Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	A	Truss	9	1	Job Reference (optional)

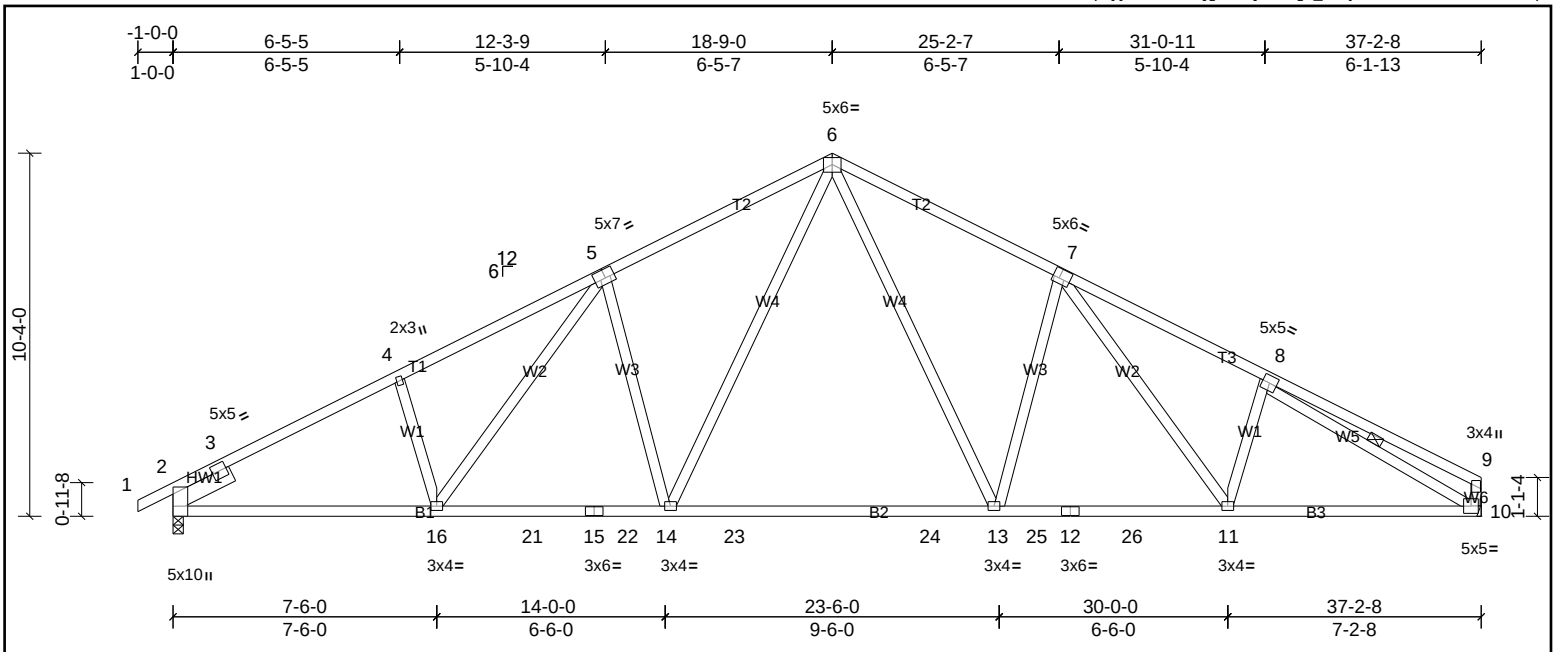


Plate Offsets (X, Y): [5:0-3-4,0-3-0], [7:0-2-4,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.31	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.57	13-14	>777	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 222 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 5-1:2x4 SP SS
BOT CHORD	2x4 SP No.1 *Except* 12-10:2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 8-10

REACTIONS (lb/size) 2=1543/0-3-8, (min. 0-1-13), 10=1482/ Mechanical, (min. 0-1-8)
Max Horiz 2=176 (LC 14)
Max Uplift 2=-224 (LC 10), 10=-198 (LC 11)

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

TOP CHORD	2-3=-365/172, 3-4=-2360/649, 4-5=-2252/716, 5-6=-2071/717, 6-7=-2037/709, 7-8=-2256/709, 8-9=-342/165, 9-10=-290/155
BOT CHORD	2-16=-459/2014, 16-21=-342/1891, 15-21=-342/1891, 15-22=-342/1891, 14-22=-342/1891, 14-23=-153/1420, 23-24=-153/1420, 13-24=-153/1420, 13-25=-333/1854, 12-25=-333/1854, 12-26=-333/1854, 11-26=-333/1854, 10-11=-452/1971
WEBS	5-14=-545/329, 5-16=-127/284, 6-14=-244/863, 7-13=-514/317, 6-13=-229/804, 7-11=-117/292, 8-10=-2085/485

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 2 and 198 lb uplift at joint 10.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	A1	Truss	4	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:39 — Page: 1

ID:gyzn?BERTdGKxxvCvb_kZbyymE8-ZnREe0190k9luptSi8KJwbCmzhhae_TlizgIUziuVo

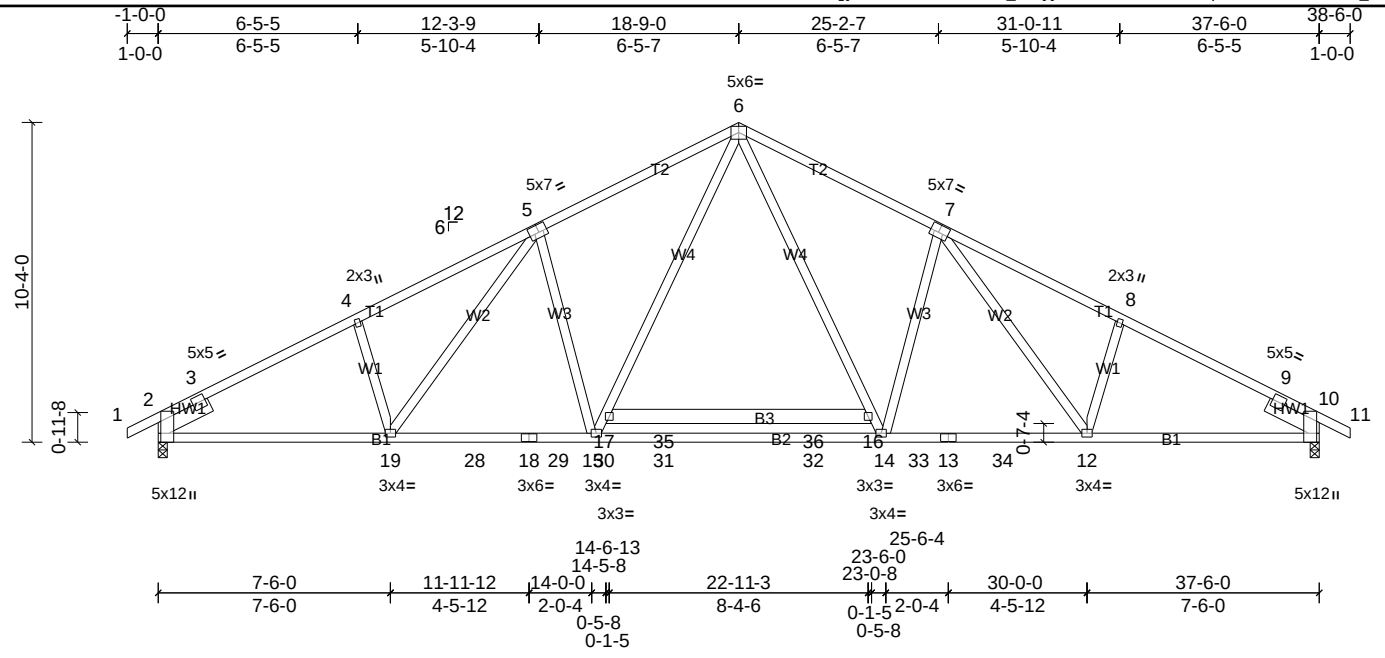


Plate Offsets (X, Y): [2:0-7-9,Edge], [2:0-0-0,0-0-0], [5:0-3-4,0-3-0], [7:0-3-4,0-3-0], [10:0-7-9,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.32	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.63	14-15	>717	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.16	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 238 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 5-1,7-11:2x4 SP SS
BOT CHORD	2x4 SP SS *Except* 17-16:2x6 SP No.2, 18-13:2x4 SP No.1
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-17

REACTIONS (lb/size) 2=1647/0-3-8, (min. 0-2-0), 10=1647/0-3-8, (min. 0-2-0)
Max Horiz 2=-172 (LC 11)
Max Uplift 2=-173 (LC 10), 10=-173 (LC 11)
Max Grav 2=1676 (LC 2), 10=1676 (LC 2)

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

TOP CHORD	3-4=-2664/561, 4-5=-2552/628, 5-6=-2408/618, 6-7=-2408/618, 7-8=-2552/628, 8-9=-2664/560
BOT CHORD	2-19=-365/2279, 19-28=-237/2187, 18-28=-237/2187, 18-29=-237/2187, 15-29=-237/2187, 15-30=-31/1658, 30-31=-31/1658, 31-32=-31/1658, 14-32=-31/1658, 14-33=-237/2187, 13-33=-237/2187, 13-34=-237/2187, 12-34=-237/2187, 10-12=-365/2279
WEBS	5-15=-535/334, 5-19=-142/256, 15-17=-255/863, 6-17=-190/1008, 7-14=-535/334, 6-16=-190/1008, 14-16=-255/863, 7-12=-142/256

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 10 and 173 lb uplift at joint 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	A2	Truss	6	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:39 — Page: 1

ID:gyzn?BERTdGKxxvCvb_kZbyymE8-ZnREe0190k9luptSi8KJwbCmzhhadyTlizgIUziuVo

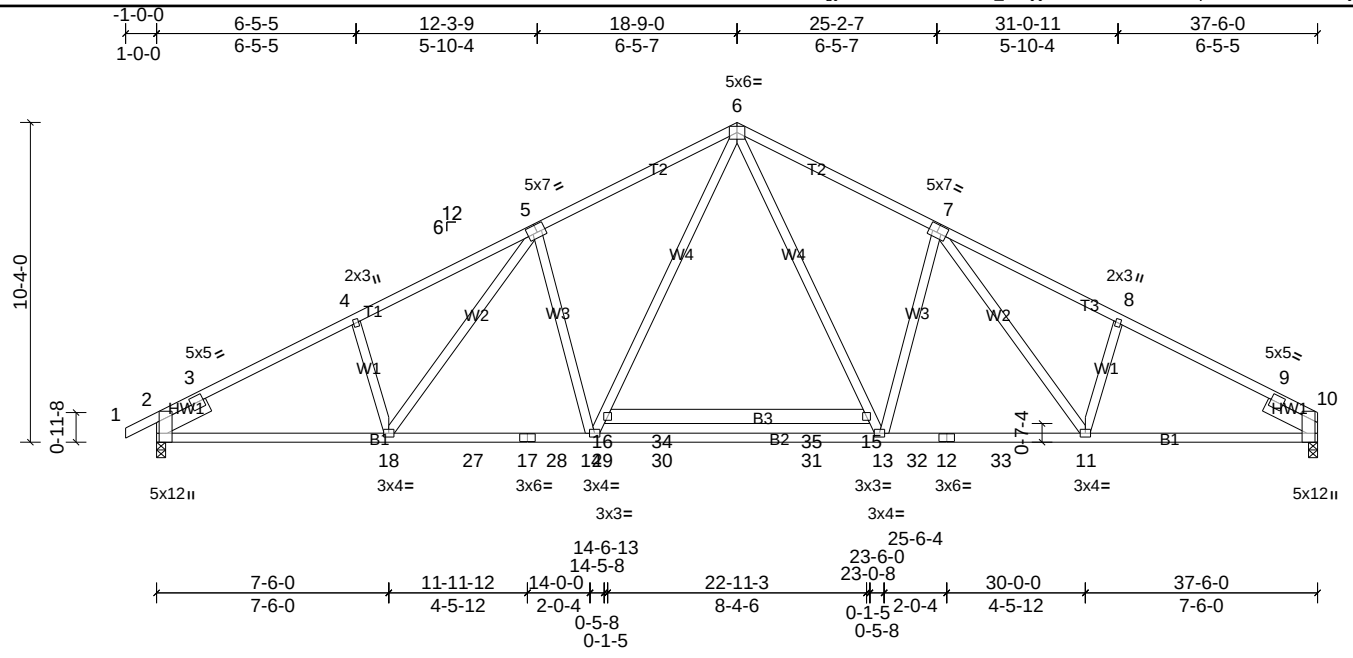


Plate Offsets (X, Y): [2:0-7-9,Edge], [5:0-3-4,0-3-0], [7:0-3-4,0-3-0], [10:0-7-9,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.32	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.63	13-14	>718	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.16	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 236 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 1-5,7-10:2x4 SP SS
BOT CHORD	2x4 SP SS *Except* 17-12:2x4 SP No.1, 16-15:2x6 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 15-16

REACTIONS (lb/size) 2=1648/0-3-8, (min. 0-2-0), 10=1586/0-3-8, (min. 0-1-15)
Max Horiz 2=181 (LC 14)
Max Uplift 2=-173 (LC 10), 10=-150 (LC 11)
Max Grav 2=1676 (LC 2), 10=1625 (LC 2)

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

TOP CHORD	3-4=-2665/561, 4-5=-2553/629, 5-6=-2409/619, 6-7=-2410/619, 7-8=-2559/633, 8-9=-2670/564
BOT CHORD	2-18=-401/2280, 18-27=-274/2188, 17-27=-274/2188, 17-28=-274/2188, 14-28=-274/2188, 14-29=-66/1659, 29-30=-66/1659, 30-31=-66/1659, 13-31=-66/1659, 13-32=-274/2189, 12-32=-274/2189, 12-33=-274/2189, 11-33=-274/2189, 10-11=-405/2285
WEBS	5-18=-142/256, 5-14=-535/334, 14-16=-255/863, 6-16=-190/1008, 6-15=-191/1010, 13-15=-256/865, 7-13=-537/335, 7-11=-143/263

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 2 and 150 lb uplift at joint 10.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	A2G	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:39 — Page: 1

ID:88XACXF3ExOBZ5TOTJVz6pyymE7-ZnREe0190k9luptt Si8KJwbNPztQajwTlizgIUziuVo

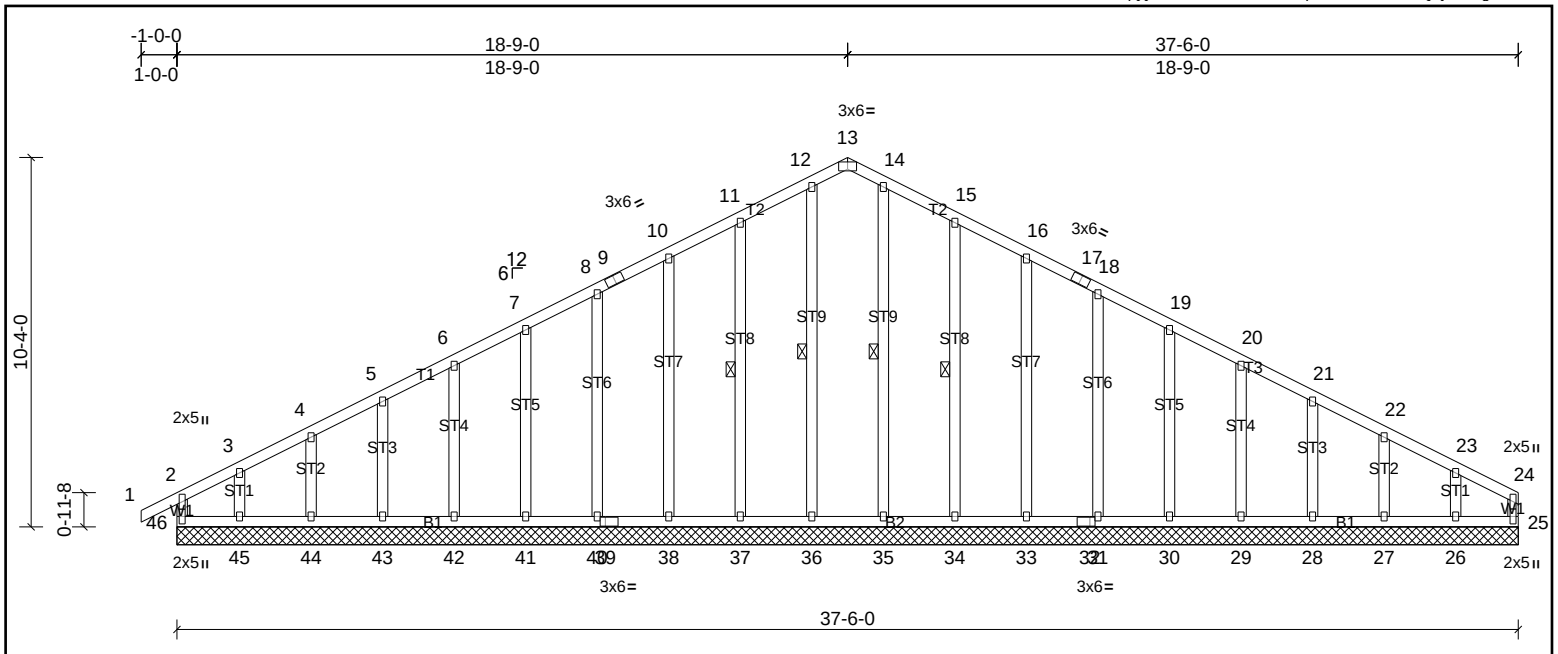


Plate Offsets (X, Y): [13:0-3-0,Edge], [32:0-1-12,0-1-8], [39:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 263 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-36, 14-35, 11-37, 15-34

REACTIONS All bearings 37-6-0.

(lb) - Max Horiz 46=158 (LC 14)

Max Uplift All uplift 100 (lb) or less at joint(s) 25, 27, 28, 29, 30, 31, 33, 34, 37, 38, 40, 41, 42, 43, 44, 46 except 26=-141 (LC 11), 45=-157 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46

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

TOP CHORD 10-11=-108/260, 11-12=-132/326, 12-13=-116/285, 13-14=-116/285, 14-15=-132/326, 15-16=-108/260

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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.
4) All plates are 2x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 46, 25, 37, 38, 40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 45=156, 26=141.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	AG	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:40 — Page: 1

ID:ZjCIrZHyXsmmQYCz8R3gjRyymE4-1z?drM2nn1HcWzS30PfZs88X9NDfJAAczMjDqwziuVn

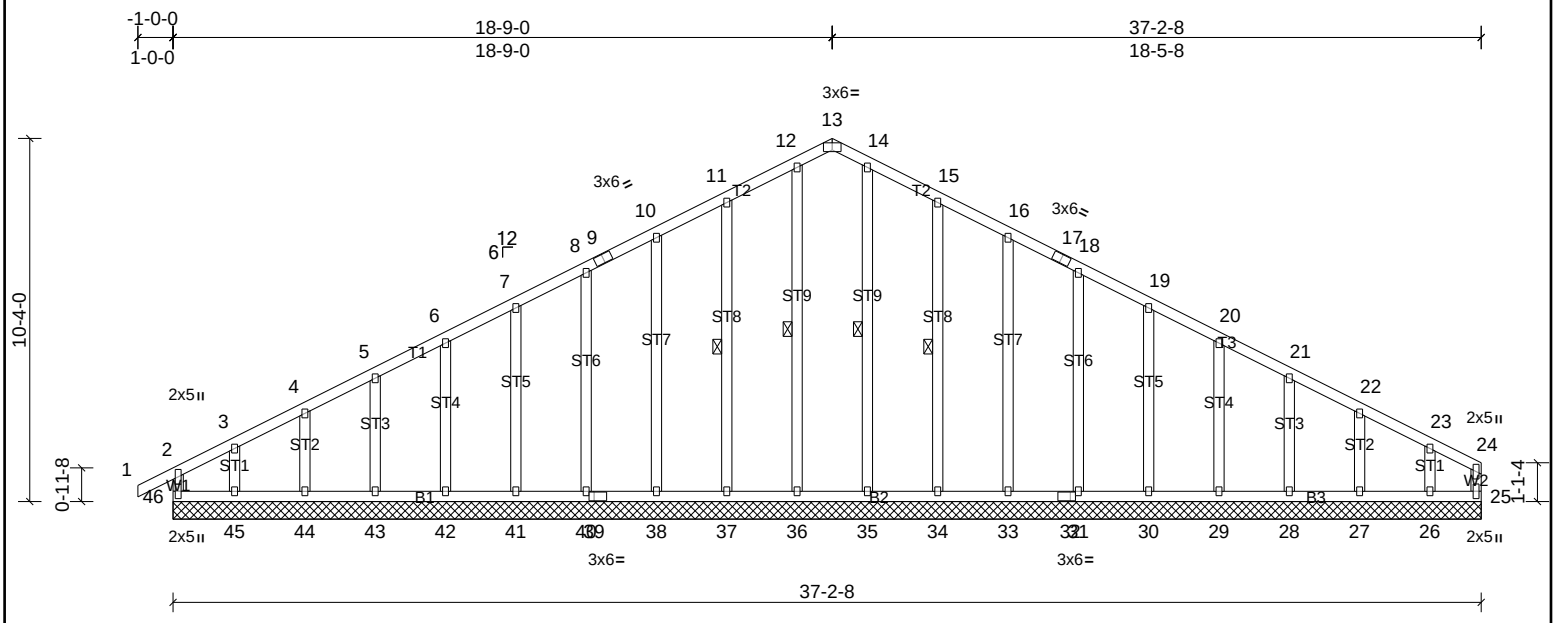


Plate Offsets (X, Y): [13:0-3-0,Edge], [32:0-1-12,0-1-8], [39:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 262 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-36, 14-35, 11-37, 15-34

REACTIONS All bearings 37-2-8.

(lb) - Max Horiz 46=161 (LC 7)

Max Uplift All uplift 100 (lb) or less at joint(s) 25, 27, 28, 29, 30, 31, 33, 34, 37, 38, 40, 41, 42, 43, 44, 46 except 26=-158 (LC 11), 45=-157 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46

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

TOP CHORD 10-11=-110/266, 11-12=-134/332, 12-13=-118/290, 13-14=-118/290, 14-15=-134/332, 15-16=-110/266

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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.
4) All plates are 2x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 46, 25, 37, 38, 40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 45=156, 26=158.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	B	Truss	6	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:40 — Page: 1

ID:dL5YQtGh?FW2AF2a100Ce0yymE6-1z?drM2nn1HcWzS30PfZs88R_N?yJ90czMjDqwziuVn

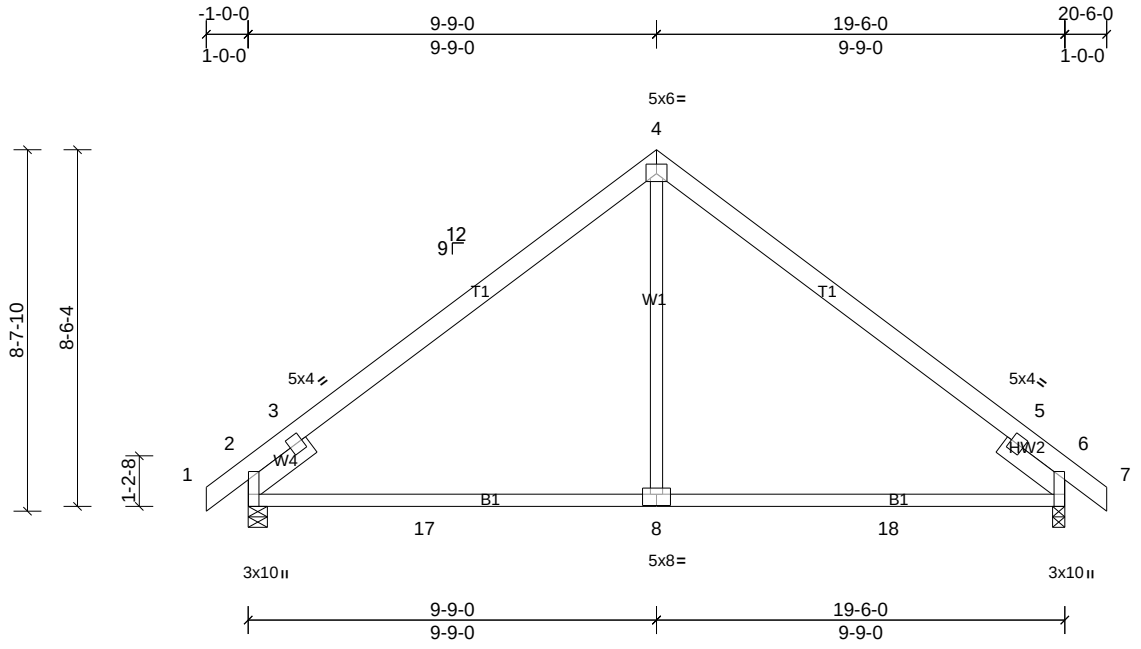


Plate Offsets (X, Y): [2:0-7-10,Edge], [6:0-7-10,Edge], [6:0-0-0,0-0-0], [8:0-4-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.17	8-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.30	8-11	>778	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	-0.07	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 114 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 2=840/0-5-8, (min. 0-1-8), 6=840/0-3-8, (min. 0-1-8)
Max Horiz 2=-208 (LC 8)
Max Uplift 2=-111 (LC 10), 6=-111 (LC 11)
Max Grav 2=932 (LC 17), 6=932 (LC 18)

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

TOP CHORD	2-3=-494/0, 3-4=-962/190, 4-5=-962/190, 5-6=-419/0
BOT CHORD	2-17=-263/716, 8-17=-14/716, 8-18=-14/716, 6-18=-14/716
WEBS	4-8=0/540

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 2 and 111 lb uplift at joint 6.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	BG	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:40 — Page: 1

ID:dL5YQtGh?FW2AF2a100Ce0yymE6-1z?drM2nn1HcWzS30PfZs88X2NDVJBbczMjDqwziuVn

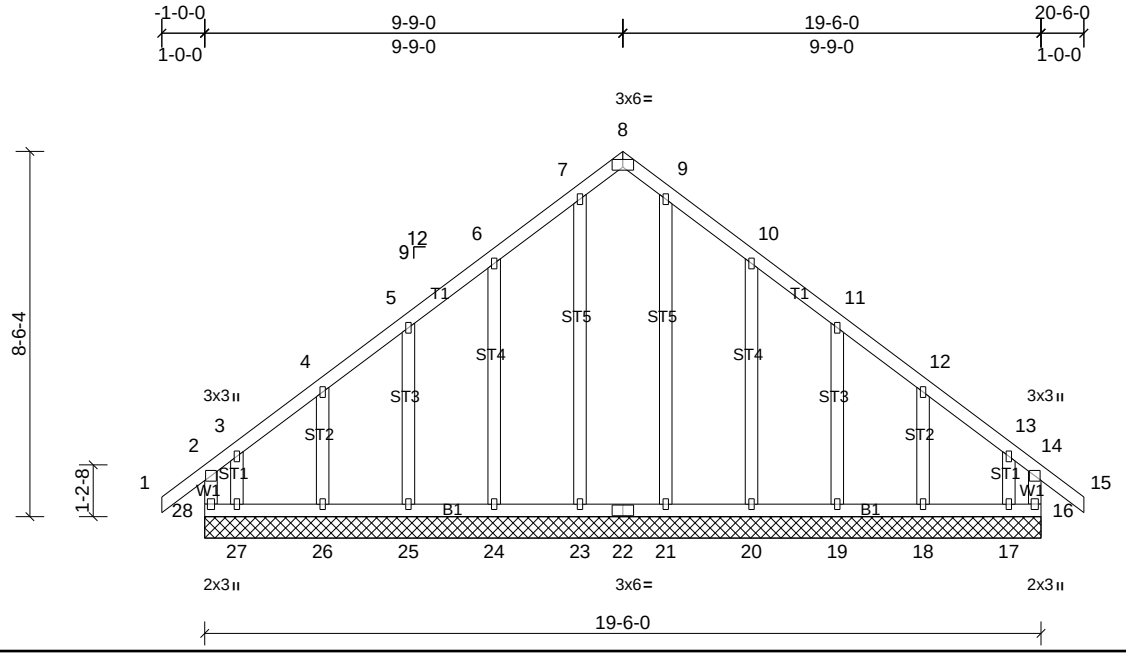


Plate Offsets (X, Y): [8:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 135 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 19-6-0.

(lb) - Max Horiz 28=246 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 8, 18, 19, 20, 21, 23, 24, 25, 26 except 16=-208 (LC 7), 17=-194 (LC 6), 27=-242 (LC 7), 28=-275 (LC 6)

Max Grav All reactions 250 (lb) or less at joint(s) 16, 18, 19, 20, 21, 23, 24, 25, 26 except 8=295 (LC 11), 17=255 (LC 9), 27=306 (LC 8), 28=291 (LC 9)

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

TOP CHORD 6-7=-212/291, 7-8=-247/338, 8-9=-247/338, 9-10=-212/291

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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.
4) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 23, 21, 24, 25, 26, 20, 19, 18 except (jt=lb) 28=274, 16=208, 27=241, 17=193.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	BL	Truss	1	2	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:41 — Page: 1

ID:zIuRTaJqpn8KH0xYqZcNL4yymE1-V9Z??i3PYLPT871FZ6BoPLgdynOU2StmC0SmMMziuVm

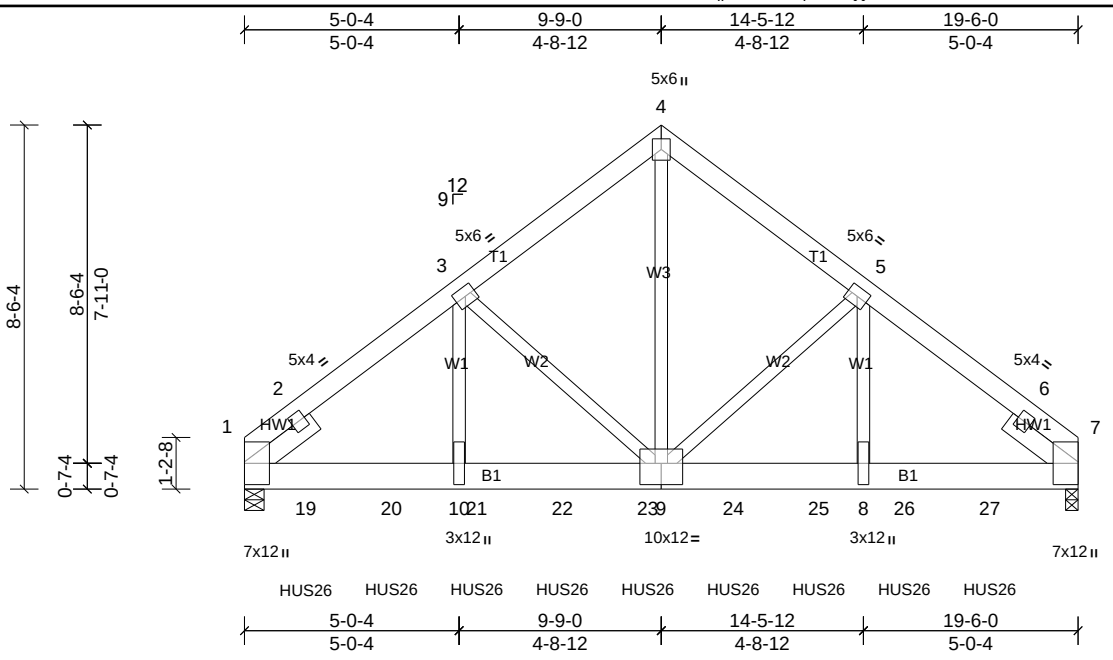


Plate Offsets (X, Y): [9:0-6-0,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.09	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.17	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 335 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x8 SP No.1
WEBS	2x4 SP No.3 *Except* 9-4:2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0

BRACING

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

REACTIONS (lb/size) 1=7568/0-5-8, (min. 0-4-7), 7=7147/0-3-8, (req. 0-4-3)
Max Horiz 1=-189 (LC 6)
Max Uplift 1=-1063 (LC 8), 7=-1003 (LC 9)

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

TOP CHORD	1-2=-6641/880, 2-3=-8596/1233, 3-4=-6377/995, 4-5=-6377/995, 5-6=-8537/1226, 6-7=-5506/750
BOT CHORD	1-19=-1006/6707, 19-20=-1006/6707, 10-20=-1006/6707, 10-21=-1006/6707, 21-22=-1006/6707, 22-23=-1006/6707, 9-23=-1006/6707, 9-24=-898/6650, 24-25=-898/6650, 8-25=-898/6650, 8-26=-898/6650, 26-27=-898/6650, 7-27=-898/6650
WEBS	4-9=-1048/7096, 5-9=-2139/456, 5-8=-364/2755, 3-9=-2216/466, 3-10=-372/2825

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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) WARNING: Required bearing size at joint(s) 7 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1063 lb uplift at joint 1 and 1003 lb uplift at joint 7.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 17-5-4 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-7=-60, 11-15=-20
Concentrated Loads (lb)
Vert: 19=-1462 (F), 20=-1462 (F), 21=-1462 (F), 22=-1462 (F), 23=-1462 (F), 24=-1462 (F), 25=-1462 (F), 26=-1462 (F), 27=-1462 (F)

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	CG	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:41 — Page: 1

ID:5XfwdDGJmYevoOdnbkXRBEyymE5-V9Z?2i3PYLPT871FZ6BoPLgjbnZH2fZmC0SmMMziuVm

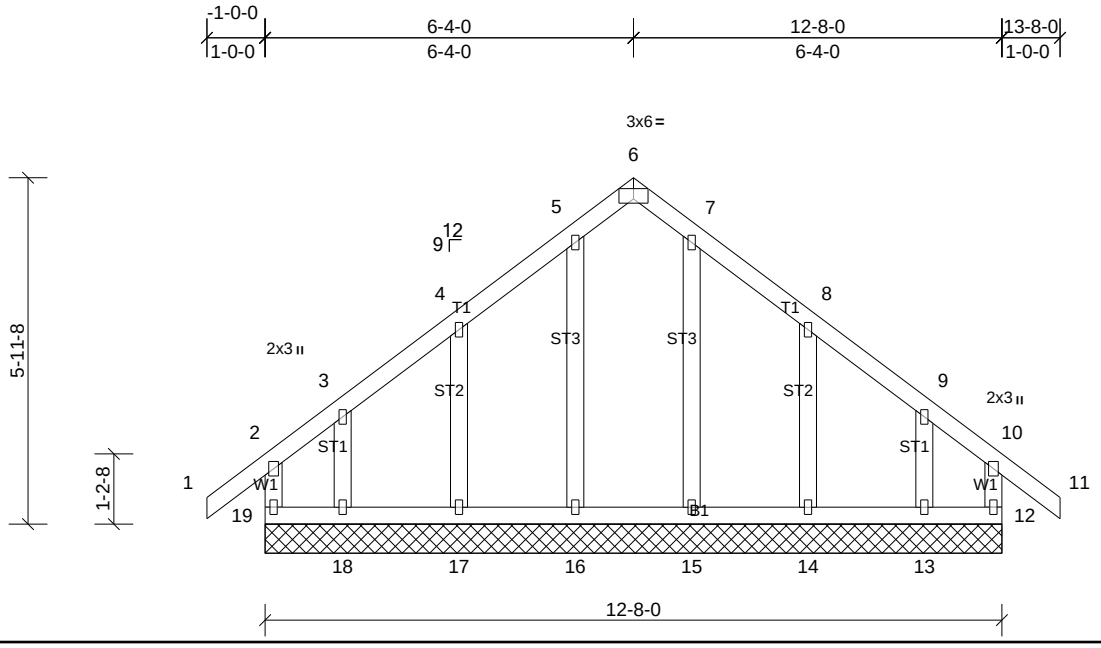


Plate Offsets (X, Y): [6:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 77 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 12-8-0.

(lb) - Max Horiz 19=180 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 12, 14, 17, 19 except 13=-134 (LC 11), 18=-138 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19

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

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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.
4) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 17, 14 except (jt=lb) 18=137, 13=134.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	D	Truss	5	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:41 — Page: 1

ID:Gep4xzPDAx1Ld5zukYE07YyymDw-V9Z??i3PYLPT871FZ6BoPLgfQnVv2e?mC0SmMMziuVm

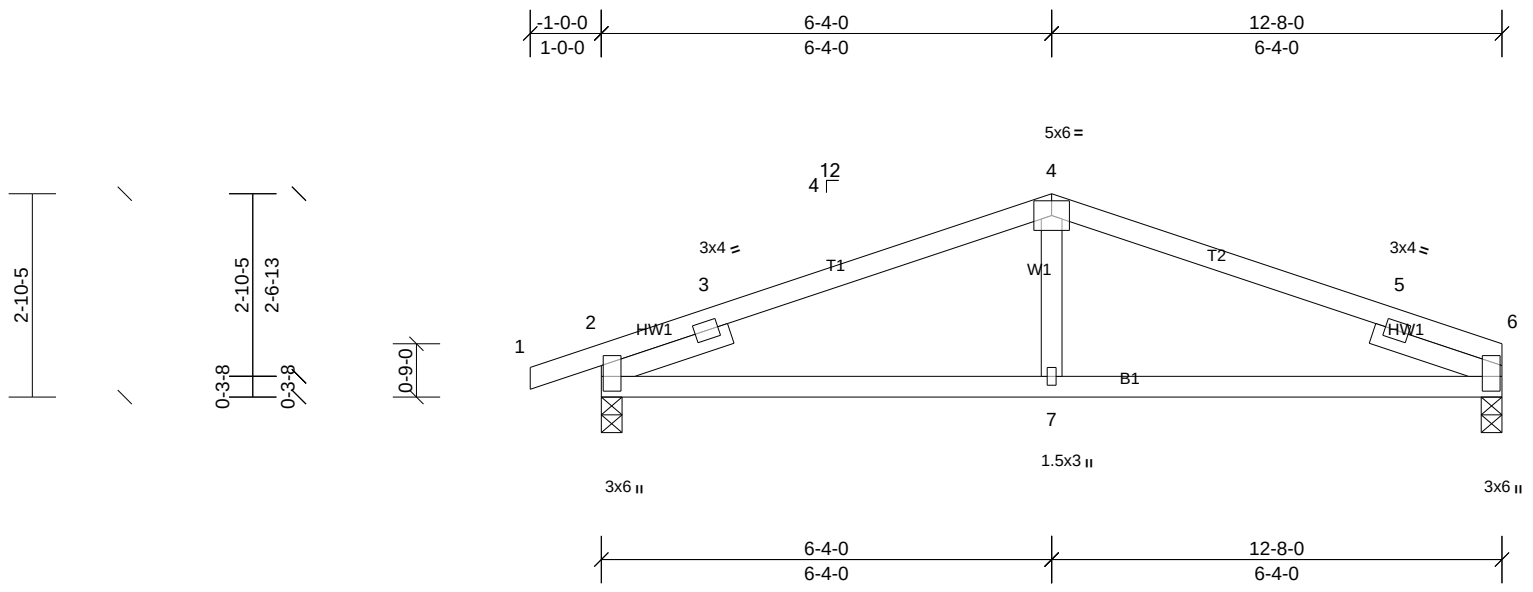


Plate Offsets (X, Y): [2:0-4-5,0-0-5], [6:0-2-8,0-2-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.04	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 50 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0

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.

REACTIONS (lb/size) 2=569/0-3-8, (min. 0-1-8), 6=504/0-3-8, (min. 0-1-8)
Max Horiz 2=48 (LC 14)
Max Uplift 2=-123 (LC 6), 6=-80 (LC 7)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-295/0, 3-4=-727/258, 4-5=-727/257, 5-6=-299/0
BOT CHORD 2-7=-178/690, 6-7=-175/690

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 6 and 123 lb uplift at joint 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	DG	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:42 — Page: 1

ID:KGhKWINzeJndNnpVc7CY27yymDy-V9Z?2i3PYLPT871FZ6BoPLgkXnZK2ftmC0SmMMziuVm

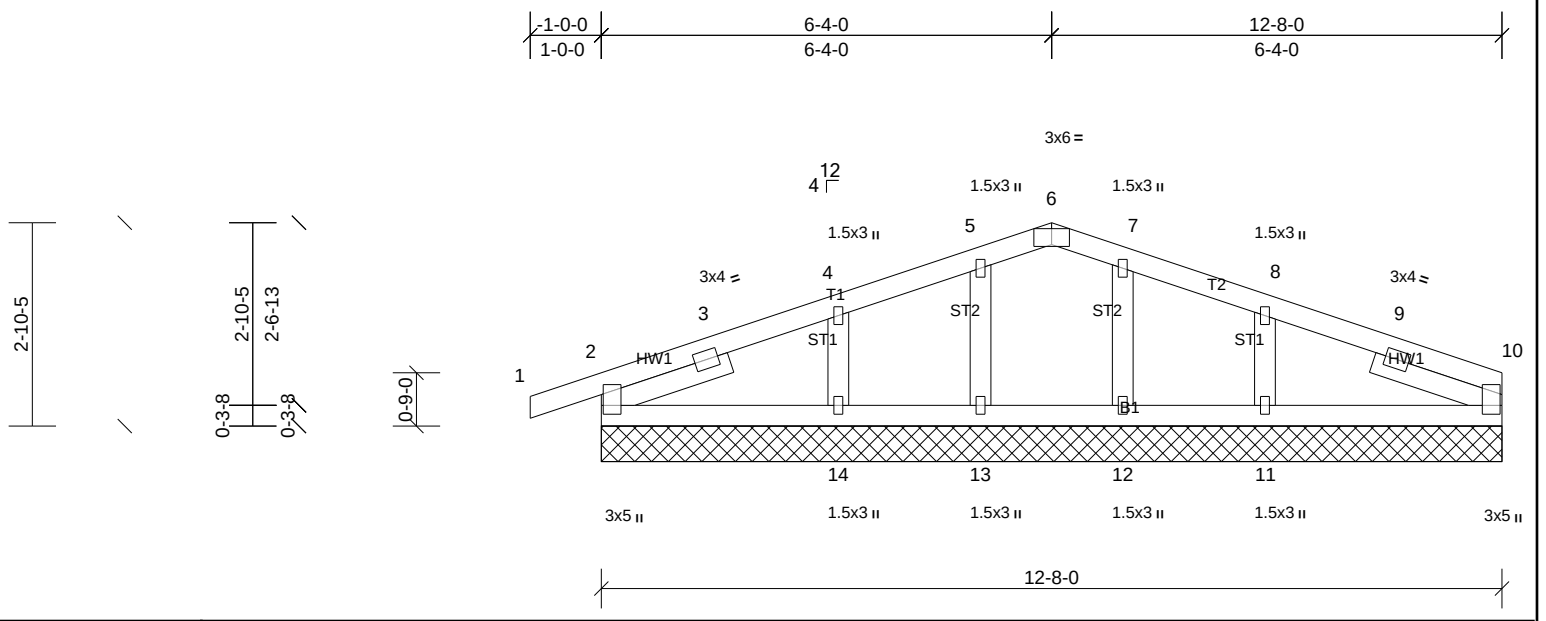


Plate Offsets (X, Y): [2:0-1-8,0-0-5], [6:0-3-0,Edge], [10:0-3-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 56 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0

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.

REACTIONS All bearings 12-8-0.

(lb) - Max Horiz 2=48 (LC 14), 15=48 (LC 14)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 10, 11, 13, 14, 15, 19

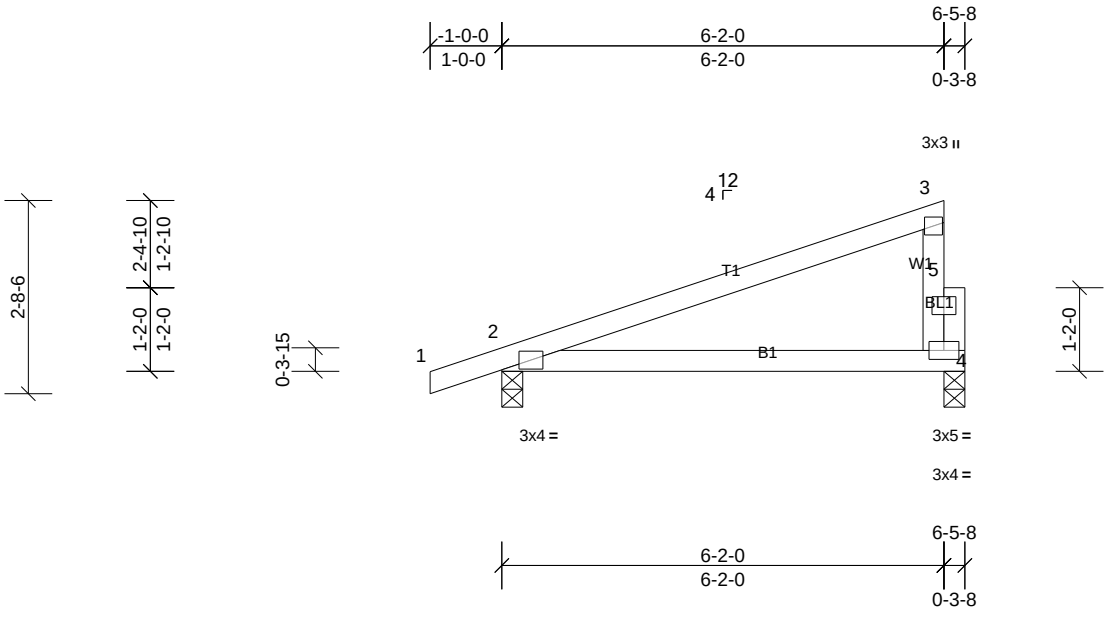
Max Grav All reactions 250 (lb) or less at joint(s) 2, 10, 12, 13, 14, 15, 19 except 11=260 (LC 22)

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

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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.
4) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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 100 lb uplift at joint(s) 2, 10, 13, 14, 11, 2, 10.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	M	Truss	7	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	0.05	4-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.10	4-8	>778	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (lb/size) 2=311/0-3-8, (min. 0-1-8), 4=233/0-3-8, (min. 0-1-8)
Max Horiz 2=99 (LC 6)
Max Uplift 2=-82 (LC 6), 4=-58 (LC 10)

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

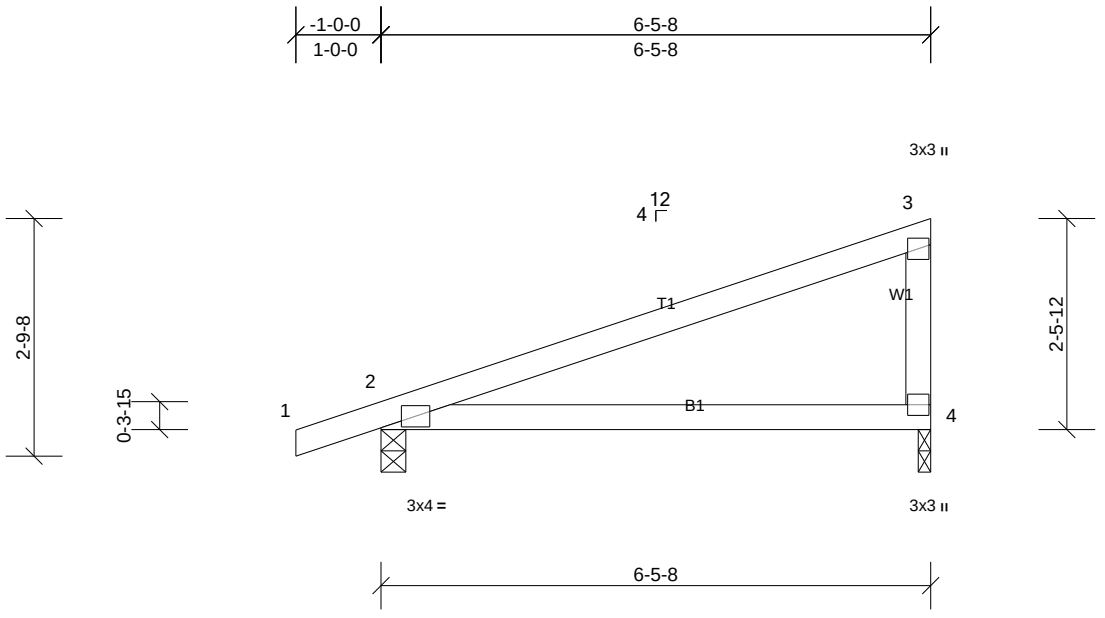
NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 2 and 58 lb uplift at joint 4.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	M1	Truss	4	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:42 — Page: 1

ID:s47yJyNLt0emldEJ3PhJWwyymDz-zL7NG231JfXKlHcS7qi1xZDpXBqPn6jvRgCKvpziuVl



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.06	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.11	4-7	>661	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 24 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3

BRACING

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

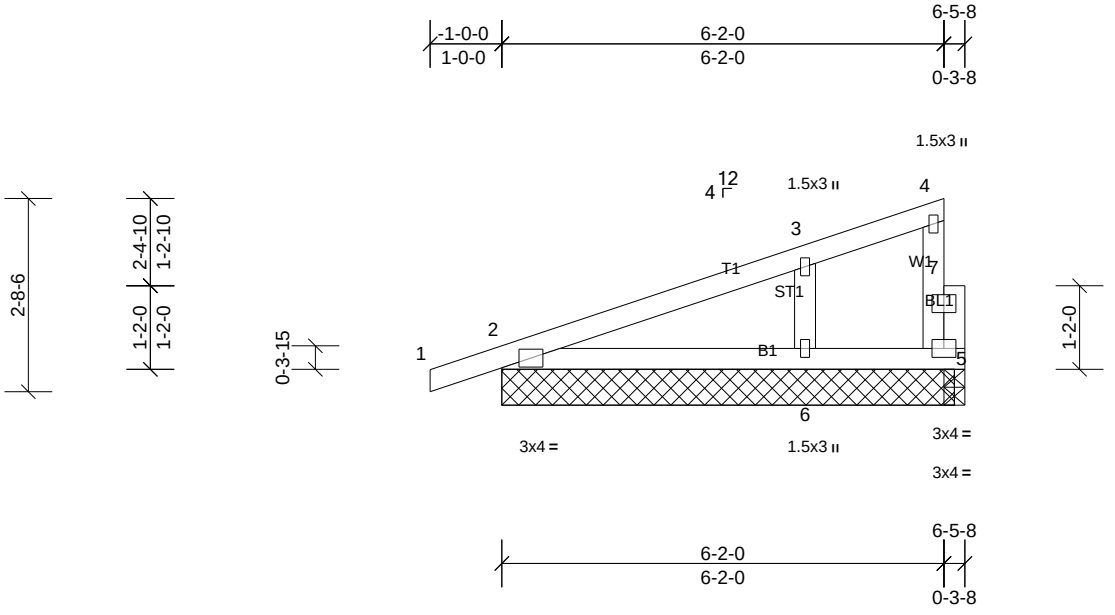
REACTIONS (lb/size) 2=317/0-3-8, (min. 0-1-8), 4=248/0-1-12, (min. 0-1-8)
Max Horiz 2=103 (LC 6)
Max Uplift 2=-83 (LC 6), 4=-64 (LC 10)

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

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 4 and 83 lb uplift at joint 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	MG	Truss	1	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.01	6-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	6-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 27 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 6-3-12. except 5=0-3-8

(lb) - Max Horiz 2=96 (LC 9), 8=96 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 5, 6, 8
Max Grav All reactions 250 (lb) or less at joint(s) 2, 5, 8 except 6=337 (LC 1)

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

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Truss designed for wind loads in the plane of the truss only.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 6, 2.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	P	Truss	7	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:42 — Page: 1

ID:KGhKWINzeJndNnpVc7CY27yymDy-zL7NG231JfXKlHcS7qi1xZDqfBrBn_LvRgCKvpziuVl

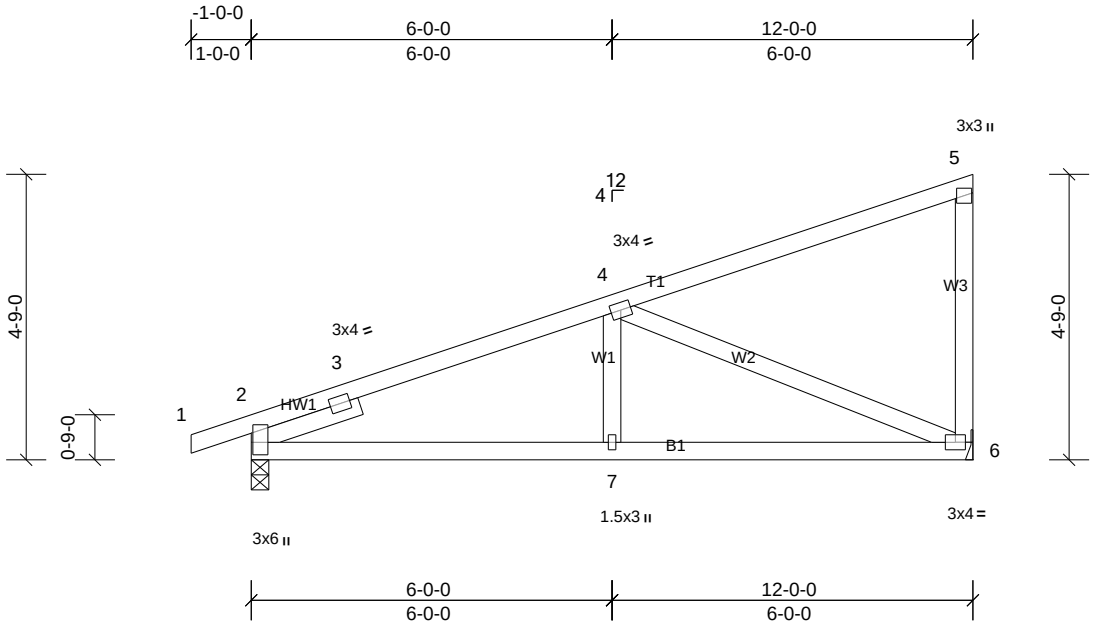


Plate Offsets (X, Y): [2:0-4-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 60 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-11-0

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=537/0-3-8, (min. 0-1-8), 6=472/ Mechanical, (min. 0-1-8)
Max Horiz 2=178 (LC 6)
Max Uplift 2=-108 (LC 6), 6=-129 (LC 10)

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

TOP CHORD	2-3=-280/0, 3-4=-654/154
BOT CHORD	2-7=-283/661, 6-7=-283/661
WEBS	4-6=-695/299

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2 and 129 lb uplift at joint 6.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	P1	Truss	1	1	Job Reference (optional)

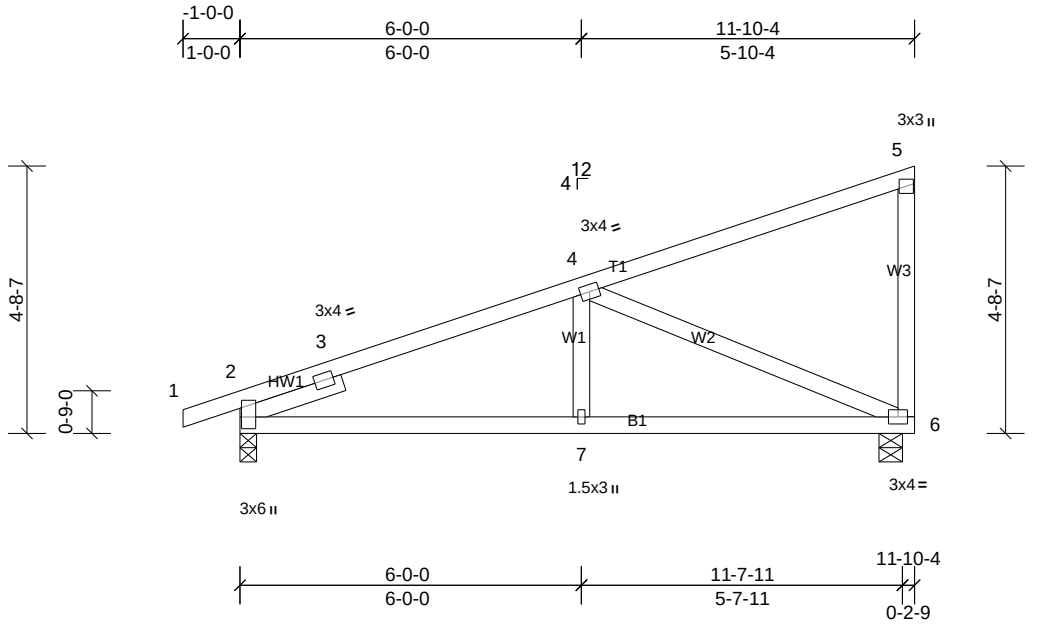


Plate Offsets (X, Y): [2:0-4-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.07	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 59 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-11-0

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=531/0-3-8, (min. 0-1-8), 6=466/0-4-15, (min. 0-1-8)
Max Horiz 2=192 (LC 9)
Max Uplift 2=-124 (LC 6), 6=-112 (LC 10)

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

TOP CHORD	2-3=-280/0, 3-4=-638/227
BOT CHORD	2-7=-185/645, 6-7=-185/645
WEBS	4-6=-681/283

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 112 lb uplift at joint 6.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	PL	Truss	1	1	Job Reference (optional)

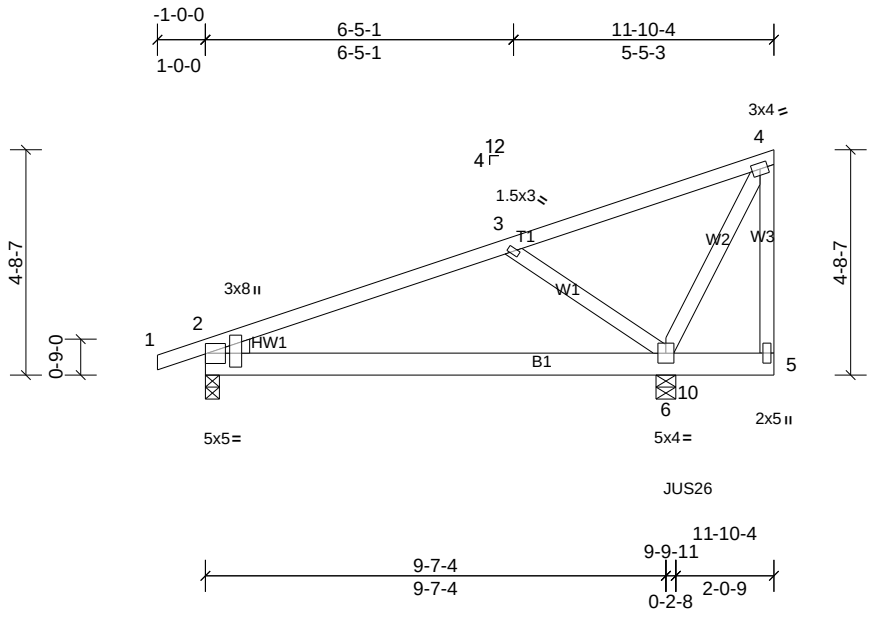


Plate Offsets (X, Y): [2:Edge,0-2-6], [2:0-3-5,0-6-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.05	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.10	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 67 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.2

BRACING

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

REACTIONS (lb/size) 2=406/0-3-8, (min. 0-1-8), 6=1075/0-4-15, (min. 0-1-8)
Max Horiz 2=176 (LC 4)
Max Uplift 2=-89 (LC 19), 6=-251 (LC 8)

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

TOP CHORD	2-3=-343/59
BOT CHORD	2-6=-157/287
WEBS	3-6=-447/229

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 2 and 251 lb uplift at joint 6.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent at 10-0-12 from the left end to connect truss(es) to front face of bottom chord.
7) Fill all nail holes where hanger is in contact with lumber.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-484 (F)

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V1	Truss	2	1	Job Reference (optional)

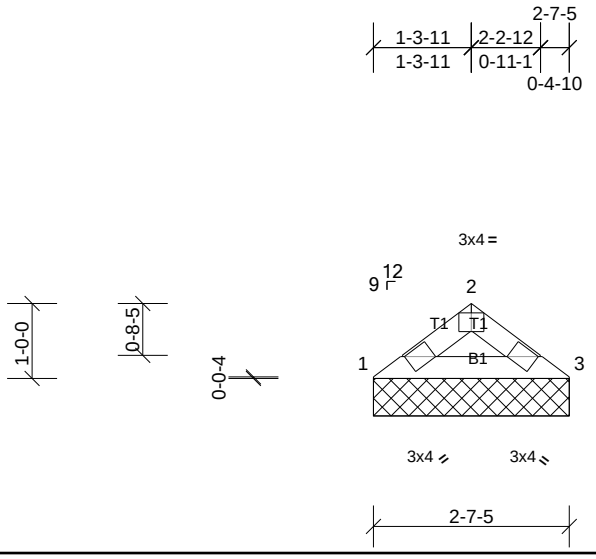


Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=104/2-7-5, (min. 0-1-8), 3=104/2-7-5, (min. 0-1-8)
Max Horiz 1=-21 (LC 8)
Max Uplift 1=-13 (LC 10), 3=-13 (LC 11)

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

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 13 lb uplift at joint 3.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V2	Truss	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:43 — Page: 1

ID:ZjCIrZHyXsmmQYCz8R3gjRyymE4-RYhlTO4f3yfBNRBehXDGUml3faEdWZz2gKxtRFziuVk

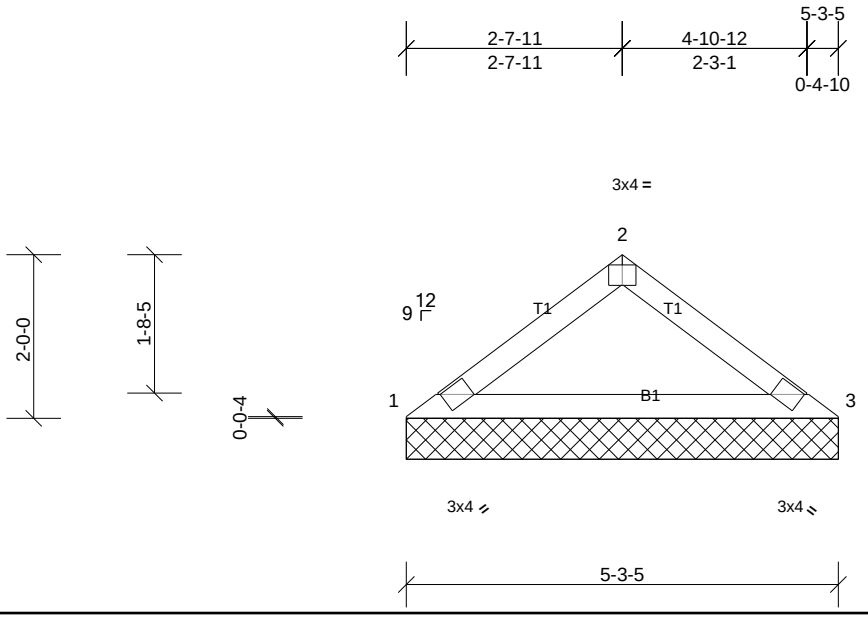


Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 16 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-3-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=211/5-3-5, (min. 0-1-8), 3=211/5-3-5, (min. 0-1-8)
Max Horiz 1=-47 (LC 8)
Max Uplift 1=-26 (LC 10), 3=-26 (LC 11)

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

TOP CHORD	1-2=-316/76
BOT CHORD	1-3=-51/251

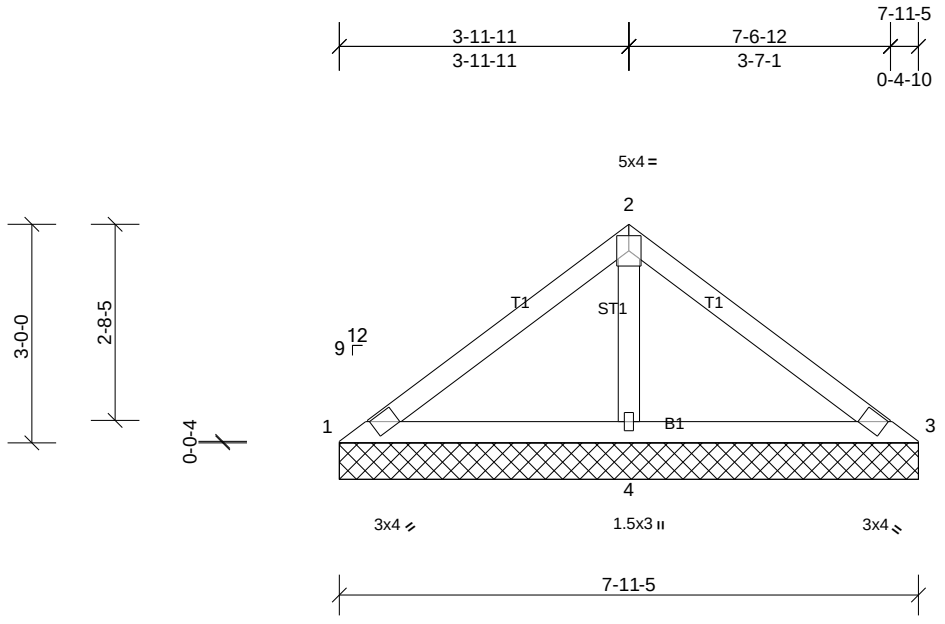
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1 and 26 lb uplift at joint 3.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V3	Truss	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:43 — Page: 1

ID:ZjClrZHyXsmmQYCz8R3gjRyymE4-RYhlTO4f3yfBNRBehXDGUml3zaEKWYY2gKxtRFziuVk



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 7-11-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=48/7-11-5, (min. 0-1-8), 3=48/7-11-5, (min. 0-1-8), 4=539/7-11-5, (min. 0-1-8)

Max Horiz 1=-73 (LC 6)

Max Uplift 1=-4 (LC 22), 3=-11 (LC 6), 4=-87 (LC 10)

Max Grav 1=75 (LC 21), 3=75 (LC 22), 4=539 (LC 1)

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

WEBS 2-4=-396/155

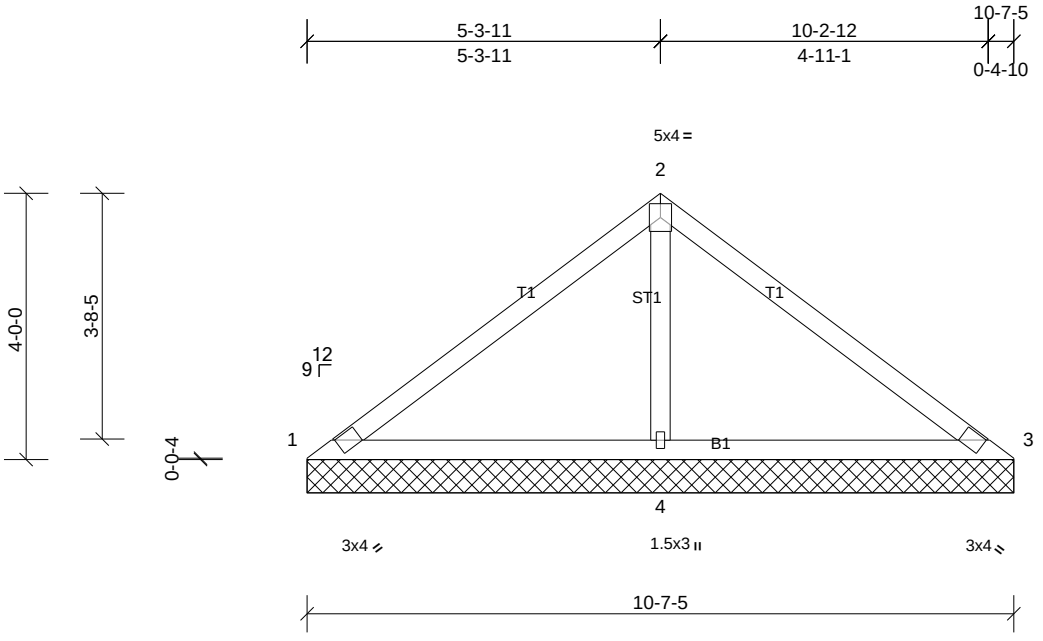
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 11 lb uplift at joint 3 and 87 lb uplift at joint 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V4	Truss	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:43 — Page: 1

ID:ZjCIrZHyXsmmQYCz8R3gjRyymE4-RYhlTO4f3yfBNRBehXDGUml0NaCKWWy2gKxtRFziuVk



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 39 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (lb/size) 1=17/10-7-5, (min. 0-1-8), 3=17/10-7-5, (min. 0-1-8), 4=814/10-7-5, (min. 0-1-8)

Max Horiz 1=99 (LC 7)

Max Uplift 1=-41 (LC 22), 3=-41 (LC 21), 4=-148 (LC 10)

Max Grav 1=66 (LC 21), 3=66 (LC 22), 4=814 (LC 1)

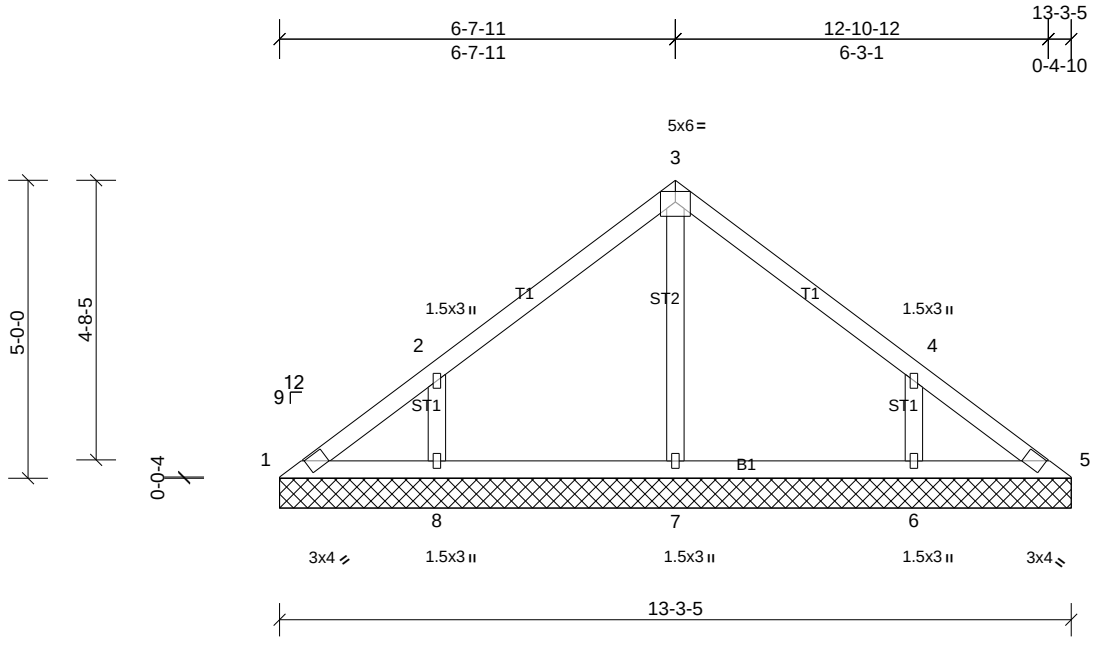
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-2=-119/373, 2-3=-119/373
BOT CHORD	1-4=-307/170, 3-4=-307/170
WEBS	2-4=-632/251

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 41 lb uplift at joint 3 and 148 lb uplift at joint 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V5	Truss	1	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 54 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 13-3-5.

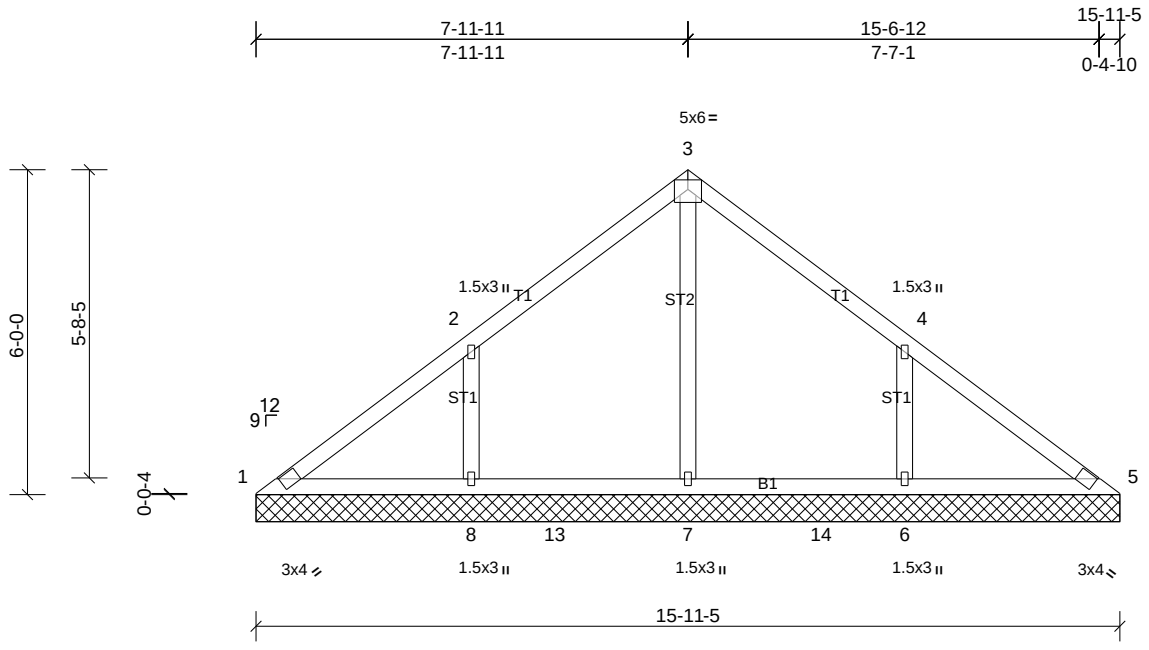
(lb) - Max Horiz 1=-125 (LC 8)
Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 6=-150 (LC 11), 8=-152 (LC 10)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=341 (LC 18), 7=274 (LC 1), 8=344 (LC 17)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-272/196, 4-6=-272/195

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=152, 6=149.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V6	Truss	1	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 67 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 15-11-5.

(lb) - Max Horiz 1=150 (LC 7)
Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 6=-177 (LC 11), 8=-180 (LC 10)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=421 (LC 18), 7=441 (LC 17), 8=424 (LC 17)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-276/4, 2-8=-300/213, 4-6=-300/212

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=179, 6=177.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V7	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:44 — Page: 1

ID:1wmg2vIaHAud1in9i9avGfyymE3-wkF7hk5IqGn2?amqFFkV0_IB1_ZVFxwCu_hQzhziuVj

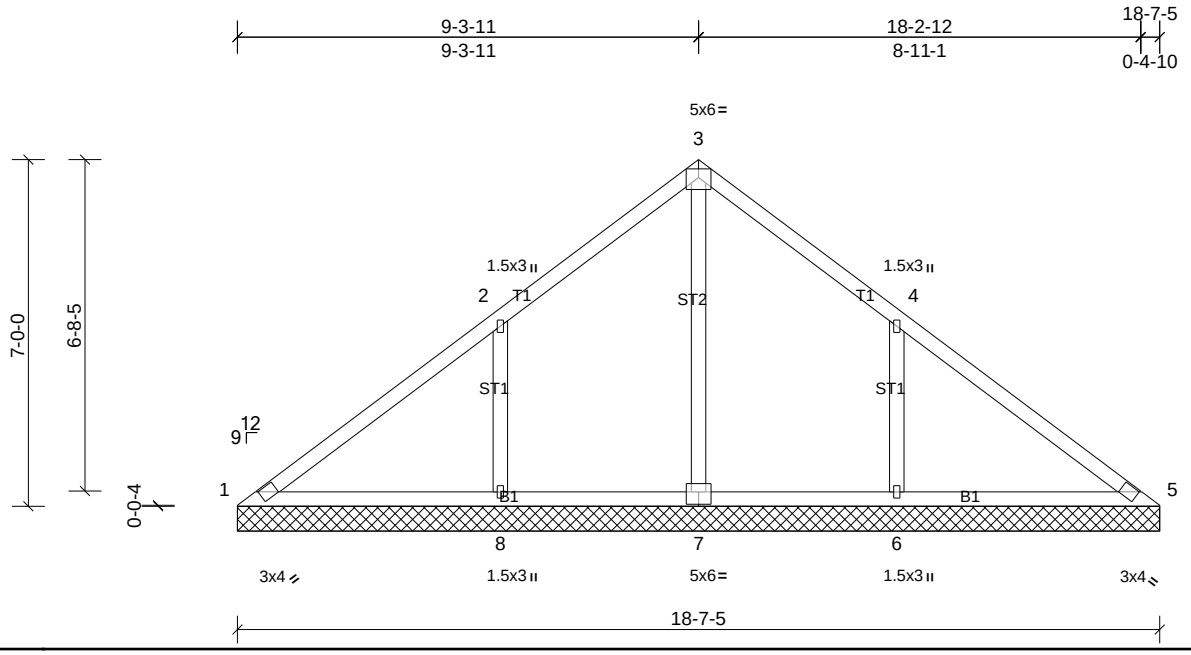


Plate Offsets (X, Y): [7:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 81 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS All bearings 18-7-5.

(lb) - Max Horiz 1=-176 (LC 6)

Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 6=-214 (LC 11), 8=-216 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=541 (LC 18), 7=545 (LC 17), 8=544 (LC 17)

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

TOP CHORD 1-2=-163/315, 4-5=-118/270

WEBS 3-7=-393/11, 2-8=-353/248, 4-6=-353/247

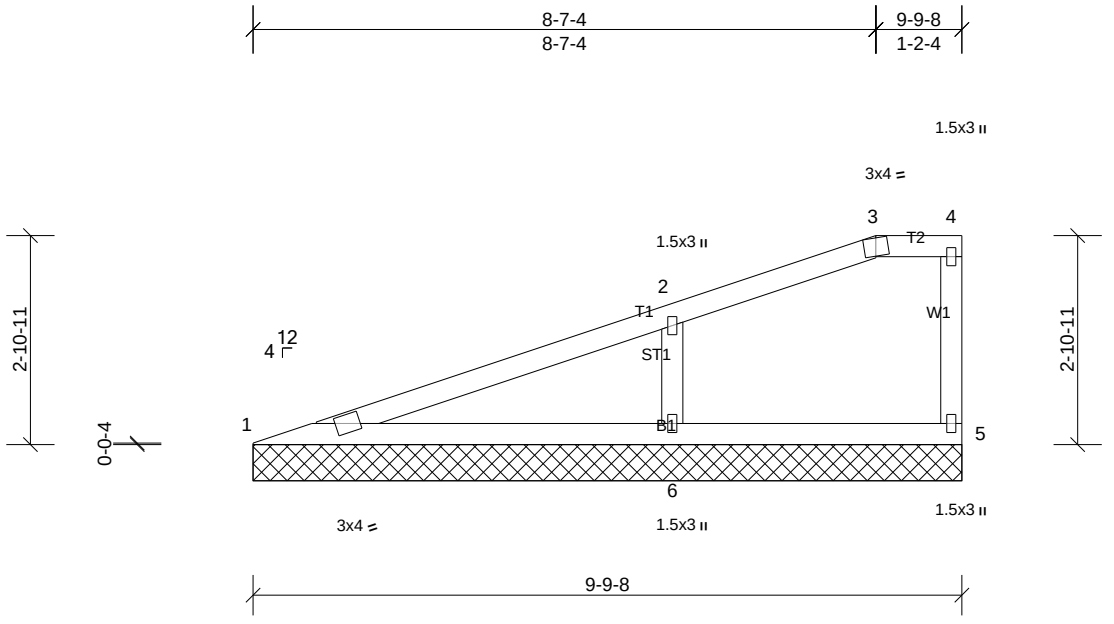
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=216, 6=213.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V8	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:44 — Page: 1

ID:KGhKWINzeJndNnpVc7CY27yymDy-wkF7hk5lqGn2?amqFFkV0_lB4_XrF?9Cu_hQzhziuVj



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 34 lb	FT = 20%

LUMBER

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

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 6-0-0 oc bracing.

REACTIONS (lb/size) 1=189/9-9-8, (min. 0-1-8), 5=90/9-9-8, (min. 0-1-8), 6=493/9-9-8, (min. 0-1-8)

Max Horiz 1=118 (LC 7)

Max Uplift 1=-24 (LC 6), 5=-24 (LC 7), 6=-119 (LC 6)

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

TOP CHORD	1-2=-411/101
BOT CHORD	1-6=-128/384
WEBS	2-6=-331/219

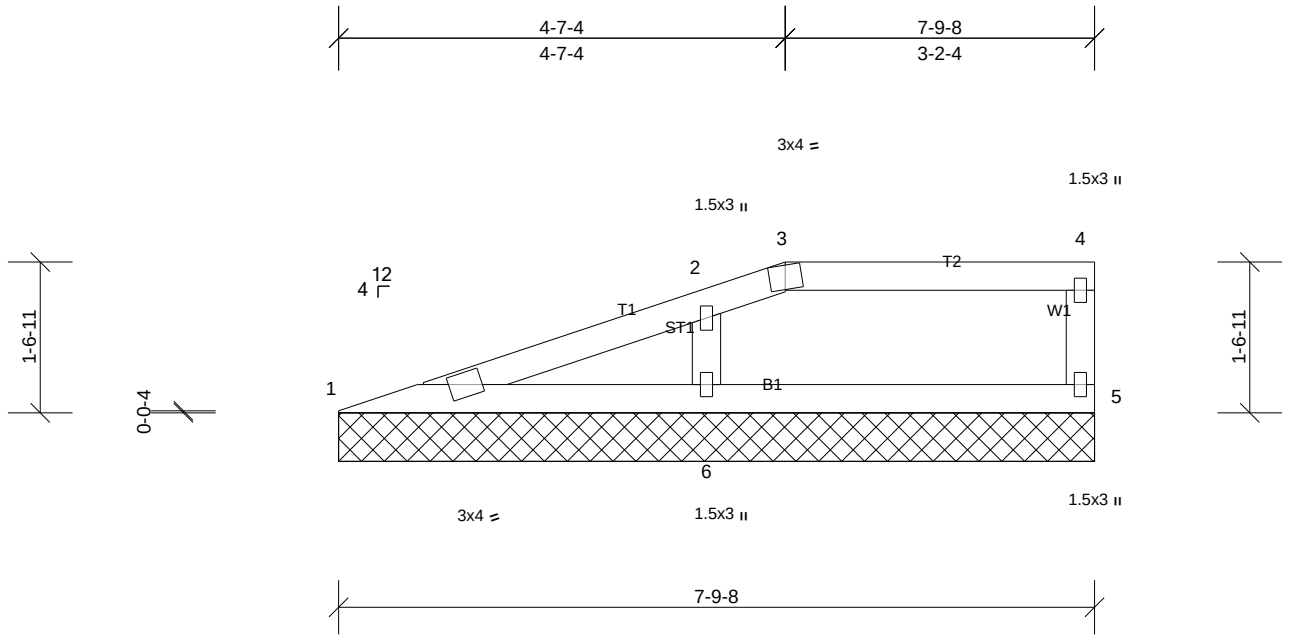
NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Provide adequate drainage to prevent water ponding.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 5, 24 lb uplift at joint 1 and 119 lb uplift at joint 6.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	PBS\PLAN # 5 THE APEX ROOF
72263661	V9	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Joseph Fresquez II — Run: 8.51 S Oct 22 2021 Print: 8.510 S Oct 22 2021 MiTek Industries, Inc. Mon Feb 21 15:07:44 — Page: 1

ID:KGhKWINzeJndNnpVc7CY27yymDy-wkF7hk5IqGn2?amqFFkV0_IEd_a?F0OCu_hQzhziuVj



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 25 lb	FT = 20%

LUMBER

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

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) 1=125/7-9-8, (min. 0-1-8), 5=128/7-9-8, (min. 0-1-8), 6=358/7-9-8, (min. 0-1-8)
Max Horiz 1=60 (LC 7)
Max Uplift 1=-20 (LC 6), 5=-30 (LC 7), 6=-79 (LC 6)

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

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) Provide adequate drainage to prevent water ponding.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 5, 20 lb uplift at joint 1 and 79 lb uplift at joint 6.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.