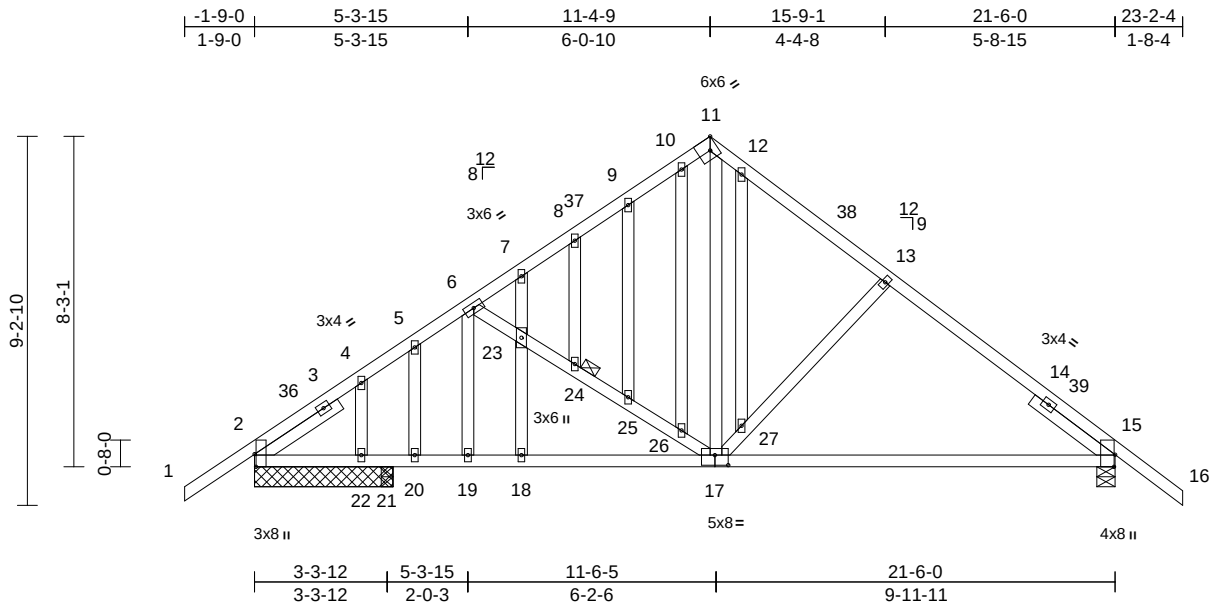
| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| J21-006507 | A01 | Roof Special Structural Gable | 2 | 1 | I47256870<br>Job Reference (optional) |

Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 08:38:06 Page: 1
ID:m0cH5IlsyuH0h3xe3AbhMqz5hho-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:57.6

Plate Offsets (X, Y): [2:0-3-13,Edge], [11:0-2-5,Edge], [15:0-3-10,Edge], [17:0-4-0,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 30.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.17 | 17-34 | >999 | 240 | MT20 | 197/144 |
| (Roof Snow = 30.0) | | Lumber DOL | 1.15 | BC | 0.60 | Vert(TL) | -0.43 | 17-34 | >503 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.23 | Horiz(TL) | 0.02 | 15 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2012/TPI2007 | Matrix-AS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 128 lb | FT = 10% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x4 SPF No.2 |
| OTHERS | 2x4 SPF No.2 |
| SLIDER | Left 2x4 SPF No.2 -- 2-6-0, Right 2x4 SPF No.2 -- 2-6-0 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied. |
| BOT CHORD | Rigid ceiling directly applied. |
| JOINTS | 1 Brace at Jt(s): 24 |

**REACTIONS** (lb/size) 2=1068/3-5-8, 15=1168/0-5-8, 21=595/0-3-8, 22=-406/3-5-8, 28=1068/3-5-8
Max Horiz 2=-230 (LC 8), 28=-230 (LC 8)
Max Uplift 2=-107 (LC 10), 15=-142 (LC 11), 21=-18 (LC 10), 22=-406 (LC 1), 28=-107 (LC 10)
Max Grav 2=1068 (LC 1), 15=1168 (LC 1), 21=595 (LC 1), 22=-10 (LC 11), 28=1068 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/78, 2-4=-1156/126, 4-5=-1096/152, 5-6=-1160/181, 6-7=-895/125, 7-8=-883/150, 8-9=-853/173, 9-10=-843/203, 10-11=-704/181, 11-12=-784/203, 12-13=-990/191, 13-15=-1145/181, 15-16=0/81

BOT CHORD 2-22=-121/934, 21-22=-121/934, 20-21=-121/934, 19-20=-121/934, 18-19=-121/934, 15-18=-121/934

WEBS 6-19=-70/159, 6-23=-276/170, 23-24=-266/151, 24-25=-294/170, 25-26=-341/192, 17-26=-269/168, 11-17=-88/483, 17-27=-324/219, 13-27=-339/205, 4-22=-52/76, 5-20=-212/40, 7-23=-96/57, 18-23=-113/94, 8-24=-54/36, 9-25=-89/41, 10-26=-50/149, 12-27=-15/59

**NOTES**

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V (IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-9-0 to 1-3-0, Interior (1) 1-3-0 to 8-4-9, Exterior (2) 8-4-9 to 14-4-9, Interior (1) 14-4-9 to 20-2-4, Exterior (2) 20-2-4 to 23-2-4 zone; 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; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 2, 142 lb uplift at joint 15, 406 lb uplift at joint 22, 18 lb uplift at joint 21 and 107 lb uplift at joint 2.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


August 2,2021



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| J21-006507 | A02 | Roof Special | 12 | 1 | I47256871<br>Job Reference (optional) |

Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 08:38:08 Page: 1
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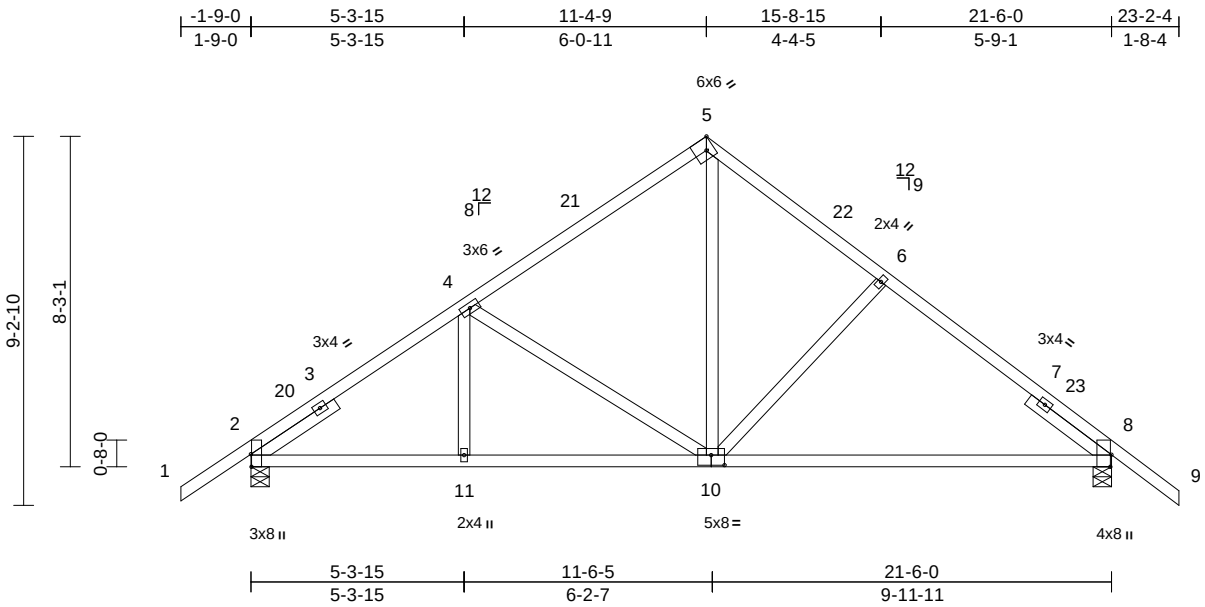


Scale = 1:57.6

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 30.0 | Plate Grip DOL | 1.15 | TC | 0.44 | Vert(LL) | -0.17 | 10-18 | >999 | 240 | MT20 | 197/144 |
| (Roof Snow = 30.0) | | Lumber DOL | 1.15 | BC | 0.60 | Vert(TL) | -0.44 | 10-18 | >580 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.44 | Horiz(TL) | 0.03 | 8 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2012/TPI2007 | Matrix-AS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 93 lb | FT = 10% |

**LUMBER**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-6-0, Right 2x4 SPF No.2 -- 2-6-0

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 2=1215/0-5-8, 8=1210/0-5-8
Max Horiz 2=-230 (LC 8)
Max Uplift 2=-154 (LC 10), 8=-142 (LC 11)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/78, 2-4=-1275/162, 4-5=-1030/185, 5-6=-1048/198, 6-8=-1206/182, 8-9=0/81
BOT CHORD 2-11=-161/1136, 8-11=-161/1136
WEBS 4-11=0/178, 4-10=-479/210, 5-10=-86/647, 6-10=-341/210

**NOTES**
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V (IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-9-0 to 1-3-0, Interior (1) 1-3-0 to 8-4-9, Exterior (2) 8-4-9 to 14-4-9, Interior (1) 14-4-9 to 20-2-4, Exterior (2) 20-2-4 to 23-2-4 zone; 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; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.10
3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 2 and 142 lb uplift at joint 8.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


August 2,2021



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| J21-006507 | B01 | Roof Special Supported Gable | 2 | 1 | I47256872<br>Job Reference (optional) |

Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 08:38:09 Page: 1
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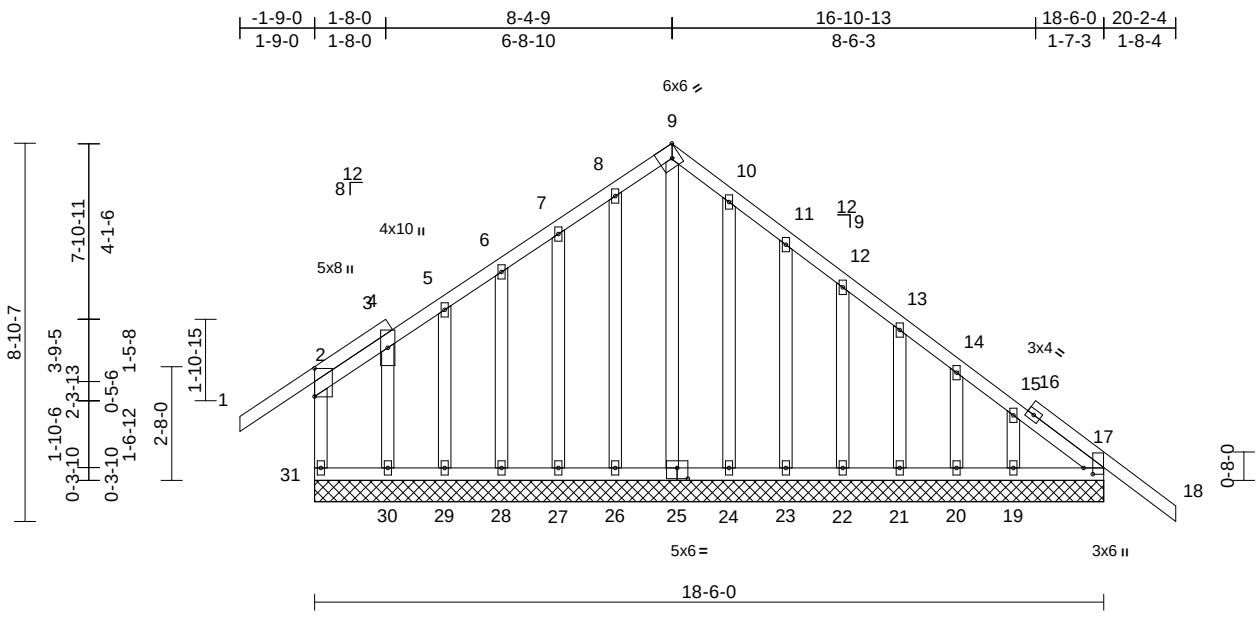


Scale = 1:54

Plate Offsets (X, Y): [2:0-7-15,Edge], [9:0-2-4,Edge], [17:0-1-12,0-2-9], [25:0-3-0,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 30.0 | Plate Grip DOL | 1.15 | TC | 0.28 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| (Roof Snow = 30.0) | | Lumber DOL | 1.15 | BC | 0.07 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.28 | Horiz(TL) | 0.01 | 17 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2012/TPI2007 | Matrix-AS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 121 lb | FT = 10% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 17=285/18-6-0, 19=114/18-6-0, 20=143/18-6-0, 21=131/18-6-0, 22=134/18-6-0, 23=133/18-6-0, 24=136/18-6-0, 25=138/18-6-0, 26=140/18-6-0, 27=132/18-6-0, 28=135/18-6-0, 29=131/18-6-0, 30=75/18-6-0, 31=297/18-6-0, 32=285/18-6-0
Max Horiz 31=-256 (LC 8)
Max Uplift 17=-99 (LC 7), 19=-50 (LC 11), 20=-50 (LC 11), 21=-54 (LC 11), 22=-52 (LC 11), 23=-61 (LC 11), 24=-32 (LC 11), 25=-58 (LC 8), 26=-11 (LC 10), 27=-58 (LC 10), 28=-47 (LC 10), 29=-42 (LC 10), 30=-56 (LC 10), 31=-62 (LC 10), 32=-99 (LC 7)
Max Grav 17=293 (LC 18), 19=136 (LC 19), 20=143 (LC 1), 21=137 (LC 19), 22=136 (LC 19), 23=134 (LC 19), 24=147 (LC 19), 25=227 (LC 10), 26=140 (LC 1), 27=137 (LC 18), 28=138 (LC 18), 29=131 (LC 1), 30=119 (LC 18), 31=297 (LC 1), 32=293 (LC 18)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-31=-285/218, 1-2=0/76, 2-3=-75/146, 3-5=-59/156, 5-6=-100/201, 6-7=-134/241, 7-8=-173/289, 8-9=-190/306, 9-10=-199/322, 10-11=-175/298, 11-12=-163/242, 12-13=-177/195, 13-14=-192/200, 14-15=-204/200, 15-17=-208/211, 17-18=0/81
BOT CHORD 30-31=-185/199, 29-30=-185/199, 28-29=-185/199, 27-28=-185/199, 26-27=-185/199, 24-26=-187/200, 23-24=-187/200, 22-23=-187/200, 21-22=-187/200, 20-21=-187/200, 19-20=-187/200, 17-19=-187/200
WEBS 9-25=-281/126, 8-26=-111/28, 7-27=-112/74, 6-28=-108/62, 5-29=-109/65, 3-30=-116/56, 10-24=-123/47, 11-23=-106/79, 12-22=-110/68, 13-21=-110/69, 14-20=-111/71, 15-19=-132/62

**NOTES**
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V (IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-9-0 to 1-3-0, Exterior (2) 1-3-0 to 5-4-9, Corner (3) 5-4-9 to 11-4-9, Exterior (2) 11-4-9 to 17-2-4, Corner (3) 17-2-4 to 20-2-4 zone; 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; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 31, 99 lb uplift at joint 17, 58 lb uplift at joint 25, 11 lb uplift at joint 26, 58 lb uplift at joint 27, 47 lb uplift at joint 28, 42 lb uplift at joint 29, 56 lb uplift at joint 30, 32 lb uplift at joint 24, 61 lb uplift at joint 23, 52 lb uplift at joint 22, 54 lb uplift at joint 21, 50 lb uplift at joint 20, 50 lb uplift at joint 19 and 99 lb uplift at joint 17.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


August 2,2021



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| J21-006507 | B02 | Roof Special | 11 | 1 | I47256873<br>Job Reference (optional) |

Run: 8.43 S Jul 16 2021 Print: 8.430 S Jul 16 2021 MiTek Industries, Inc. Mon Aug 02 08:38:09 Page: 1
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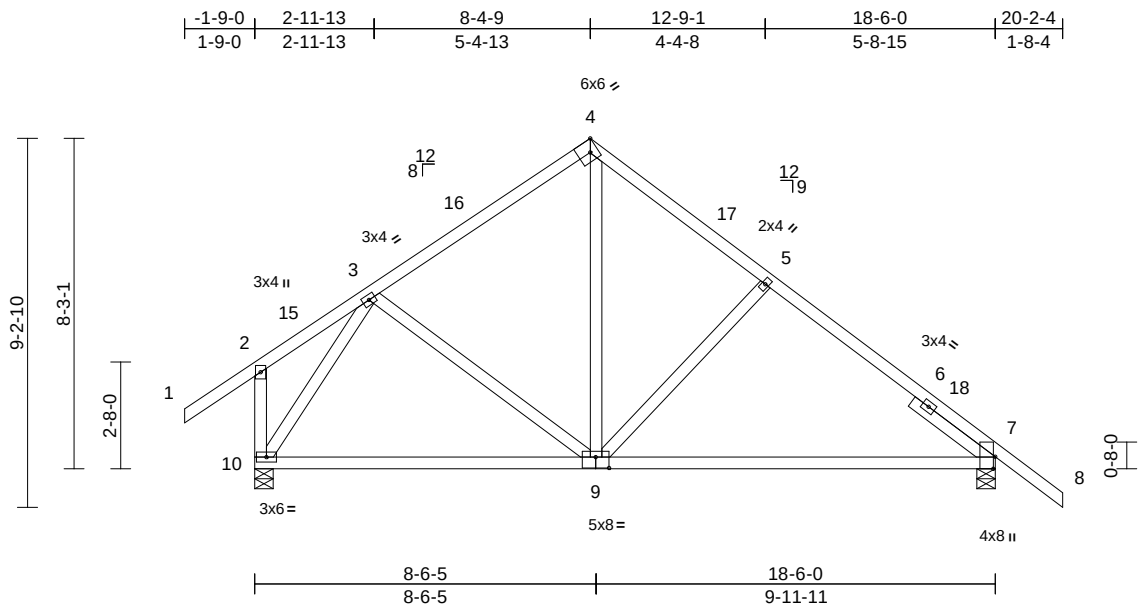


Scale = 1:57.6

Plate Offsets (X, Y): [4:0-2-5,Edge], [7:0-3-10,Edge], [9:0-4-0,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 30.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.15 | 9-13 | >999 | 240 | MT20 | 197/144 |
| (Roof Snow = 30.0) | | Lumber DOL | 1.15 | BC | 0.64 | Vert(TL) | -0.38 | 9-13 | >576 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.40 | Horiz(TL) | -0.01 | 7 | n/a | n/a | | |
| BCLL | 0.0 | Code | IRC2012/TPI2007 | Matrix-AS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 86 lb | FT = 10% |

**LUMBER**
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 -- 2-6-0

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 7=1051/0-5-8, 10=1071/0-5-8
Max Horiz 10=-270 (LC 8)
Max Uplift 7=-134 (LC 11), 10=-124 (LC 10)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/84, 2-3=-99/136, 3-4=-779/174, 4-5=-802/185, 5-7=-968/169, 7-8=0/81, 2-10=-244/191
BOT CHORD 7-10=-98/775
WEBS 3-9=-52/156, 4-9=-72/454, 5-9=-353/214, 3-10=-903/114

**NOTES**
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V (IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 1-3-0 to 4-3-0, Interior (1) 4-3-0 to 8-4-9, Exterior (2) 8-4-9 to 14-4-9, Interior (1) 14-4-9 to 20-2-4, Exterior (2) 20-2-4 to 23-2-4 zone; 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; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.10
3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 10 and 134 lb uplift at joint 7.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


August 2,2021



MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017