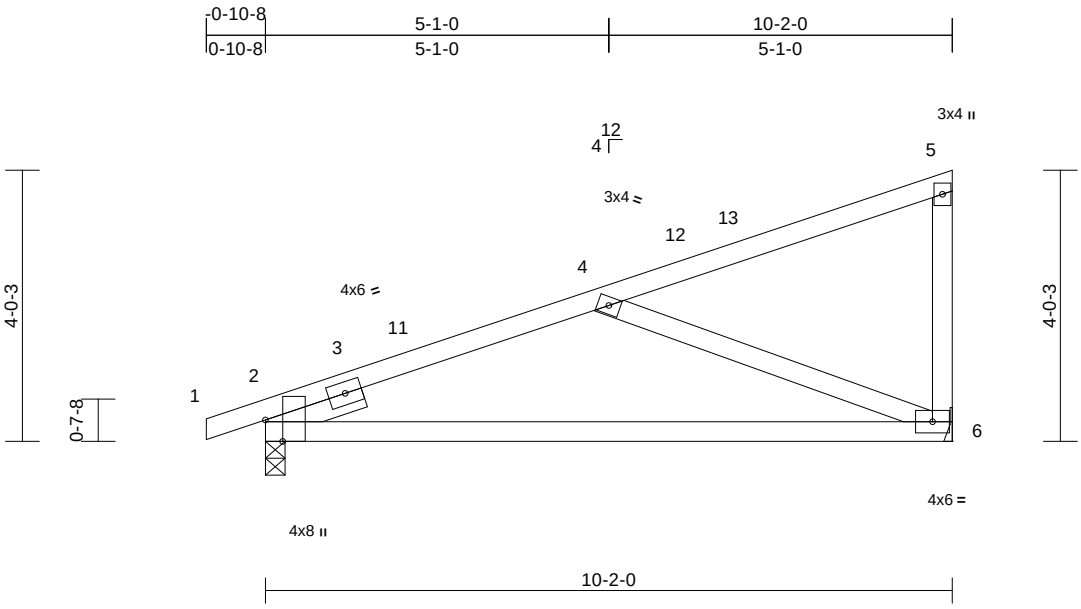

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Plate Offsets (X, Y): [2:0-3-13,Edge]

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	0.38	Vert(LL)	-0.20	6-9	>613	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.39	6-9	>305	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	6-9	>999	240		
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -- 1-6-0

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) 2=447/0-3-8, 6=391/ Mechanical
Max Horiz 2=92 (LC 15)
Max Grav 2=515 (LC 2), 6=448 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/19, 2-4=-976/79, 4-5=-115/36, 5-6=-154/84
BOT CHORD	2-6=-211/616
WEBS	4-6=-623/109

NOTES

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	M2	Monopitch	7	1	I49386666 Job Reference (optional)

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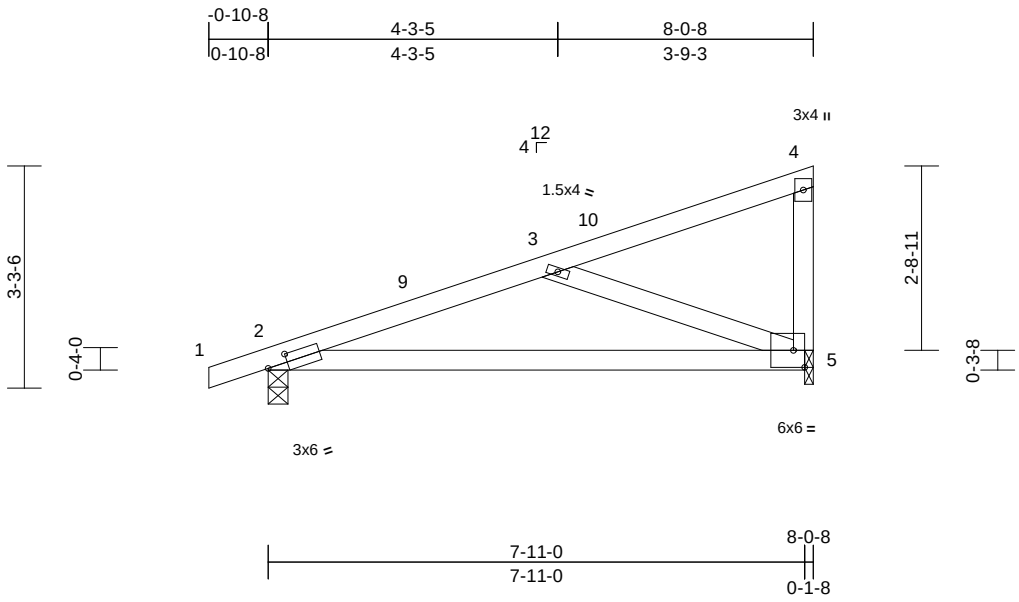

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Plate Offsets (X, Y): [2:0-3-9,0-1-8]

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	0.29	Vert(LL)	-0.08	5-8	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.16	5-8	>578	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.01	5-8	>999	240		
BCDL	10.0										Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=364/0-3-8, 5=307/0-1-8
Max Horiz 2=69 (LC 15)
Max Uplift 2=-3 (LC 12)
Max Grav 2=420 (LC 2), 5=352 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-562/70, 3-4=-91/26, 4-5=-104/71
BOT CHORD 2-5=-121/527
WEBS 3-5=-529/106

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
9) One RT4 USP 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.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	MGE1	Monopitch Supported Gable	1	1	I49386667 Job Reference (optional)

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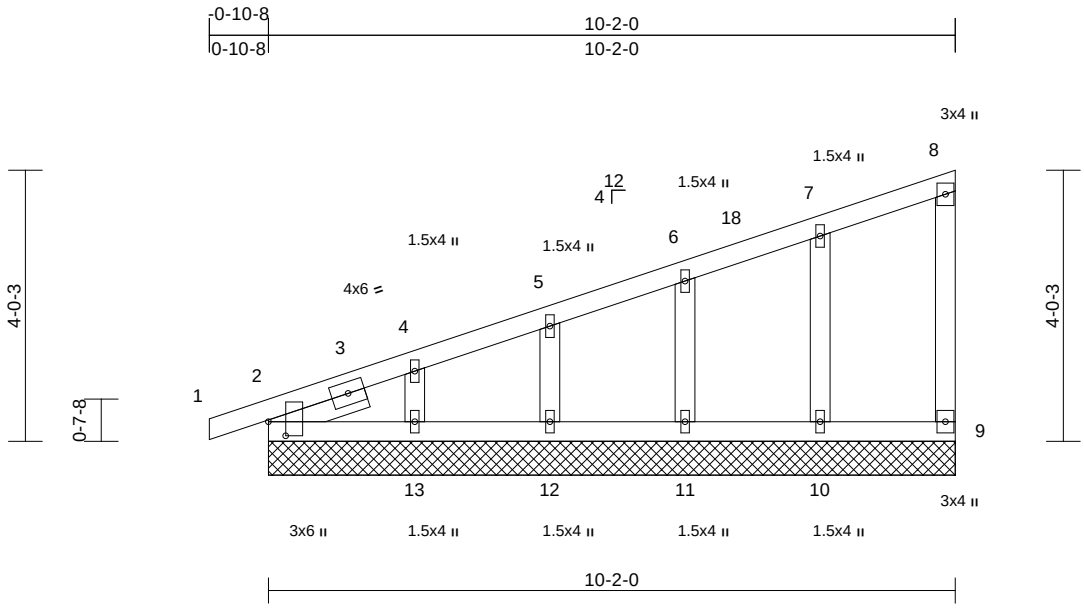

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Plate Offsets (X, Y): [2:0-2-8,0-3-1]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 39 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -- 1-6-0

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) 2=133/10-2-0, 9=60/10-2-0, 10=164/10-2-0, 11=157/10-2-0, 12=154/10-2-0, 13=170/10-2-0, 14=133/10-2-0
Max Horiz 2=92 (LC 15), 14=92 (LC 15)
Max Uplift 9=-1 (LC 13), 13=-8 (LC 16)
Max Grav 2=156 (LC 2), 9=72 (LC 23), 10=200 (LC 23), 11=180 (LC 2), 12=177 (LC 2), 13=194 (LC 2), 14=156 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/19, 2-4=-182/102, 4-5=-151/86, 5-6=-125/77, 6-7=-96/68, 7-8=-52/54, 8-9=-57/46
BOT CHORD	2-13=-47/61, 12-13=-47/61, 11-12=-47/61, 10-11=-47/61, 9-10=-47/61
WEBS	7-10=-159/118, 6-11=-139/67, 5-12=-140/58, 4-13=-143/90

NOTES

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-10-8 to 2-2-0, Exterior (2) 2-2-0 to 10-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 13. This connection is for uplift only and does not consider lateral forces.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 14.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	PB1	Piggyback	1	1	I49386668 Job Reference (optional)

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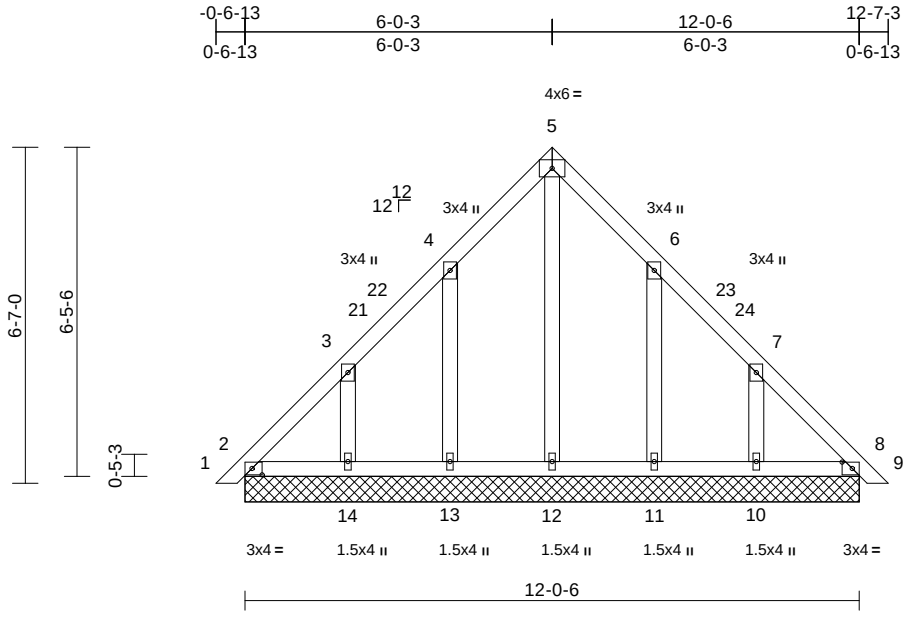

Scale = 1:45.1

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

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 55 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

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) 2=110/12-0-6, 8=110/12-0-6, 10=173/12-0-6, 11=158/12-0-6, 12=105/12-0-6, 13=158/12-0-6, 14=173/12-0-6, 15=110/12-0-6, 18=110/12-0-6
Max Horiz 2=-99 (LC 12), 15=-99 (LC 12)
Max Uplift 2=-10 (LC 10), 10=-45 (LC 15), 11=-35 (LC 15), 13=-35 (LC 14), 14=-46 (LC 14), 15=-10 (LC 10)
Max Grav 2=137 (LC 27), 8=128 (LC 2), 10=205 (LC 27), 11=185 (LC 27), 12=126 (LC 29), 13=186 (LC 26), 14=205 (LC 26), 15=137 (LC 27), 18=128 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-99/76, 3-4=-105/48, 4-5=-105/91, 5-6=-105/93, 6-7=-88/26, 7-8=-88/72, 8-9=0/18
BOT CHORD 2-14=-68/96, 13-14=-68/96, 12-13=-68/96, 11-12=-68/96, 10-11=-68/96, 8-10=-68/96
WEBS 5-12=-85/42, 4-13=-151/96, 3-14=-147/94, 6-11=-150/96, 7-10=-147/94

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-2-8 to 3-2-8, Interior (1) 3-2-8 to 6-7-0, Exterior (2) 6-7-0 to 9-7-0, Interior (1) 9-7-0 to 12-11-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	PB2	Piggyback	1	**2**	I49386669 Job Reference (optional)

Builders FirstSource ( ), , OH - ,

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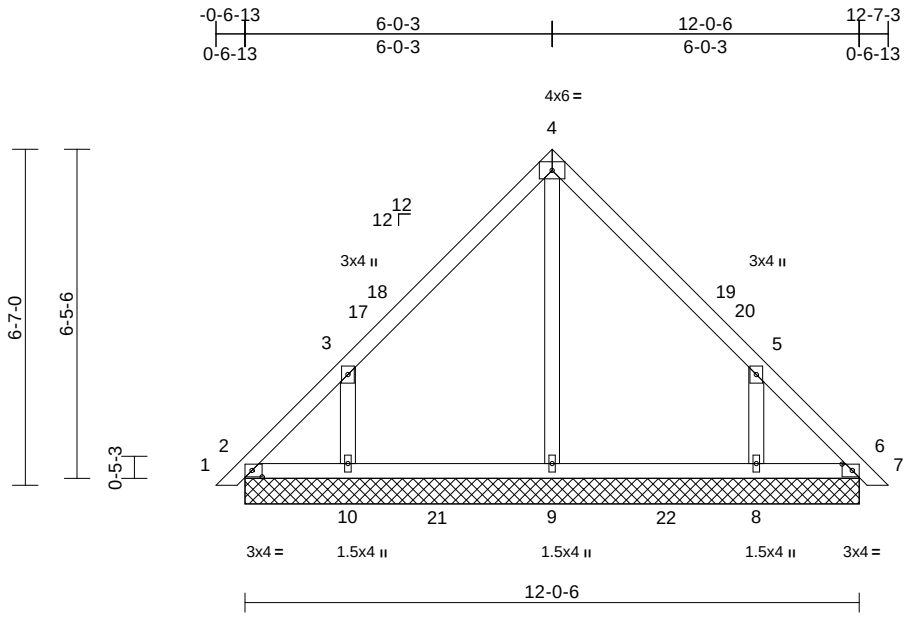

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Plate Offsets (X, Y): [2:0-2-6,0-1-8], [6:0-2-6,0-1-8]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 92 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

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) 2=100/12-0-6, 6=100/12-0-6, 8=281/12-0-6, 9=225/12-0-6, 10=281/12-0-6, 11=100/12-0-6, 14=100/12-0-6
Max Horiz 2=-99 (LC 12), 11=-99 (LC 12)
Max Uplift 2=-22 (LC 10), 6=-6 (LC 11), 8=-77 (LC 15), 10=-77 (LC 14), 11=-22 (LC 10), 14=-6 (LC 11)
Max Grav 2=127 (LC 27), 6=117 (LC 2), 8=353 (LC 27), 9=345 (LC 26), 10=354 (LC 26), 11=127 (LC 27), 14=117 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-108/84, 3-4=-174/86, 4-5=-174/88, 5-6=-91/69, 6-7=0/18
BOT CHORD 2-10=-46/82, 9-10=-46/82, 8-9=-46/82, 6-8=-46/82
WEBS 4-9=-167/0, 3-10=-274/164, 5-8=-274/164

NOTES
1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-2-8 to 3-2-8, Interior (1) 3-2-8 to 6-7-0, Exterior (2) 6-7-0 to 9-7-0, Interior (1) 9-7-0 to 12-11-8 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) 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.
6) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	PB3	Piggyback	9	1	I49386670 Job Reference (optional)

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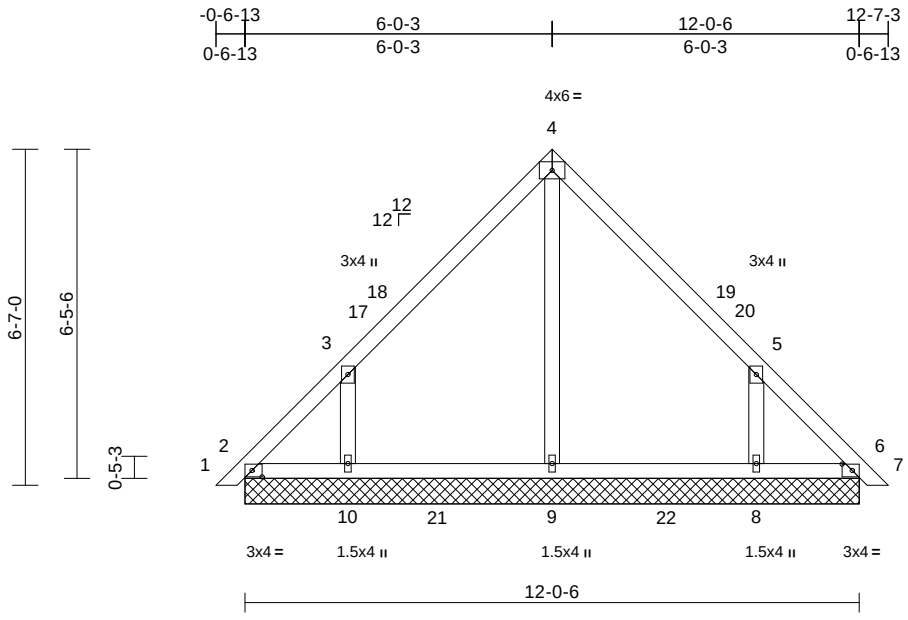

Scale = 1:45.1

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

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 46 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

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) 2=100/12-0-6, 6=100/12-0-6, 8=281/12-0-6, 9=225/12-0-6, 10=281/12-0-6, 11=100/12-0-6, 14=100/12-0-6
Max Horiz 2=-99 (LC 12), 11=-99 (LC 12)
Max Uplift 2=-22 (LC 10), 6=-6 (LC 11), 8=-77 (LC 15), 10=-77 (LC 14), 11=-22 (LC 10), 14=-6 (LC 11)
Max Grav 2=128 (LC 27), 6=118 (LC 2), 8=353 (LC 27), 9=344 (LC 26), 10=354 (LC 26), 11=128 (LC 27), 14=118 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-109/84, 3-4=-174/86, 4-5=-174/88, 5-6=-91/69, 6-7=0/18
BOT CHORD 2-10=-46/82, 9-10=-46/82, 8-9=-46/82, 6-8=-46/82
WEBS 4-9=-166/0, 3-10=-274/164, 5-8=-274/164

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-2-8 to 3-2-8, Interior (1) 3-2-8 to 6-7-0, Exterior (2) 6-7-0 to 9-7-0, Interior (1) 9-7-0 to 12-11-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	PB4	Piggyback	2	4	I49386671 Job Reference (optional)

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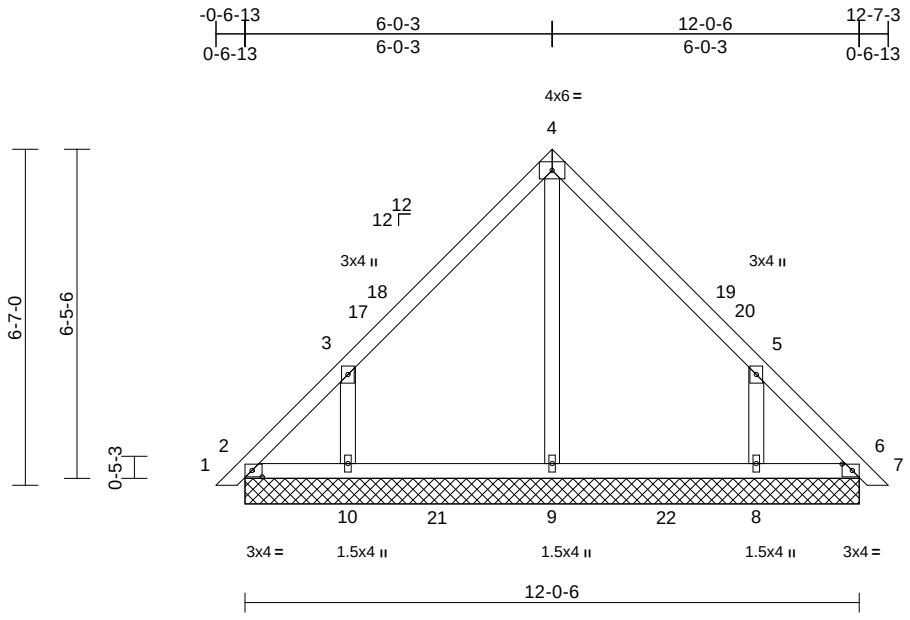

Scale = 1:45.1

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

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 183 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

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) 2=99/12-0-6, 6=99/12-0-6, 8=281/12-0-6, 9=227/12-0-6, 10=281/12-0-6, 11=99/12-0-6, 14=99/12-0-6
Max Horiz 2=-99 (LC 12), 11=-99 (LC 12)
Max Uplift 2=-22 (LC 10), 6=-6 (LC 11), 8=-77 (LC 15), 10=-77 (LC 14), 11=-22 (LC 10), 14=-6 (LC 11)
Max Grav 2=127 (LC 27), 6=117 (LC 2), 8=353 (LC 27), 9=346 (LC 26), 10=354 (LC 26), 11=127 (LC 27), 14=117 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-107/84, 3-4=-173/87, 4-5=-173/89, 5-6=-96/69, 6-7=0/18
BOT CHORD 2-10=-45/81, 9-10=-45/81, 8-9=-45/81, 6-8=-45/81
WEBS 4-9=-168/0, 3-10=-273/164, 5-8=-273/164

NOTES
1) 4-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-2-8 to 3-2-8, Interior (1) 3-2-8 to 6-7-0, Exterior (2) 6-7-0 to 9-7-0, Interior (1) 9-7-0 to 12-11-8 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) 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.
6) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	PB5	Piggyback	1	1	I49386672 Job Reference (optional)

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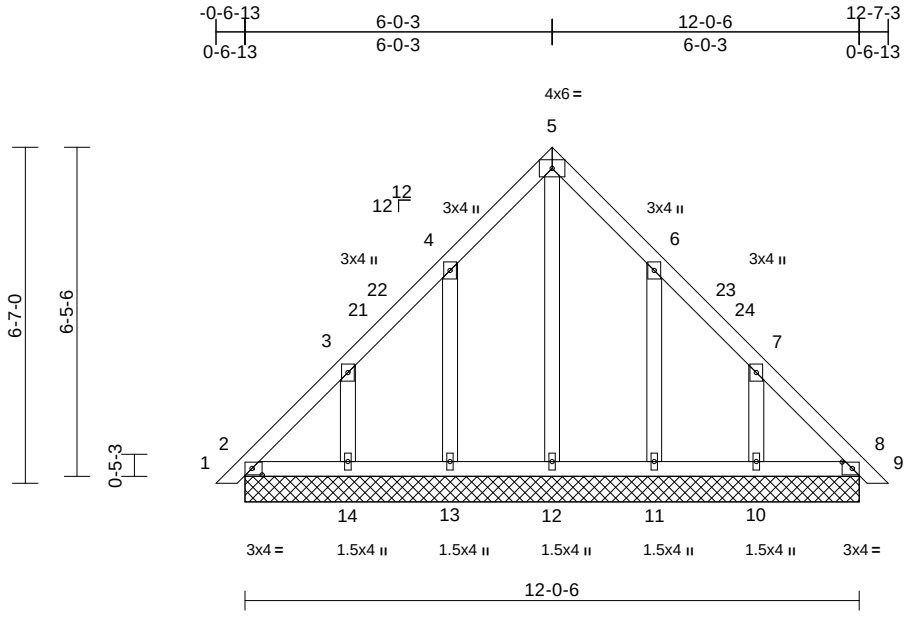

Scale = 1:45.1

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

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 55 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

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) 2=110/12-0-6, 8=110/12-0-6, 10=173/12-0-6, 11=158/12-0-6, 12=105/12-0-6, 13=158/12-0-6, 14=173/12-0-6, 15=110/12-0-6, 18=110/12-0-6
Max Horiz 2=-99 (LC 12), 15=-99 (LC 12)
Max Uplift 2=-10 (LC 10), 10=-45 (LC 15), 11=-35 (LC 15), 13=-35 (LC 14), 14=-46 (LC 14), 15=-10 (LC 10)
Max Grav 2=137 (LC 27), 8=128 (LC 2), 10=205 (LC 27), 11=185 (LC 27), 12=126 (LC 29), 13=186 (LC 26), 14=205 (LC 26), 15=137 (LC 27), 18=128 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-99/76, 3-4=-105/48, 4-5=-105/91, 5-6=-105/93, 6-7=-88/26, 7-8=-88/72, 8-9=0/18
BOT CHORD 2-14=-68/96, 13-14=-68/96, 12-13=-68/96, 11-12=-68/96, 10-11=-68/96, 8-10=-68/96
WEBS 5-12=-85/42, 4-13=-151/96, 3-14=-147/94, 6-11=-150/96, 7-10=-147/94

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-2-8 to 3-2-8, Interior (1) 3-2-8 to 6-7-0, Exterior (2) 6-7-0 to 9-7-0, Interior (1) 9-7-0 to 12-11-8 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) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	Q1	Attic	4	1	I49386673 Job Reference (optional)

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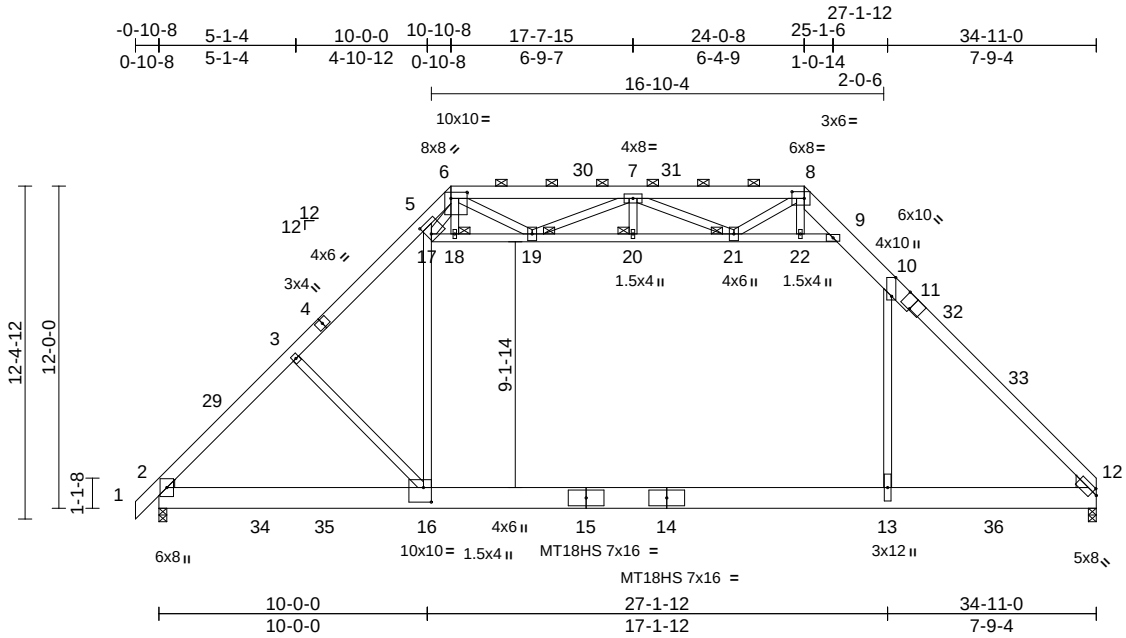

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Plate Offsets (X, Y): [5:0-2-0,0-5-4], [6:0-7-4,0-2-12], [8:0-5-8,0-3-0], [10:0-8-6,Edge], [11:0-5-0,Edge], [12:0-2-4,0-2-0], [16:0-3-8,0-6-8]

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	0.57	Vert(LL)	-0.44	13-16	>948	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.63	13-16	>660	240	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	13-16	>999	240		
BCDL	10.0										Weight: 295 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SPF 1650F 1.5E *Except* 11-8:2x8 SP 2400F 2.0E
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x4 SPF No.2
WEDGE	Left: 2x4 SPF No.2 Right: 2x6 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-5-13 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 18, 19, 20, 21

REACTIONS (lb/size) 2=1663/0-3-8, 12=1644/0-3-8
Max Horiz 2=179 (LC 11)
Max Grav 2=2208 (LC 3), 12=2284 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/43, 2-3=-2913/0, 3-5=-2717/0, 5-6=-2835/75, 6-7=-1359/0, 7-8=-1025/2, 8-9=-865/20, 9-10=-1966/18, 10-12=-2934/73
BOT CHORD	2-16=-46/1999, 13-16=0/1910, 12-13=-9/1901
WEBS	3-16=-226/144, 16-17=0/1350, 5-17=-575/195, 10-13=0/1205, 17-18=-1039/44, 18-19=-1029/46, 19-20=-902/544, 20-21=-902/544, 21-22=-1969/32, 9-22=-1986/31, 6-17=-74/1992, 6-18=0/111, 6-19=-16/603, 7-19=-585/106, 7-20=0/94, 7-21=-939/76, 8-21=0/797, 8-22=0/164

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 34-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Ceiling dead load (10.0 psf) on member(s). 9-10, 17-18, 18-19, 19-20, 20-21, 21-22, 9-22
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-16
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	Q1SE	Attic Structural Gable	1	1	I49386674 Job Reference (optional)

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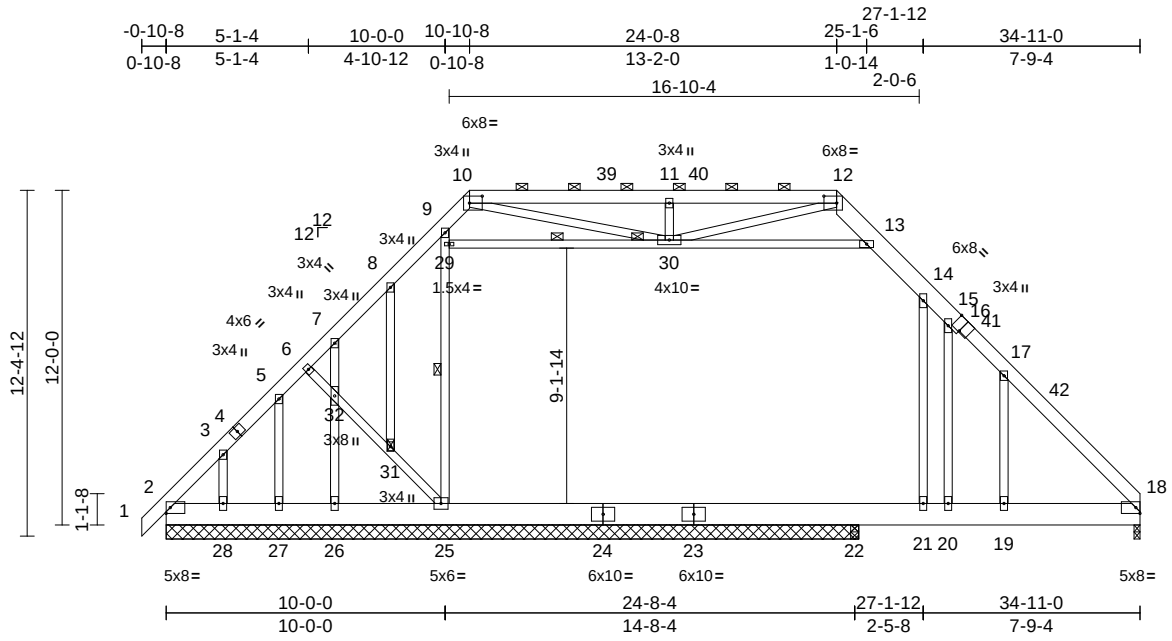

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Plate Offsets (X, Y): [10:0-5-8,0-3-0], [12:0-5-8,0-3-0], [16:0-4-0,Edge]

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	0.23	Vert(LL)	-0.14	22-25	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.18	22-25	>967	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	18	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	19	>999	240		
BCDL	10.0										Weight: 322 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SPF 1650F 1.5E *Except* 12-16:2x8 SP 2400F 2.0E
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x4 SPF No.2 *Except* 9-25:2x4 SPF 1650F 1.5E
OTHERS	2x4 SPF 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.): 10-12.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 25-29, 29-30
JOINTS	1 Brace at Jt(s): 30, 31

REACTIONS All bearings 24-10-0. except 18=0-2-8, 22=0-3-8
(lb) - Max Horiz 2=179 (LC 11)
Max Uplift All uplift 100 (lb) or less at joint(s) 2 except 26=-853 (LC 21), 28=-142 (LC 34)
Max Grav All reactions 250 (lb) or less at joint(s) 26, 28 except 2=846 (LC 2), 18=1064 (LC 32), 22=1515 (LC 28), 25=1649 (LC 21), 27=625 (LC 3)

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

TOP CHORD	2-3=-844/80, 3-4=-814/60, 4-5=-725/73, 5-6=-899/77, 6-7=-861/85, 7-8=-1013/159, 8-9=-919/189, 9-10=-869/139, 10-39=-1865/72, 11-39=-1865/72, 11-40=-1865/72, 12-40=-1865/72, 12-13=-899/69, 13-14=-1083/124, 14-15=-786/98, 15-16=-865/95, 16-41=-862/93, 17-41=-934/89, 17-42=-913/0, 18-42=-1072/0
BOT CHORD	2-28=-132/552, 27-28=-8/551, 26-27=-8/550, 25-26=-8/550, 24-25=0/657, 23-24=0/657, 22-23=0/657, 21-22=0/657, 20-21=0/661, 19-20=0/661, 18-19=0/661
WEBS	25-29=-365/64, 9-29=-300/102, 14-21=-485/6, 11-30=-465/108, 7-32=-293/116, 26-32=-316/138, 5-27=-261/18, 10-30=0/1331, 12-30=-48/1292

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 34-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.

December 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Ceiling dead load (10.0 psf) on member(s). 13-14, 29-30, 13-30
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 22-25, 21-22
13) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
14) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 28. This connection is for uplift only and does not consider lateral forces.
15) Two RT7 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26. This connection is for uplift only and does not consider lateral forces.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
17) Double installations of RT7 require the two hurricane ties to be installed on opposite sides of top plate to avoid nail interference in single ply truss.
18) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	Q2	Attic	1	**2**	I49386675 Job Reference (optional)

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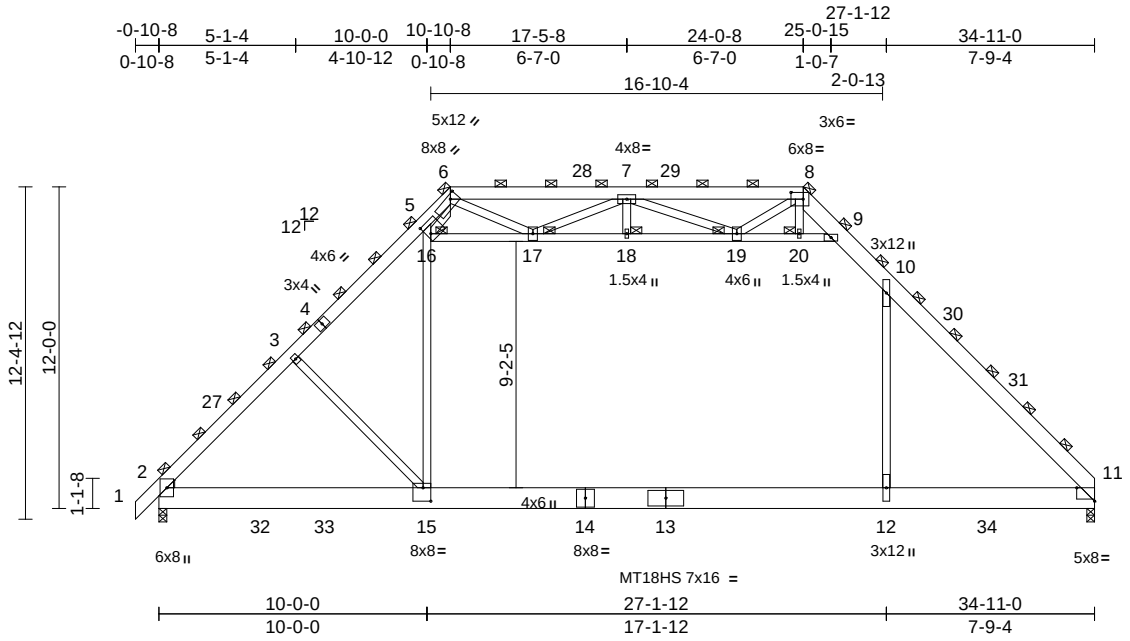

Scale = 1:86

Plate Offsets (X, Y): [5:0-1-12,0-5-0], [6:0-3-4,0-1-12], [8:0-5-8,0-3-0], [11:0-8-0,Edge], [15:0-3-8,0-6-0]

Loading	(psf)	**Spacing**	3-6-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.37	12-15	>999	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.53	12-15	>796	240	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.02	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.08	12-15	>999	240		
BCDL	10.0										Weight: 611 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF 1650F 1.5E *Except* 8-11:2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE Left: 2x4 SPF No.2

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 6, 8, 16, 17, 18, 19, 20

REACTIONS (lb/size) 2=2911/0-3-8, 11=2878/0-3-8
Max Horiz 2=315 (LC 13)
Max Grav 2=3863 (LC 3), 11=3988 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/76, 2-3=-5068/0, 3-5=-4726/0, 5-6=-4899/122, 6-7=-2429/0, 7-8=-1903/40, 8-9=-1612/66, 9-10=-3400/26, 10-11=-5194/0
BOT CHORD 2-15=-74/3485, 12-15=0/3321, 11-12=0/3305
WEBS 3-15=-388/257, 15-16=0/2317, 5-16=-943/333, 10-12=0/2268, 16-17=-1857/51, 17-18=-1424/1016, 18-19=-1424/1016, 19-20=-3234/3, 9-20=-3263/0, 6-16=-80/3516, 6-17=0/1267, 7-17=-1046/197, 7-18=0/144, 7-19=-1680/128, 8-19=0/1335, 8-20=0/264

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered 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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 34-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Ceiling dead load (10.0 psf) on member(s). 9-10, 16-17, 17-18, 18-19, 19-20, 9-20
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-15
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	R1	Attic	5	1	I49386676 Job Reference (optional)

Builders FirstSource ( ), , OH - ,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:44

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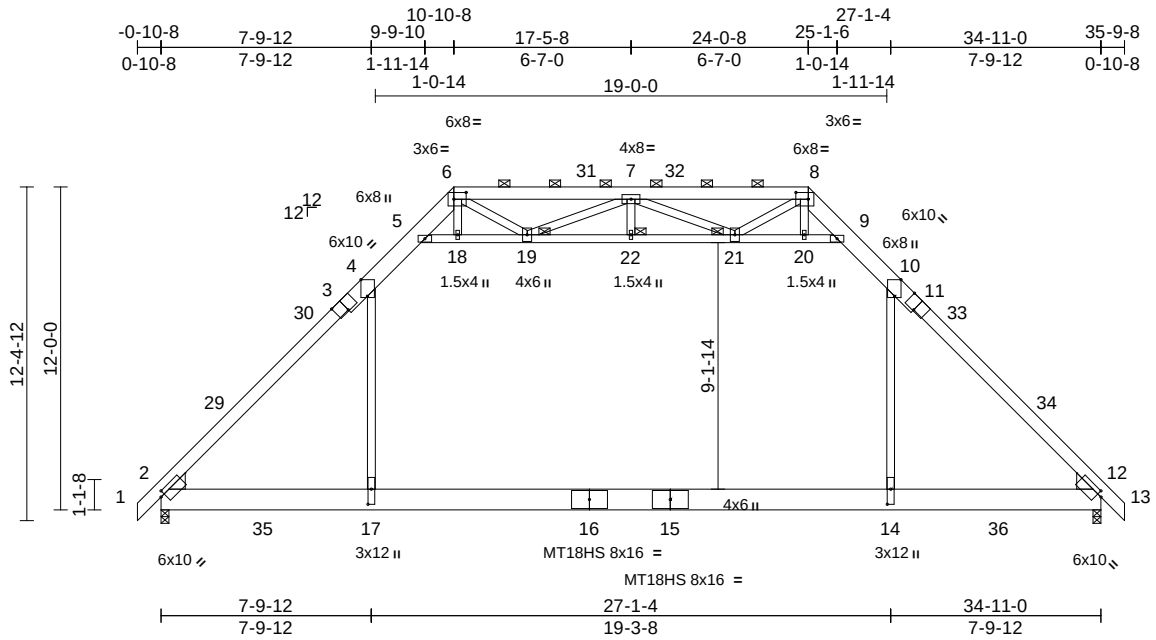

Scale = 1:85.6

Plate Offsets (X, Y): [2:0-1-15,0-1-15], [3:0-5-0,Edge], [4:0-7-6,Edge], [6:0-5-8,0-3-0], [8:0-5-8,0-3-0], [10:0-7-6,Edge], [11:0-5-0,Edge], [12:0-1-15,0-1-15], [14:0-6-12,0-1-8], [17:0-6-12,0-1-8]

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	0.64	Vert(LL)	-0.64	14-17	>650	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.92	14-17	>454	240	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.04	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	14-17	>999	240		
BCDL	10.0										Weight: 296 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF 1650F 1.5E *Except* 3-6,8-11:2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE Left: 2x8 SP No.2
Right: 2x8 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 9-2-5 oc bracing.
JOINTS 1 Brace at Jt(s): 19, 21, 22

REACTIONS (lb/size) 2=1696/0-3-8, 12=1696/0-3-8
Max Horiz 2=183 (LC 13)
Max Grav 2=2377 (LC 3), 12=2377 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/43, 2-4=-3196/0, 4-5=-1938/36, 5-6=-611/239, 6-7=-613/542, 7-8=-613/542, 8-9=-612/239, 9-10=-1938/36, 10-12=-3196/0, 12-13=0/43
BOT CHORD 2-17=-67/2090, 14-17=0/2101, 12-14=0/2089
WEBS 4-17=0/1636, 10-14=0/1636, 5-18=-2666/0, 18-19=-2646/0, 19-22=-2122/0, 21-22=-2122/0, 20-21=-2646/0, 9-20=-2665/0, 6-18=0/180, 6-19=-47/602, 8-20=0/180, 8-21=-47/602, 7-22=0/61, 7-19=-733/106, 7-21=-733/106

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 35-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-18, 18-19, 19-22, 21-22, 20-21, 9-20; Wall dead load (5.0psf) on member(s).4-17, 10-14
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-17
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	R1E	Attic Supported Gable	1	1	I49386677
					Job Reference (optional)

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Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:45 Page: 1
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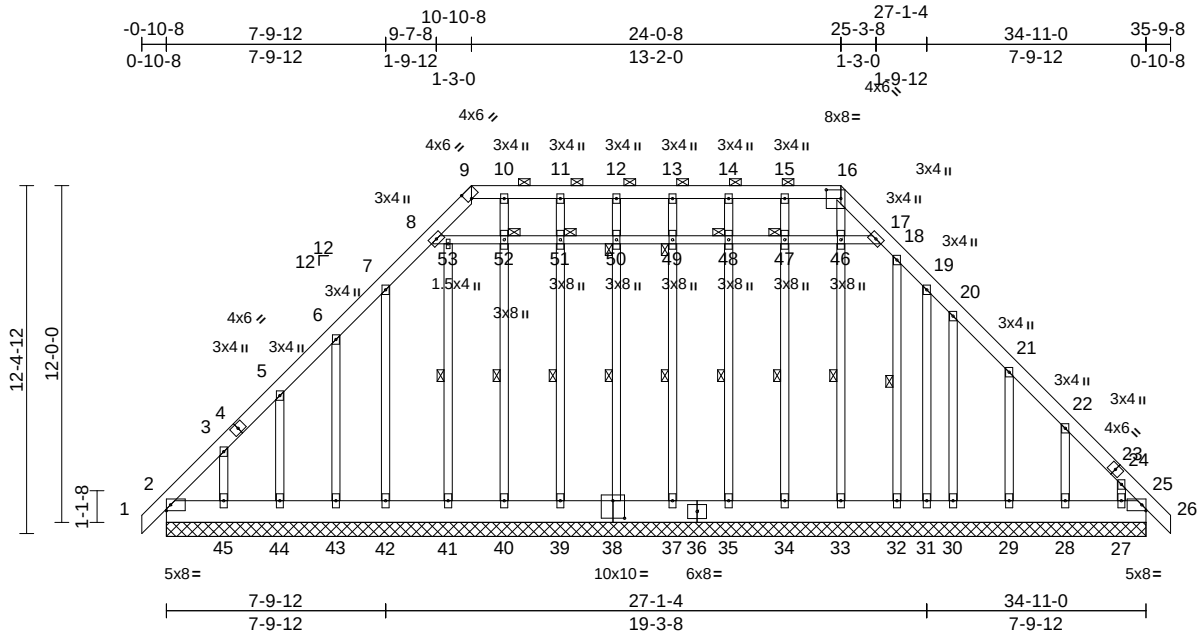

Scale = 1:82.1

Plate Offsets (X, Y): [9:0-2-2,Edge], [16:0-6-4,0-3-12], [38:0-5-0,0-7-8]

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	25	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 392 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SPF 1650F 1.5E
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF 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.): 9-16.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	33-46, 34-47, 35-48, 37-49, 38-50, 39-51, 40-52, 41-53, 18-32
JOINTS	1 Brace at Jt(s): 47, 48, 49, 50, 51, 52	

REACTIONS (lb/size) 2=210/34-11-0, 25=192/34-11-0, 27=66/34-11-0, 28=163/34-11-0, 29=160/34-11-0, 30=117/34-11-0, 31=67/34-11-0, 32=99/34-11-0, 33=119/34-11-0, 34=155/34-11-0, 35=158/34-11-0, 37=160/34-11-0, 38=156/34-11-0, 39=150/34-11-0, 40=161/34-11-0, 41=103/34-11-0, 42=167/34-11-0, 43=137/34-11-0, 44=162/34-11-0, 45=141/34-11-0

Max Horiz 2=-184 (LC 12)

Max Uplift 2=-33 (LC 10), 25=-64 (LC 13), 27=-100 (LC 15), 28=-33 (LC 15), 29=-39 (LC 15), 30=-25 (LC 15), 31=-21 (LC 15), 39=-1 (LC 10), 42=-15 (LC 14), 43=-42 (LC 14), 44=-24 (LC 14), 45=-82 (LC 14)

Max Grav 2=261 (LC 32), 25=260 (LC 34), 27=125 (LC 32), 28=188 (LC 32), 29=188 (LC 32), 30=135 (LC 32), 31=81 (LC 36), 32=132 (LC 36), 33=146 (LC 36), 34=178 (LC 36), 35=184 (LC 35), 37=183 (LC 35), 38=181 (LC 36), 39=180 (LC 36), 40=186 (LC 35), 41=118 (LC 35), 42=198 (LC 35), 43=162 (LC 31), 44=186 (LC 2), 45=194 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/43, 2-3=-204/114, 3-5=-189/83, 5-6=-178/67, 6-7=-158/87, 7-8=-166/138, 8-9=-93/88, 9-10=-76/81, 10-11=-76/81, 11-12=-76/81, 12-13=-76/81, 13-14=-76/81, 14-15=-76/81, 15-16=-76/81, 16-17=-95/93, 17-18=-162/138, 18-19=-157/135, 19-20=-138/100, 20-21=-171/59, 21-22=-182/63, 22-24=-193/91, 24-25=-204/139, 25-26=0/43

BOT CHORD 2-45=-148/182, 44-45=-108/182, 43-44=-109/183, 42-43=-109/183, 41-42=-109/183, 40-41=-109/183, 39-40=-109/183, 37-39=-109/183, 35-37=-109/183, 34-35=-109/183, 33-34=-109/183, 32-33=-109/183, 31-32=-109/183, 30-31=-108/183, 29-30=-108/182, 28-29=-108/182, 27-28=-107/182, 25-27=-106/181

WEBS 7-42=-158/52, 19-31=-72/38, 8-53=-92/86, 52-53=-91/87, 51-52=-91/87, 50-51=-91/87, 49-50=-92/88, 48-49=-92/88, 47-48=-92/88, 46-47=-92/88, 17-46=-92/88, 16-46=-101/3, 33-46=-104/5, 15-47=-140/30, 34-47=-138/28, 14-48=-143/40, 35-48=-145/40, 13-49=-141/39, 37-49=-141/38, 12-50=-142/39, 38-50=-141/41, 11-51=-138/48, 39-51=-142/43, 10-52=-177/18, 40-52=-146/14, 41-53=-75/10, 6-43=-130/94, 5-44=-146/91, 3-45=-137/94, 18-32=-97/15, 20-30=-101/69, 21-29=-147/94, 22-28=-148/93, 24-27=-114/83

NOTES

1) Unbalanced roof live loads have been considered for this design.

December 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-10-8 to 2-7-6, Exterior (2) 2-7-6 to 10-10-8, Corner (3) 10-10-8 to 14-4-6, Exterior (2) 14-4-6 to 24-0-8, Corner (3) 24-0-8 to 27-6-6, Exterior (2) 27-6-6 to 35-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x6 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 42, 31, 39, 43, 44, 45, 30, 29, 28, 27, and 25. This connection is for uplift only and does not consider lateral forces.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 25.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
2975058	R2	Attic	1	**4**	I49386678 Job Reference (optional)

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Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:46 Page: 1

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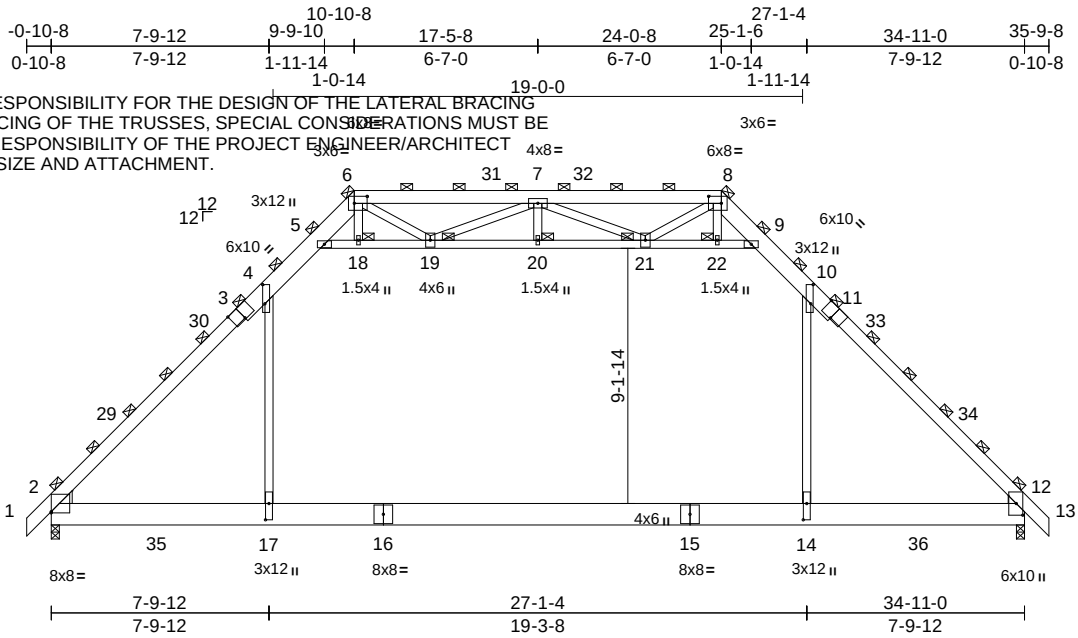

THIS DRAWING ASSUMES NO RESPONSIBILITY FOR THE DESIGN OF THE LATERAL BRACING SHOWN. DUE TO THE WIDE SPACING OF THE TRUSSES, SPECIAL CONSIDERATIONS MUST BE GIVEN IN THIS AREA. IT IS THE RESPONSIBILITY OF THE PROJECT ENGINEER/ARCHITECT TO SPECIFY PROPER BRACING SIZE AND ATTACHMENT.

Scale = 1:82.7

Plate Offsets (X, Y): [2:Edge,0-0-8], [3:0-5-0,Edge], [4:0-8-4,0-1-0], [6:0-5-8,0-3-0], [8:0-5-8,0-3-0], [10:0-8-4,0-1-0], [11:0-5-0,Edge], [12:0-5-0,0-2-12], [14:0-7-0,0-1-8], [17:0-7-0,0-1-8]

Loading	(psf)	**Spacing**	8-6-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.69	14-17	>608	360	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.98	14-17	>428	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.05	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.12	14-17	>999	240		
BCDL	10.0										Weight: 1174 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SPF 1650F 1.5E *Except* 3-6,8-11:2x8 SP 2400F 2.0E
BOT CHORD	2x10 SP 2400F 2.0E
WEBS	2x4 SPF No.2
WEDGE	Left: 2x6 SP No.2 Right: 2x4 SPF No.2

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 6, 8, 18, 19, 20, 21, 22

REACTIONS (lb/size) 2=7278/0-3-8, 12=7278/0-3-8
Max Horiz 2=779 (LC 13)
Max Grav 2=10172 (LC 3), 12=10172 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/184, 2-4=-13672/0, 4-5=-8588/56, 5-6=-3135/465, 6-7=-3438/1452, 7-8=-3489/1427, 8-9=-3168/447, 9-10=-8579/52, 10-12=-13663/0, 12-13=0/184
BOT CHORD	2-17=-283/8968, 14-17=0/9011, 12-14=0/8963
WEBS	4-17=0/6618, 10-14=0/6675, 5-18=-10917/139, 18-19=-10828/147, 19-20=-8067/449, 20-21=-8067/449, 21-22=-10790/121, 9-22=-10879/114, 6-18=0/834, 6-19=0/2974, 7-19=-3298/355, 7-20=0/426, 7-21=-3285/339, 8-21=0/2964, 8-22=0/832

NOTES

1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 2-7-6, Interior (1) 2-7-6 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 35-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Ceiling dead load (10.0 psf) on member(s). 4-5, 9-10, 5-18, 18-19, 19-20, 20-21, 21-22, 9-22
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-17
12) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	S1	Attic	1	4	I49386679 Job Reference (optional)

Builders FirstSource ( ), , OH - ,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:47 Page: 1

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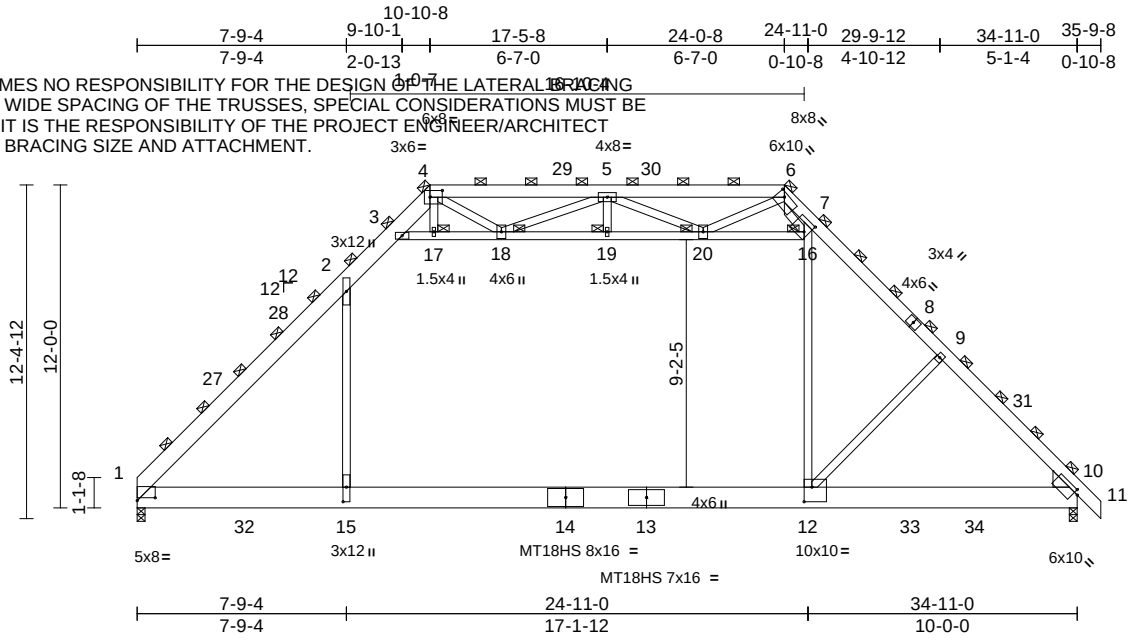

Scale = 1:85.6

Plate Offsets (X, Y): [1:0-8-0,0-1-4], [4:0-5-8,0-3-0], [6:0-3-4,0-1-12], [7:0-2-0,0-5-0], [10:0-1-11,0-1-11], [12:0-3-8,0-6-8], [15:0-6-8,0-1-8]

Loading	(psf)	Spacing	8-6-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.45	12-15	>925	360	MT20	244/190
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.65	12-15	>646	240	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.10	12-15	>999	240		
BCDL	10.0										Weight: 1228 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF 1650F 1.5E *Except* 1-4:2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE Right: 2x8 SP No.2

BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 4, 6, 16, 17, 18, 19, 20

REACTIONS (lb/size) 1=6989/0-3-8, 10=7069/0-3-8
Max Horiz 1=-765 (LC 12)
Max Grav 1=9684 (LC 3), 10=9381 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-12583/0, 2-3=-8256/63, 3-4=-3917/151, 4-5=-4757/87, 5-6=-5858/0, 6-7=-11896/291, 7-9=-11472/0, 9-10=-12355/0, 10-11=0/184
BOT CHORD 1-15=-61/8063, 12-15=0/8098, 10-12=0/8199
WEBS 2-15=0/5470, 12-16=0/5627, 7-16=-2286/796, 9-12=-913/642, 3-17=-7936/12, 17-18=-7863/20, 18-19=-3465/2462, 19-20=-3465/2462, 16-20=-4508/122, 6-16=-190/8533, 4-17=0/667, 4-18=0/3368, 5-18=-3924/314, 5-19=0/347, 5-20=-2578/481, 6-20=0/3036

NOTES

1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-0 to 3-5-14, Interior (1) 3-5-14 to 10-10-8, Exterior (2) 10-10-8 to 15-9-12, Interior (1) 15-9-12 to 24-0-8, Exterior (2) 24-0-8 to 28-11-12, Interior (1) 28-11-12 to 35-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 19.2 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Ceiling dead load (10.0 psf) on member(s). 2-3, 3-17, 17-18, 18-19, 19-20, 16-20
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-15
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1	Valley	1	1	I49386680 Job Reference (optional)

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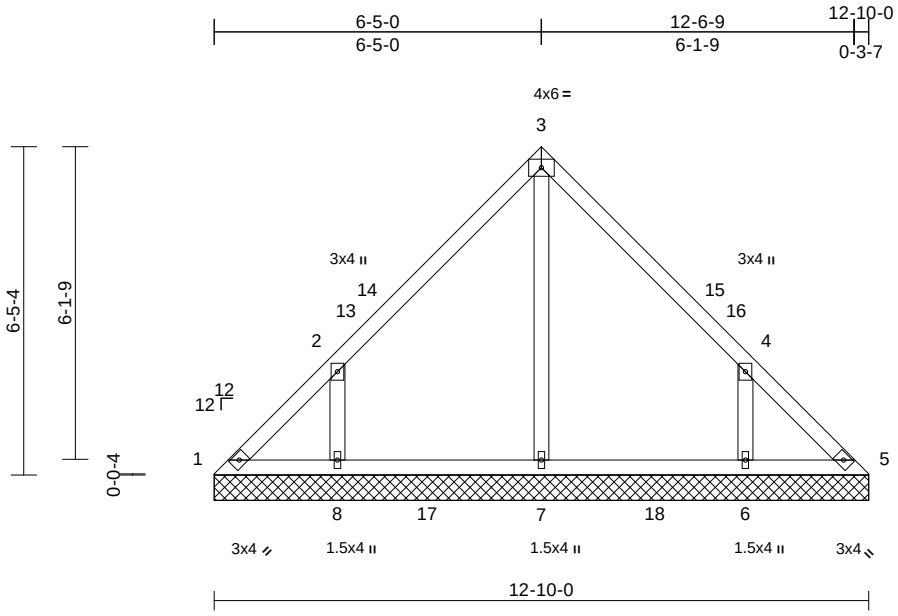

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 45 lb	FT = 20%

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

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=82/12-10-0, 5=82/12-10-0, 6=303/12-10-0, 7=238/12-10-0, 8=303/12-10-0
Max Horiz 1=-96 (LC 10)
Max Uplift 1=-21 (LC 10), 6=-64 (LC 15), 8=-66 (LC 14)
Max Grav 1=114 (LC 26), 5=97 (LC 25), 6=368 (LC 26), 7=353 (LC 25), 8=371 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-131/92, 2-3=-162/96, 3-4=-160/95, 4-5=-113/66
BOT CHORD 1-8=-43/92, 7-8=-43/66, 6-7=-43/66, 5-6=-43/79
WEBS 3-7=-185/0, 2-8=-282/157, 4-6=-282/157

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 6-5-4, Exterior (2) 6-5-4 to 9-5-4, Interior (1) 9-5-4 to 12-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1A	Valley	1	1	I49386681 Job Reference (optional)

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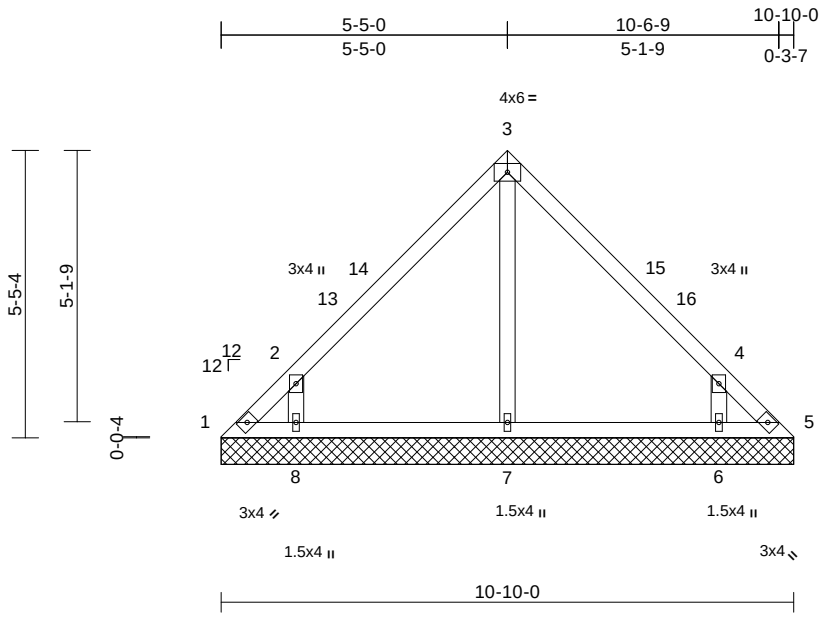

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 36 lb	FT = 20%

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

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=25/10-10-0, 5=25/10-10-0, 6=295/10-10-0, 7=211/10-10-0, 8=295/10-10-0
Max Horiz 1=-81 (LC 10)
Max Uplift 1=-45 (LC 12), 5=-25 (LC 13), 6=-60 (LC 15), 8=-63 (LC 14)
Max Grav 1=68 (LC 11), 5=48 (LC 10), 6=347 (LC 30), 7=236 (LC 2), 8=347 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-109/91, 2-3=-185/85, 3-4=-185/84, 4-5=-104/85
BOT CHORD 1-8=-46/69, 7-8=-18/69, 6-7=-18/69, 5-6=-46/69
WEBS 3-7=-148/0, 2-8=-321/198, 4-6=-321/198

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-5-4, Exterior (2) 5-5-4 to 8-5-4, Interior (1) 8-5-4 to 10-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 25 lb uplift at joint 5.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1B	Valley	1	1	I49386682 Job Reference (optional)

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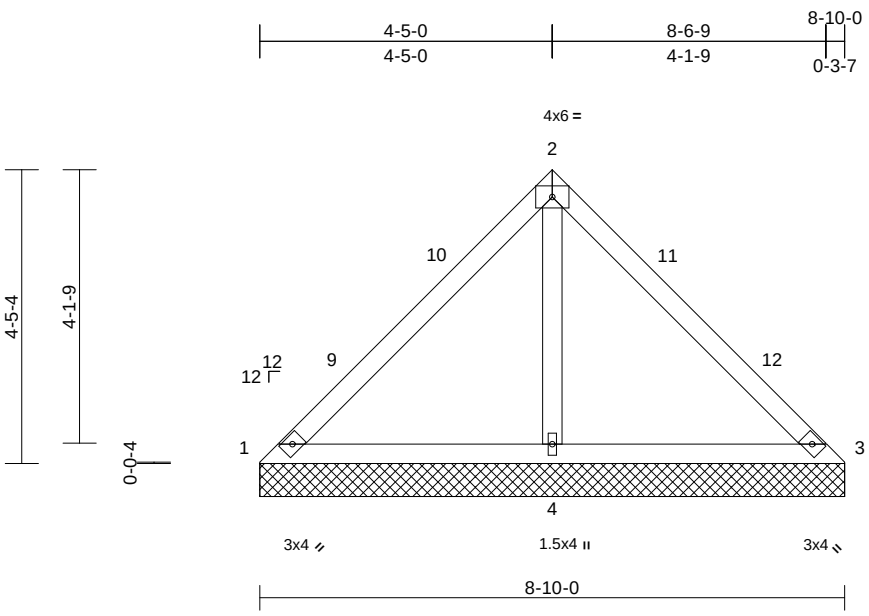

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 28 lb	FT = 20%

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

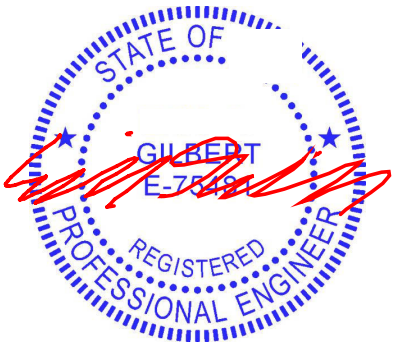
BRACING
TOP CHORD Structural wood sheathing directly applied or 8-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=40/8-10-0, 3=40/8-10-0, 4=613/8-10-0
Max Horiz 1=-66 (LC 10)
Max Uplift 1=-23 (LC 30), 3=-23 (LC 29)
Max Grav 1=88 (LC 29), 3=88 (LC 30), 4=702 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/277, 2-3=-84/277
BOT CHORD 1-4=-174/105, 3-4=-174/105
WEBS 2-4=-531/132

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 4-5-4, Exterior (2) 4-5-4 to 7-5-4, Interior (1) 7-5-4 to 8-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 23 lb uplift at joint 3.

LOAD CASE(S) Standard



December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1C	Valley	1	1	I49386683 Job Reference (optional)

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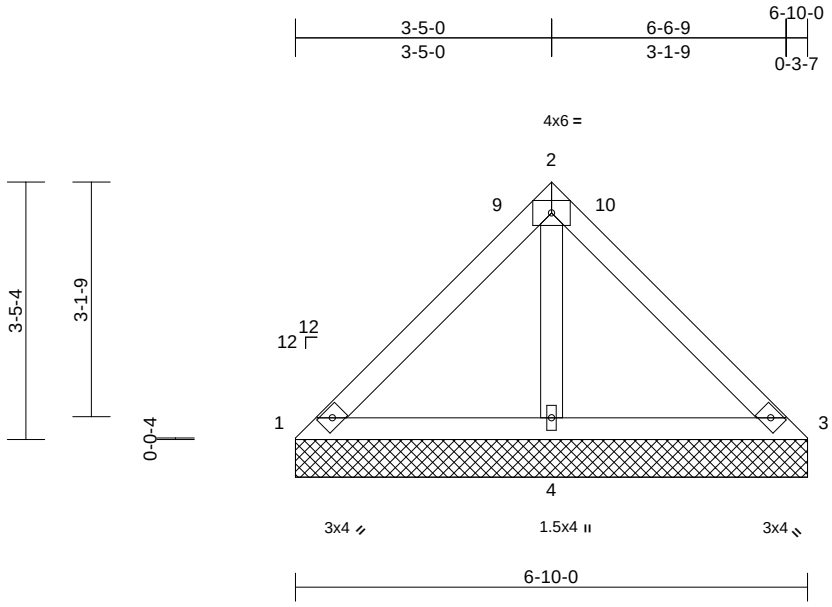

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 lb	FT = 20%

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

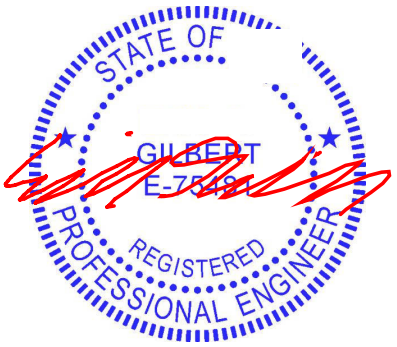
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=43/6-10-0, 3=43/6-10-0, 4=451/6-10-0
Max Horiz 1=-50 (LC 10)
Max Uplift 1=-8 (LC 30), 3=-8 (LC 29)
Max Grav 1=78 (LC 29), 3=78 (LC 30), 4=517 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-56/183, 2-3=-56/183
BOT CHORD 1-4=-134/90, 3-4=-134/90
WEBS 2-4=-365/95

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 3-5-4, Exterior (2) 3-5-4 to 6-2-1, Interior (1) 6-2-1 to 6-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.

LOAD CASE(S) Standard



December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1D	Valley	1	1	I49386684 Job Reference (optional)

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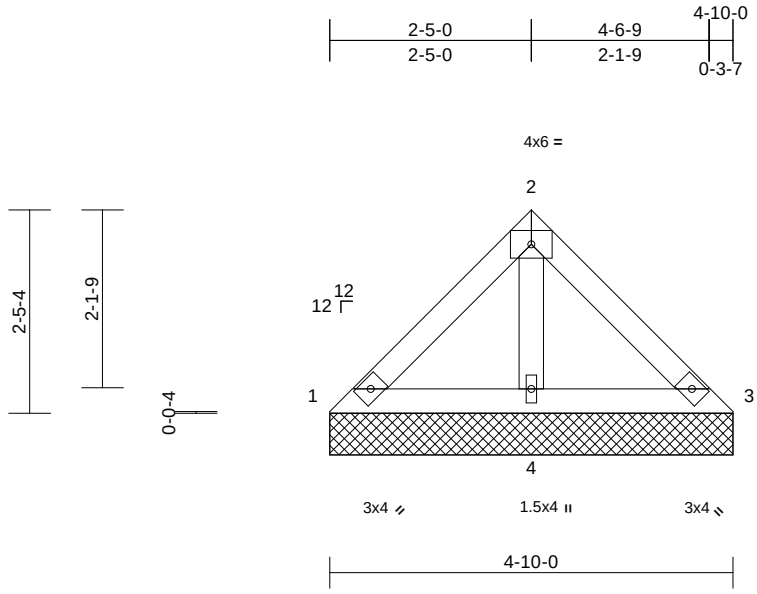

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=49/4-10-0, 3=49/4-10-0, 4=280/4-10-0
Max Horiz 1=-35 (LC 12)
Max Grav 1=71 (LC 29), 3=71 (LC 30), 4=321 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-60/93, 2-3=-60/93
BOT CHORD 1-4=-71/54, 3-4=-71/54
WEBS 2-4=-201/43

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V1E	Valley	1	1	I49386685 Job Reference (optional)

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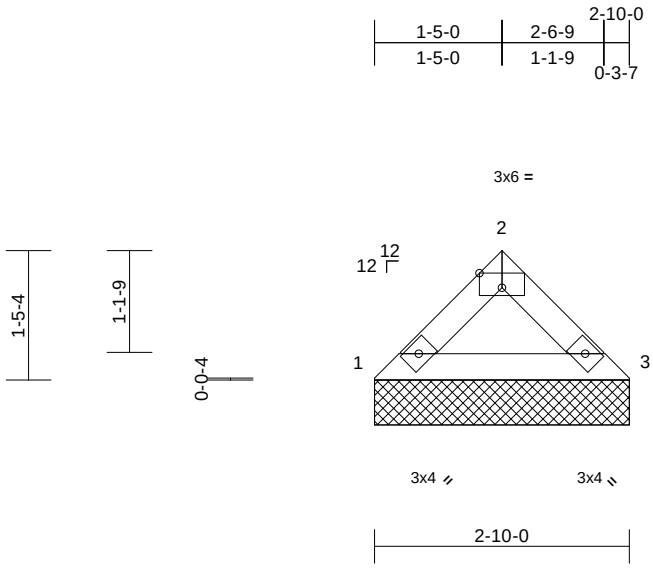

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Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 7 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=111/2-10-0, 3=111/2-10-0
Max Horiz 1=19 (LC 13)
Max Grav 1=128 (LC 2), 3=128 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-152/17, 2-3=-152/17
BOT CHORD 1-3=-3/102

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2	Valley	1	1	I49386686
					Job Reference (optional)

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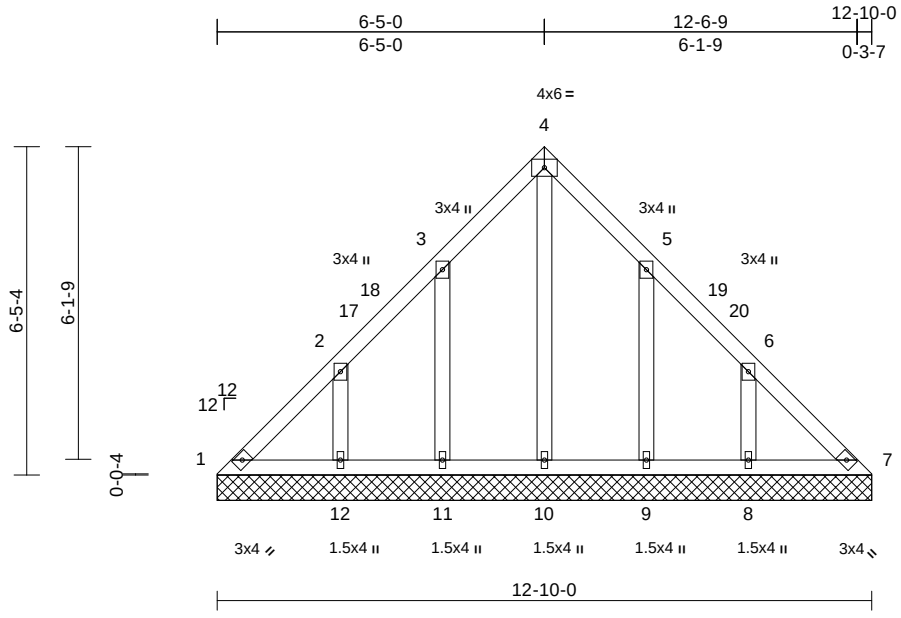

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 54 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=77/12-10-0, 7=77/12-10-0, 8=201/12-10-0, 9=150/12-10-0, 10=153/12-10-0, 11=150/12-10-0, 12=201/12-10-0
Max Horiz 1=-96 (LC 10)
Max Uplift 1=-13 (LC 10), 8=-30 (LC 15), 9=-39 (LC 15), 11=-39 (LC 14), 12=-33 (LC 14)
Max Grav 1=106 (LC 26), 7=89 (LC 2), 8=230 (LC 2), 9=179 (LC 26), 10=173 (LC 2), 11=178 (LC 25), 12=230 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-112/104, 2-3=-77/75, 3-4=-83/93, 4-5=-83/93, 5-6=-56/54, 6-7=-97/91
BOT CHORD 1-12=-81/88, 11-12=-81/86, 10-11=-81/86, 9-10=-81/86, 8-9=-81/86, 7-8=-81/86
WEBS 4-10=-128/12, 3-11=-149/96, 2-12=-157/88, 5-9=-148/96, 6-8=-155/88

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 6-5-4, Exterior (2) 6-5-4 to 9-5-4, Interior (1) 9-5-4 to 12-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 12, 9, and 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2A	Valley	1	1	I49386687 Job Reference (optional)

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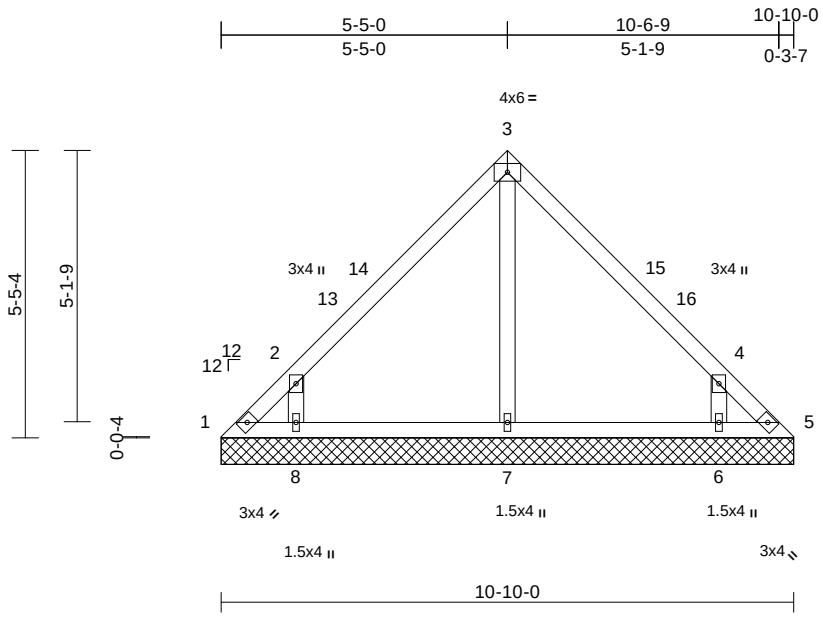

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 36 lb	FT = 20%

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

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=25/10-10-0, 5=25/10-10-0, 6=295/10-10-0, 7=211/10-10-0, 8=295/10-10-0
Max Horiz 1=-81 (LC 12)
Max Uplift 1=-45 (LC 12), 5=-25 (LC 13), 6=-60 (LC 15), 8=-63 (LC 14)
Max Grav 1=68 (LC 11), 5=48 (LC 10), 6=347 (LC 30), 7=236 (LC 2), 8=347 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-109/91, 2-3=-185/85, 3-4=-185/84, 4-5=-104/85
BOT CHORD 1-8=-46/69, 7-8=-18/69, 6-7=-18/69, 5-6=-46/69
WEBS 3-7=-148/0, 2-8=-321/198, 4-6=-321/198

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-5-4, Exterior (2) 5-5-4 to 8-5-4, Interior (1) 8-5-4 to 10-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 25 lb uplift at joint 5.
10) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2B	Valley	1	1	I49386688 Job Reference (optional)

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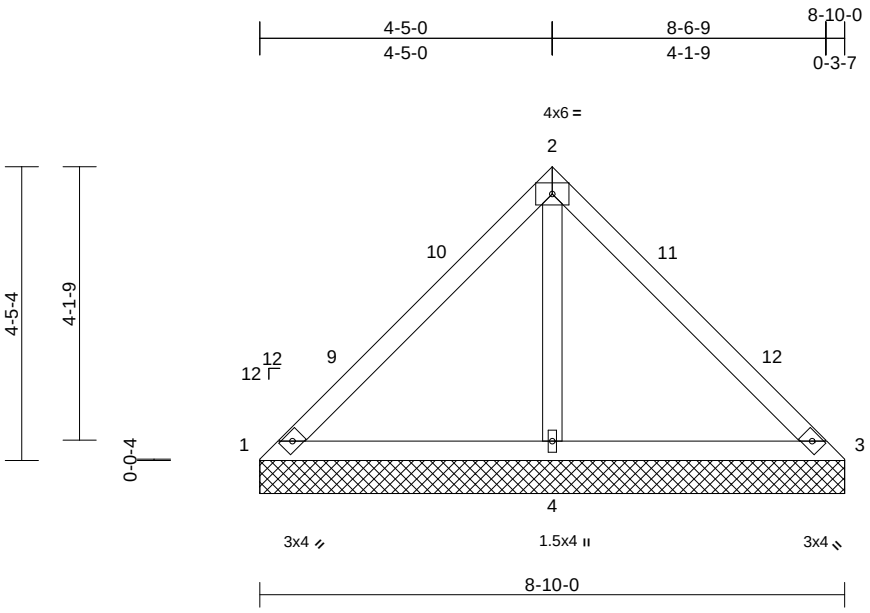

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 28 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 8-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=40/8-10-0, 3=40/8-10-0, 4=613/8-10-0
Max Horiz 1=66 (LC 11)
Max Uplift 1=-23 (LC 30), 3=-23 (LC 29)
Max Grav 1=88 (LC 29), 3=88 (LC 30), 4=702 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/277, 2-3=-84/277
BOT CHORD 1-4=-174/105, 3-4=-174/105
WEBS 2-4=-531/132

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 4-5-4, Exterior (2) 4-5-4 to 7-5-4, Interior (1) 7-5-4 to 8-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 23 lb uplift at joint 3.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2C	Valley	1	1	I49386689 Job Reference (optional)

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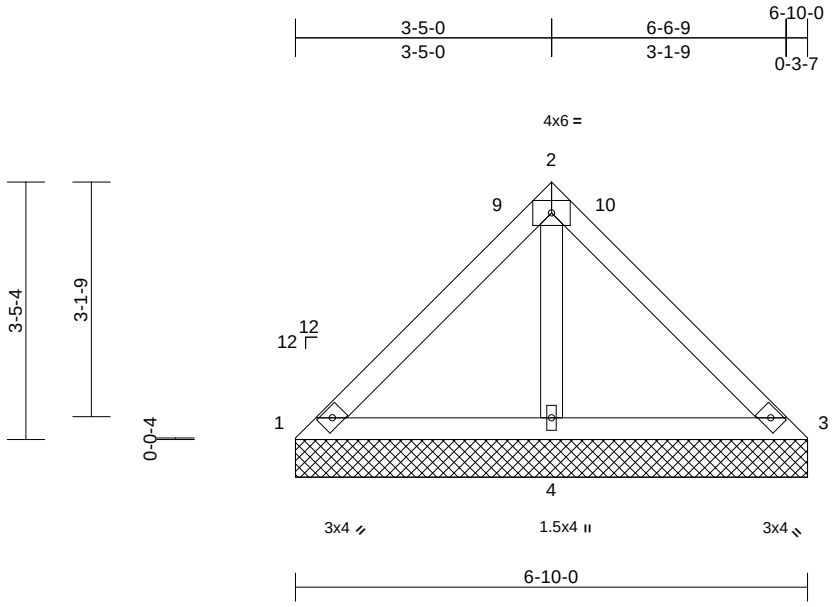

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=43/6-10-0, 3=43/6-10-0, 4=451/6-10-0
Max Horiz 1=-50 (LC 12)
Max Uplift 1=-8 (LC 30), 3=-8 (LC 29)
Max Grav 1=78 (LC 29), 3=78 (LC 30), 4=517 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-56/183, 2-3=-56/183
BOT CHORD 1-4=-134/90, 3-4=-134/90
WEBS 2-4=-365/95

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 3-5-4, Exterior (2) 3-5-4 to 6-2-1, Interior (1) 6-2-1 to 6-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2D	Valley	1	1	I49386690 Job Reference (optional)

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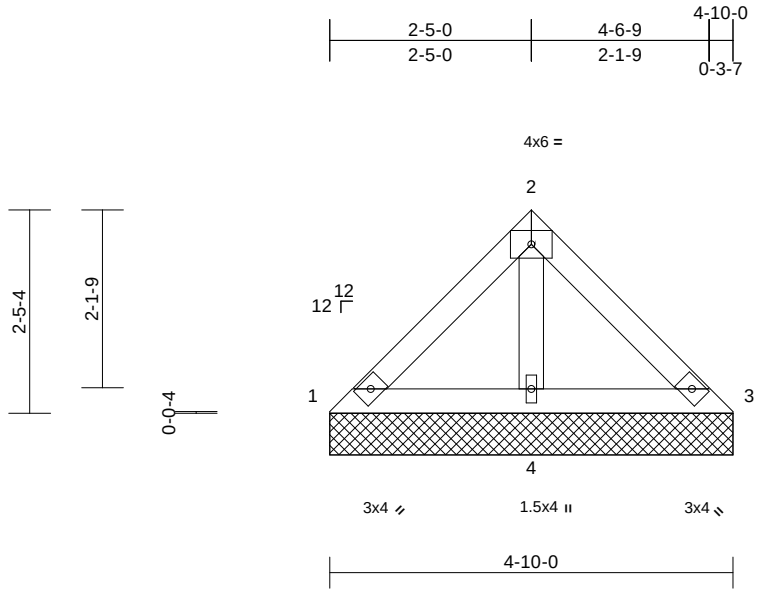

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=49/4-10-0, 3=49/4-10-0, 4=280/4-10-0
Max Horiz 1=-35 (LC 10)
Max Grav 1=71 (LC 29), 3=71 (LC 30), 4=321 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-60/93, 2-3=-60/93
BOT CHORD 1-4=-71/54, 3-4=-71/54
WEBS 2-4=-201/43

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
2975058	V2E	Valley	1	1	I49386691 Job Reference (optional)

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Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Tue Dec 21 15:19:50 Page: 1
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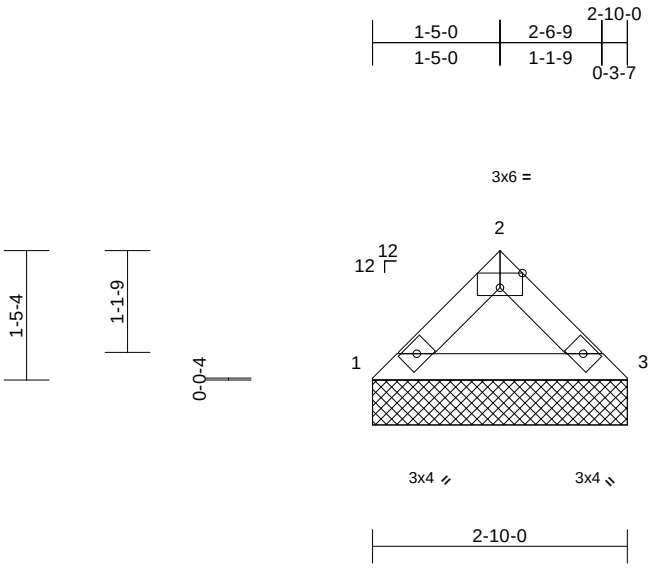

Scale = 1:25.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	19.3/25.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 7 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=111/2-10-0, 3=111/2-10-0
Max Horiz 1=-19 (LC 10)
Max Grav 1=127 (LC 2), 3=127 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-152/17, 2-3=-152/17
BOT CHORD 1-3=-3/102

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=25.0 psf (ground snow); Pf=19.2 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard

December 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017