Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A1	Truss	1	1	Job Reference (optional)

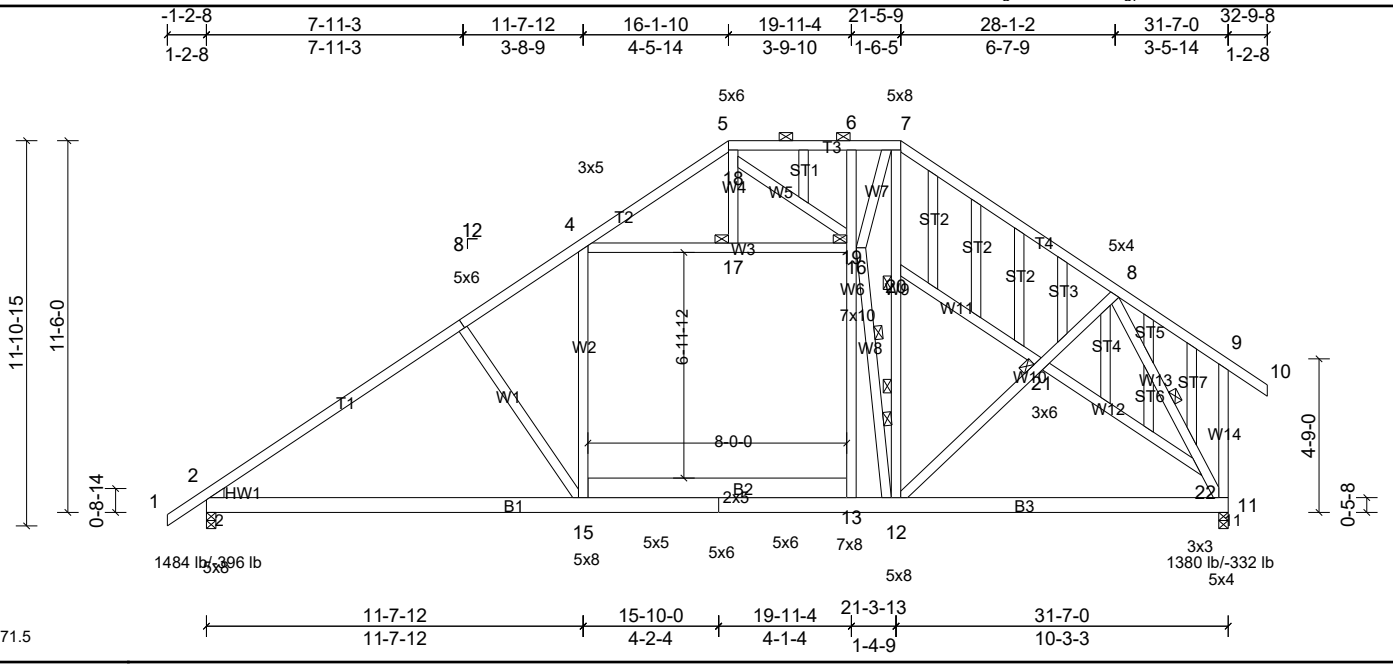

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Plate Offsets (X, Y): [2:Edge,0-1-4], [3:0-3-0,0-3-0], [7:0-2-12,0-2-0], [11:0-2-0,0-2-12], [15:0-2-0,0-2-8], [16:0-3-12,0-3-8]

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	0.63	Vert(LL)	0.33	15-42	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.51	15-42	>745	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	13-15	>926	360	Weight: 334 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B2:2x8 SP No.2, B3:2x6 SP No.1
WEBS	2x4 SP No.3 *Except* W2,W6,W3:2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-4-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-20, 8-11
WEBS	2 Rows at 1/3 pts 12-16
JOINTS	1 Brace at Jt(s): 16, 17, 20, 21
	This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS (lb/size) 2=1330/0-3-8, (min. 0-1-12), 11=1339/0-3-8, (min. 0-1-10)
Max Horiz 2=497 (LC 9)
Max Uplift 2=-396 (LC 10), 11=-332 (LC 11)
Max Grav 2=1484 (LC 18), 11=1380 (LC 2)

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

TOP CHORD	2-43=-1888/513, 3-43=-1790/557, 3-4=-1683/582, 4-44=-454/301, 5-44=-407/323, 5-6=-397/437, 6-7=-398/413, 7-45=-1020/504, 8-45=-1112/483, 9-11=-196/265
BOT CHORD	2-47=-462/1733, 47-48=-462/1733, 15-48=-462/1733, 14-15=-302/1502, 13-14=-302/1502, 12-13=-296/1472, 11-12=-182/647
WEBS	3-15=-464/361, 4-15=-108/662, 13-16=-410/1072, 16-19=-318/331, 12-16=-3254/1401, 12-20=-950/2366, 7-20=-927/2307, 4-17=-1209/461, 16-17=-1182/442, 8-22=-1245/333, 11-22=-1333/338, 18-19=-298/212, 7-16=-2160/935, 12-21=-120/459, 8-21=-121/462

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-6, Interior (1) 1-11-6 to 12-11-12, Exterior (2) 12-11-12 to 24-7-7, Interior (1) 24-7-7 to 29-7-10, Exterior (2) 29-7-10 to 32-9-8 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.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x3 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) * 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) Bottom chord live load (30.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 396 lb uplift at joint 2 and 332 lb uplift at joint 11.
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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A2	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:49 — Page: 1

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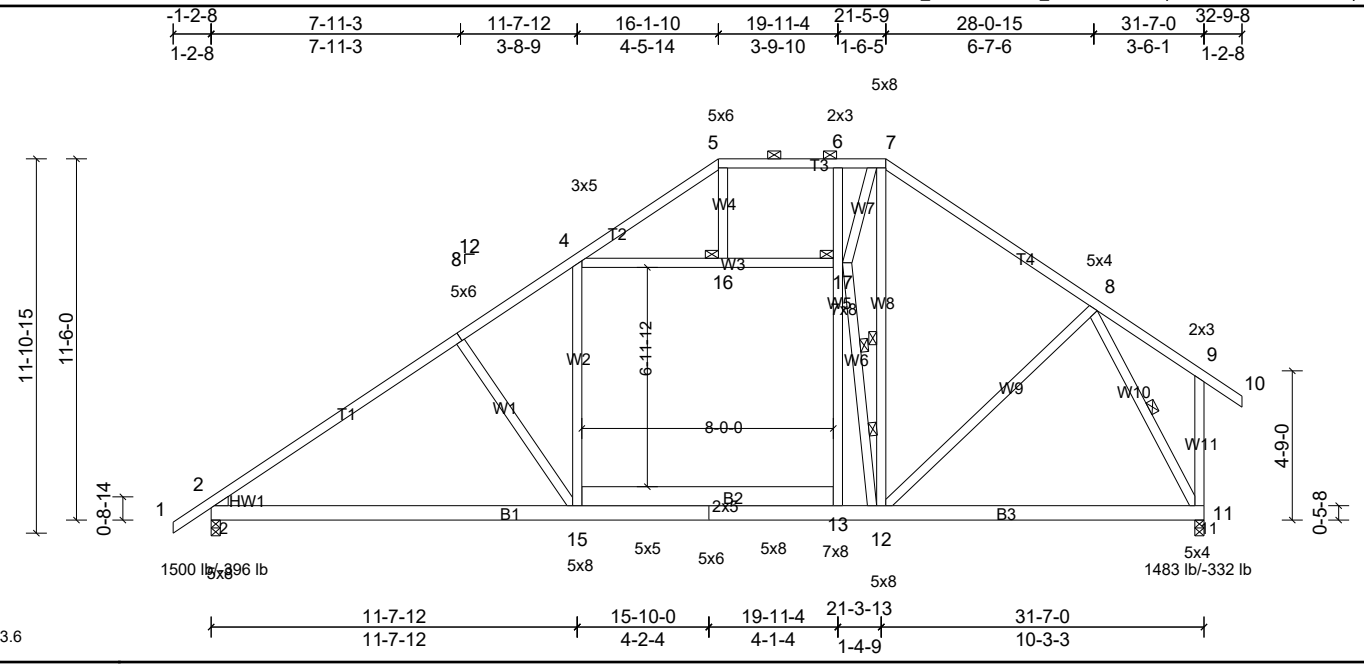

Scale = 1:73.6

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

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	0.64	Vert(LL)	0.40	15-20	>943	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.54	15-20	>694	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	0.13	13-15	>770	360	Weight: 274 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B2:2x8 SP No.2, B3:2x6 SP No.1
WEBS	2x4 SP No.3 *Except* W2,W5,W3:2x4 SP No.2
WEDGE	Left: 2x4 SP No.2

REACTIONS (lb/size) 2=1330/0-3-8, (min. 0-1-12), 11=1339/0-3-8, (min. 0-1-12)
Max Horiz 2=497 (LC 9)
Max Uplift 2=-396 (LC 10), 11=-332 (LC 11)
Max Grav 2=1500 (LC 18), 11=1483 (LC 2)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-3-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 12-13.
WEBS	1 Row at midpt 7-12, 8-11
WEBS	2 Rows at 1/3 pts 12-17
JOINTS	1 Brace at Jt(s): 16, 17
	This truss requires both edges of the bottom chord be sheathed in the room area.

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

TOP CHORD	2-21=-1910/511, 3-21=-1812/555, 3-4=-1706/580, 4-22=-474/308, 5-22=-418/329, 5-6=-374/338, 6-7=-393/341, 7-23=-1122/522, 8-23=-1222/501, 9-11=-205/266
BOT CHORD	2-25=-453/1744, 25-26=-453/1744, 15-26=-453/1744, 14-15=-296/1516, 13-14=-296/1516, 12-13=-285/1481, 12-27=-179/616, 27-28=-179/616, 11-28=-179/616
WEBS	3-15=-462/357, 4-15=-50/587, 13-17=-682/1315, 6-17=-304/317, 7-12=-669/2025, 8-12=-124/513, 4-16=-1178/438, 16-17=-1179/439, 8-11=-1352/335, 7-17=-1651/535, 12-17=-3067/1351

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-6, Interior (1) 1-11-6 to 12-11-12, Exterior (2) 12-11-12 to 24-7-7, Interior (1) 24-7-7 to 29-7-10, Exterior (2) 29-7-10 to 32-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bottom chord live load (30.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 396 lb uplift at joint 2 and 332 lb uplift at joint 11.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A4	Truss	8	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:49 — Page: 1

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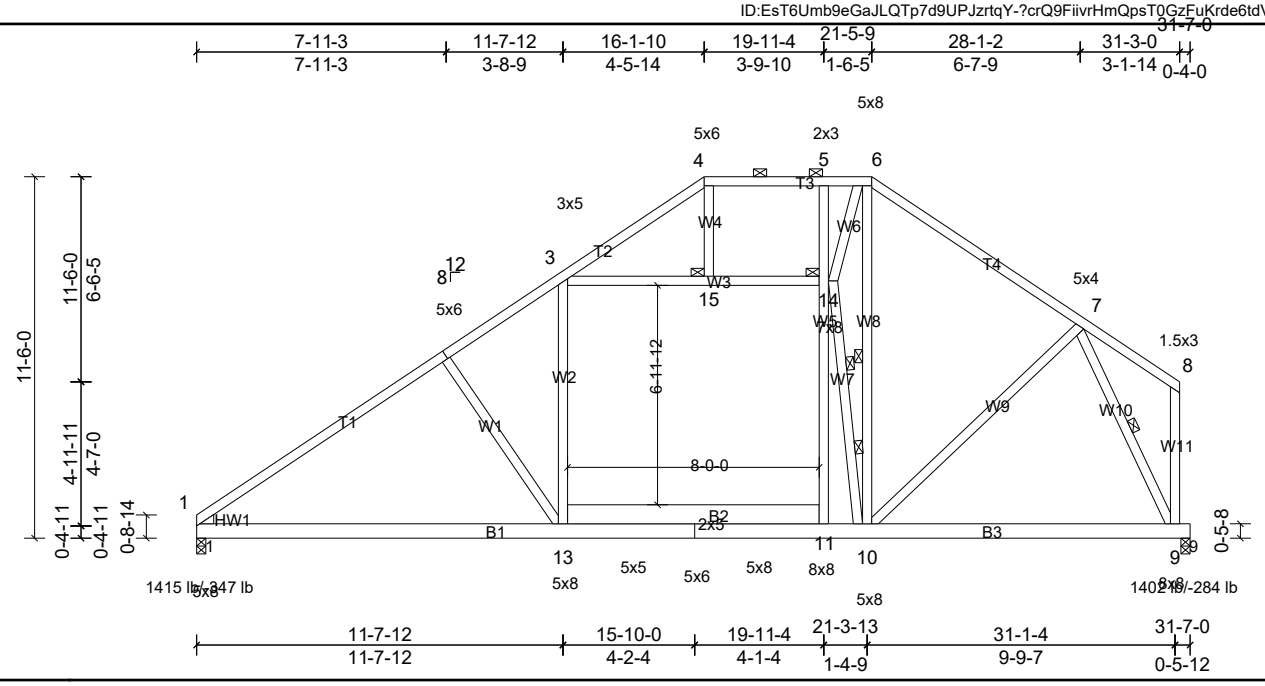

Scale = 1:73.6

Plate Offsets (X, Y): [1:Edge,0-1-4], [2:0-3-0,0-3-0], [6:0-2-12,0-2-0], [9:0-3-8,0-4-0], [13:0-2-4,0-2-8], [14:0-3-8,0-3-8]

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	0.65	Vert(LL)	0.41	13-18	>902	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.56	13-18	>668	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.04	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	0.13	11-13	>748	360	Weight: 270 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B2:2x8 SP No.2, B3:2x6 SP No.1
WEBS	2x4 SP No.3 *Except* W2,W5,W3:2x4 SP No.2
WEDGE	Left: 2x4 SP No.2

REACTIONS (lb/size) 1=1244/0-3-8, (min. 0-1-11), 9=1244/0-3-8, (min. 0-1-10)
Max Horiz 1=472 (LC 9)
Max Uplift 1=-347 (LC 10), 9=-284 (LC 11)
Max Grav 1=1415 (LC 18), 9=1402 (LC 2)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-3-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 6-10, 7-9
WEBS	2 Rows at 1/3 pts 10-14
JOINTS	1 Brace at Jt(s): 14, 15
	This truss requires both edges of the bottom chord be sheathed in the room area.

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

TOP CHORD	1-19=-1890/520, 2-19=-1793/552, 2-3=-1686/576, 3-20=-455/290, 4-20=-398/312, 4-5=-363/323, 5-6=-381/326, 6-21=-1089/507, 7-21=-1189/486
BOT CHORD	1-22=-471/1717, 22-23=-471/1717, 13-23=-471/1717, 12-13=-311/1487, 11-12=-311/1487, 10-11=-300/1451, 10-24=-196/555, 24-25=-196/555, 9-25=-196/555
WEBS	2-13=-461/359, 3-13=-52/588, 11-14=-694/1370, 5-14=-318/320, 10-14=-3129/1372, 6-10=-669/2007, 7-10=-133/543, 3-15=-1182/440, 14-15=-1183/442, 7-9=-1346/392, 6-14=-1636/534

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-1-14, Interior (1) 3-1-14 to 12-11-12, Exterior (2) 12-11-12 to 24-7-7, Interior (1) 24-7-7 to 27-11-6, Exterior (2) 27-11-6 to 31-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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) Bottom chord live load (30.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 11-13
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 347 lb uplift at joint 1 and 284 lb uplift at joint 9.
8) 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A5	Truss	3	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:50 — Page: 1

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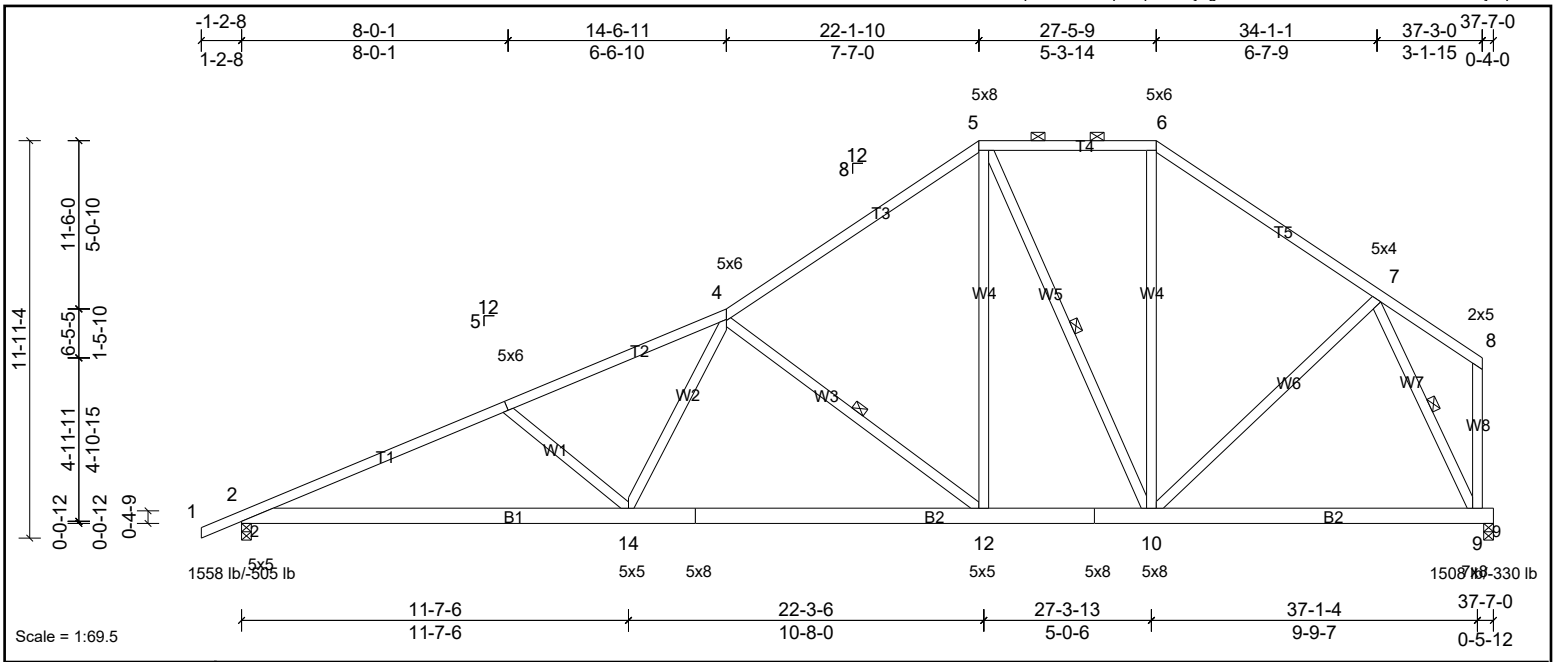


Scale = 1:69.5

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

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	0.86	Vert(LL)	0.24	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.41	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 263 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* T3:2x4 SP SS
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-3-1 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 4-12, 5-10, 7-9

REACTIONS (lb/size) 2=1558/0-3-8, (min. 0-1-13), 9=1483/0-3-8, (min. 0-1-12)
Max Horiz 2=523 (LC 7)
Max Uplift 2=-505 (LC 10), 9=-330 (LC 10)
Max Grav 2=1558 (LC 1), 9=1508 (LC 2)

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

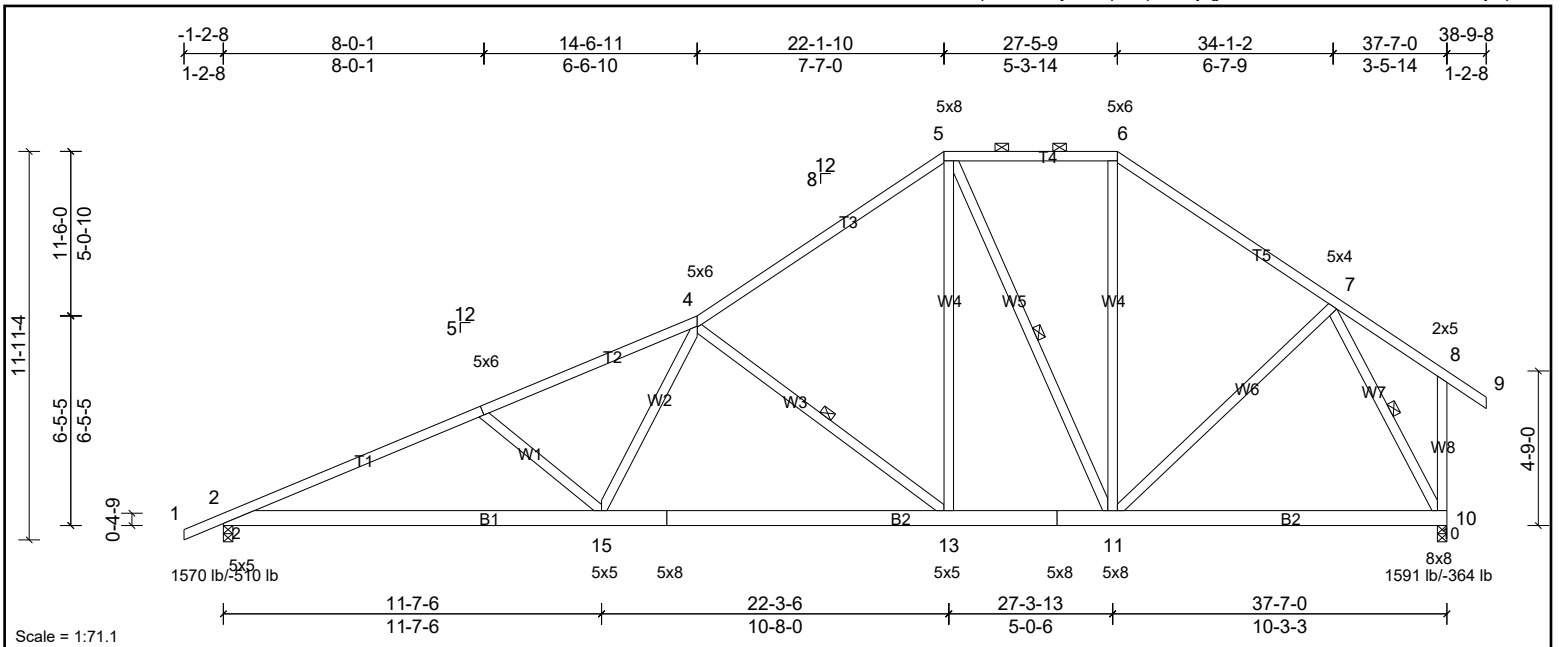
TOP CHORD	2-17=-3133/942, 3-17=-3064/971, 3-4=-2771/837, 4-18=-1567/606, 5-18=-1437/630, 5-6=-1112/564, 6-19=-1227/574, 7-19=-1299/553
BOT CHORD	2-14=-1068/2828, 13-14=-716/2188, 13-20=-716/2188, 12-20=-716/2188, 11-12=-304/1222, 10-11=-304/1222, 10-21=-212/613, 21-22=-212/613, 9-22=-212/613
WEBS	4-12=-1257/636, 5-12=-297/963, 5-10=-604/284, 6-10=-151/418, 7-10=-157/556, 7-9=-1501/462, 4-14=-154/711, 3-14=-469/383

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-6, Interior (1) 1-11-6 to 18-11-12, Exterior (2) 18-11-12 to 30-7-7, Interior (1) 30-7-7 to 33-11-6, Exterior (2) 33-11-6 to 37-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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 505 lb uplift at joint 2 and 330 lb uplift at joint 9.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A6	Truss	2	1	Job Reference (optional)



Scale = 1:71.1

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

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	0.87	Vert(LL)	0.24	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.41	15-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 266 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* T3:2x4 SP SS
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING

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

REACTIONS (lb/size) 2=1570/0-3-8, (min. 0-1-14), 10=1579/0-3-8, (min. 0-1-14)
Max Horiz 2=530 (LC 9)
Max Uplift 2=-510 (LC 10), 10=-364 (LC 11)
Max Grav 2=1570 (LC 1), 10=1591 (LC 2)

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

TOP CHORD	2-18=-3164/955, 3-18=-3095/984, 3-4=-2802/850, 4-19=-1595/625, 5-19=-1466/650, 5-6=-1136/583, 6-20=-1256/596, 7-20=-1335/575, 8-10=-198/260
BOT CHORD	2-15=-1058/2857, 14-15=-706/2216, 14-22=-706/2216, 13-22=-706/2216, 12-13=-291/1247, 11-12=-291/1247, 11-23=-198/671, 23-24=-198/671, 10-24=-198/671
WEBS	4-13=-1263/639, 5-13=-301/962, 5-11=-590/280, 6-11=-158/435, 7-11=-148/534, 7-10=-1509/383, 4-15=-154/711, 3-15=-469/383

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-6, Interior (1) 1-11-6 to 18-11-12, Exterior (2) 18-11-12 to 30-7-7, Interior (1) 30-7-7 to 35-7-10, Exterior (2) 35-7-10 to 38-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 510 lb uplift at joint 2 and 364 lb uplift at joint 10.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	A7	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:51 — Page: 1

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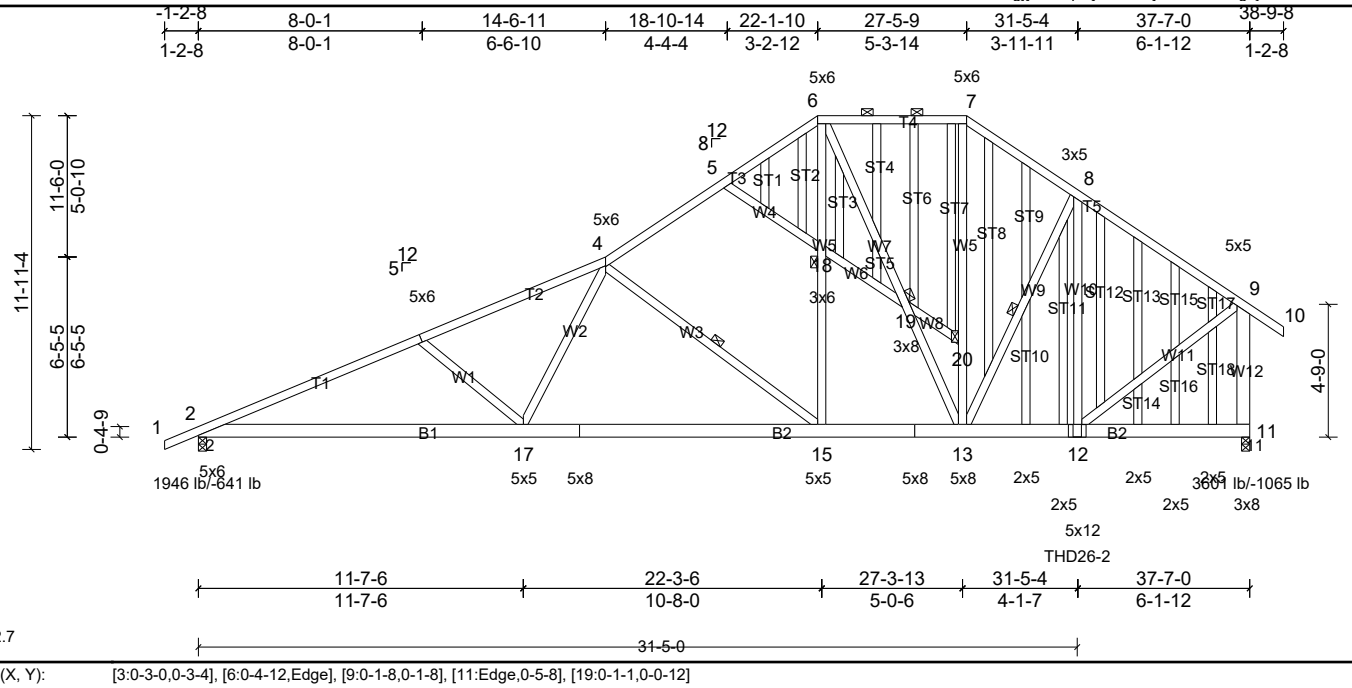

Scale = 1:82.7

31-5-0

Plate Offsets (X, Y): [3:0-3-0,0-3-4], [6:0-4-12,Edge], [9:0-1-8,0-1-8], [11:Edge,0-5-8], [19:0-1-1,0-0-12]

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	0.99	Vert(LL)	0.25	17-52	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.43	15-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 412 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* T2:2x4 SP SS, T1:2x4 SP No.1
BOT CHORD	2x6 SP No.2 *Except* B1:2x6 SP No.1
WEBS	2x4 SP No.3 *Except* W12:2x6 SP No.2, W11:2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-7 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 6-7-1 oc bracing.
WEBS	1 Row at midpt 4-15, 8-13
JOINTS	1 Brace at Jt(s): 18, 19, 20

REACTIONS (lb/size) 2=1946/0-3-8, (min. 0-2-5), 11=3601/0-3-8, (req. 0-4-4)
Max Horiz 2=531 (LC 7)
Max Uplift 2=-641 (LC 8), 11=-1065 (LC 9)

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

TOP CHORD	2-3=-4141/1326, 3-4=-3776/1188, 4-5=-2513/826, 5-6=-2301/787, 6-7=-1920/756, 7-8=-2379/888, 8-9=-2862/958, 9-11=-3513/1079
BOT CHORD	2-17=-1374/3759, 16-17=-1011/3113, 16-53=-1011/3113, 15-53=-1011/3113, 14-15=-566/2010, 13-14=-566/2010, 13-54=-639/2294, 12-54=-639/2294
WEBS	15-18=-273/1084, 6-18=-301/1124, 6-19=-234/436, 13-19=-251/484, 13-20=-393/1064, 7-20=-419/1068, 4-15=-1387/632, 4-17=-165/706, 3-17=-476/396, 8-13=-1061/558, 8-12=-405/946, 9-12=-775/2822

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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
3) Truss designed for wind loads in the plane of the truss only.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x3 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) * 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) WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 641 lb uplift at joint 2 and 1065 lb uplift at joint 11.
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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 31-5-0 from the left end to connect truss(es) C6 (2 ply 2x6 SP) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) 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, 4-6=-60, 6-7=-60, 7-9=-60, 9-10=-60, 2-11=-20
   Concentrated Loads (lb)
   Vert: 12=-2400 (B)

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B1	Truss	1	1	Job Reference (optional)

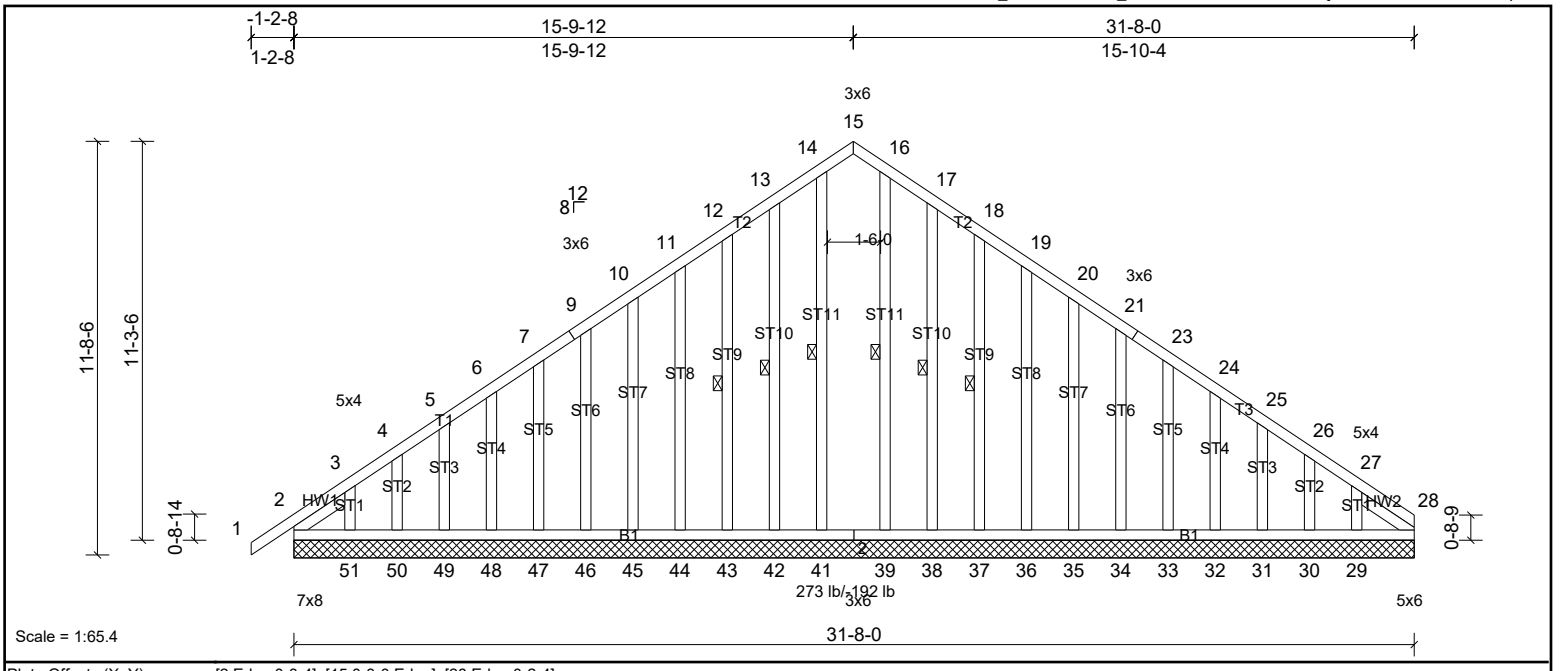

Plate Offsets (X, Y): [2:Edge,0-3-4], [15:0-3-0,Edge], [28:Edge,0-2-4]

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	0.17	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	0.12	Horz(CT)	0.02	28	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 298 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 -- 1-9-6, Right 2x4 SP No.3 -- 1-9-13

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 14-41, 16-39, 13-42, 12-43, 17-38, 18-37

REACTIONS All bearings 31-8-0.

(lb) - Max Horiz 2=390 (LC 9), 52=390 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 28, 30, 31, 32, 33, 34, 35, 36, 37, 41, 43, 44, 45, 46, 47, 48, 49, 50, 56 except 2=-131 (LC 6), 29=-186 (LC 11), 38=-112 (LC 11), 42=-103 (LC 10), 51=-192 (LC 10), 52=-131 (LC 6)

Max Grav All reactions 250 (lb) or less at joint(s) 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51 except 2=274 (LC 19), 28=266 (LC 11), 52=274 (LC 19), 56=266 (LC 11)

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

TOP CHORD 3-4=-368/253, 4-5=-312/234, 5-6=-253/212, 13-14=-253/289, 16-17=-253/283, 26-27=-295/192

BOT CHORD 2-51=-221/328, 50-51=-221/328, 49-50=-221/328, 48-49=-221/328, 47-48=-221/328, 46-47=-221/328, 45-46=-221/328, 44-45=-221/328, 43-44=-221/328, 42-43=-221/328, 41-42=-221/328, 40-41=-221/328, 39-40=-221/328, 38-39=-221/328, 37-38=-221/328, 36-37=-221/328, 35-36=-221/328, 34-35=-221/328, 33-34=-221/328, 32-33=-221/328, 31-32=-221/328, 30-31=-221/328, 29-30=-221/328, 28-29=-221/328

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-8 to 1-11-8, Exterior (2) 1-11-8 to 12-7-12, Corner (3) 12-7-12 to 18-11-12, Exterior (2) 18-11-12 to 28-6-0, Corner (3) 28-6-0 to 31-8-0 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
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) 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) * 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) 28, 41, 43, 44, 45, 46, 47, 48, 49, 50, 37, 36, 35, 34, 33, 32, 31, 30, 28 except (jt=lb) 2=131, 42=102, 51=192, 38=111, 29=186, 2=131.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B2	Truss	4	1	Job Reference (optional)

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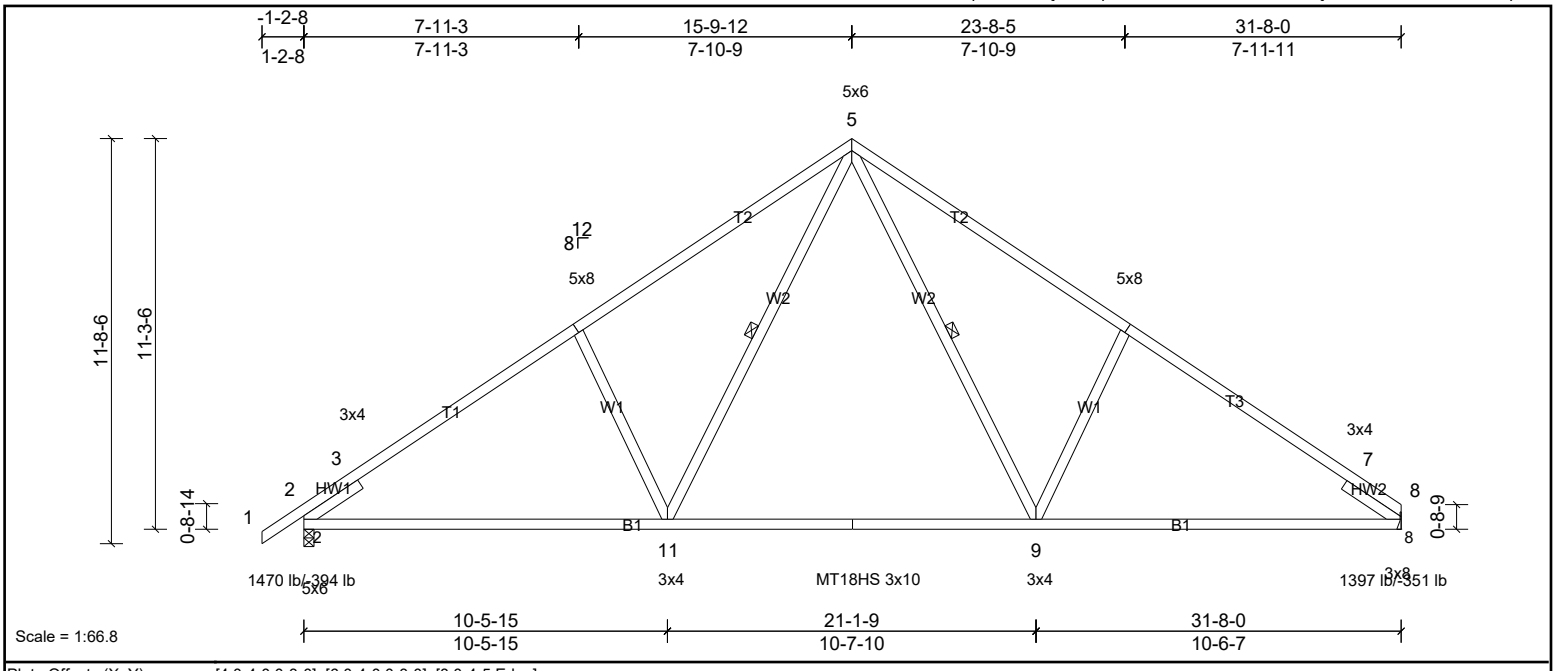

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Plate Offsets (X, Y): [4:0-4-0,0-3-0], [6:0-4-0,0-3-0], [8:0-4-5,Edge]

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	0.81	Vert(LL)	-0.41	9-11	>923	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.61	9-11	>626	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 165 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1 *Except* T1,T3:2x4 SP No.2
BOT CHORD	2x4 SP No.1
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.
BOT CHORD	Rigid ceiling directly applied or 8-6-4 oc bracing.
WEBS	1 Row at midpt 5-11, 5-9

REACTIONS (lb/size) 2=1341/0-3-8, (min. 0-1-12), 8=1265/ Mechanical, (min. 0-1-8)
Max Horiz 2=390 (LC 9)
Max Uplift 2=-394 (LC 10), 8=-351 (LC 11)
Max Grav 2=1470 (LC 18), 8=1397 (LC 19)

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

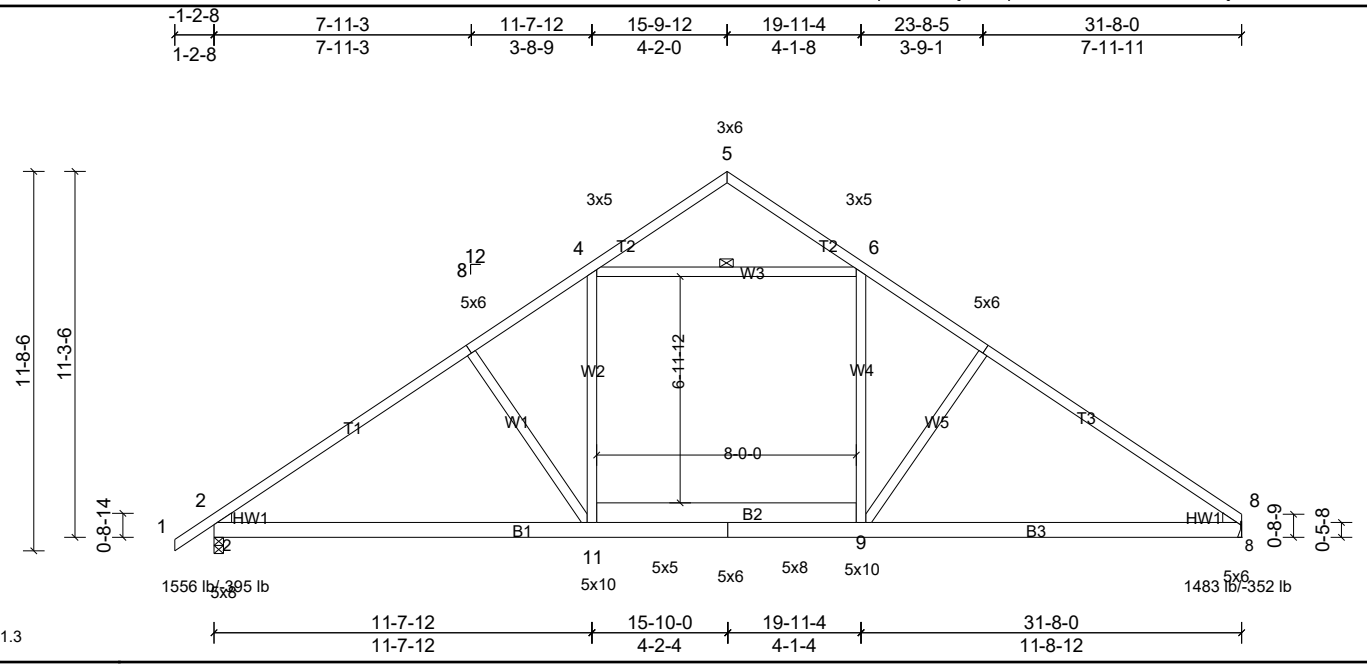
TOP CHORD	2-3=-942/0, 3-20=-1902/482, 4-20=-1828/525, 4-21=-1796/608, 5-21=-1742/632, 5-22=-1746/642, 6-22=-1808/619, 6-23=-1753/534, 7-23=-1863/503, 7-8=-940/0
BOT CHORD	2-24=-527/1761, 24-25=-504/1761, 11-25=-504/1761, 11-26=-142/1138, 10-26=-142/1138, 10-27=-142/1138, 9-27=-142/1138, 9-28=-295/1503, 28-29=-295/1503, 8-29=-295/1503
WEBS	4-11=-574/484, 5-11=-360/945, 5-9=-367/963, 6-9=-578/488

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-8, Interior (1) 1-11-8 to 12-7-12, Exterior (2) 12-7-12 to 18-11-12, Interior (1) 18-11-12 to 28-6-0, Exterior (2) 28-6-0 to 31-8-0 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 394 lb uplift at joint 2 and 351 lb uplift at joint 8.
8) 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.
9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B3	Truss	2	1	Job Reference (optional)



Scale = 1:71.3

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

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	0.68	Vert(LL)	0.52	11-14	>725	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.61	9-17	>622	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.27	9-11	>362	360	Weight: 213 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B2:2x8 SP No.2
WEBS	2x4 SP No.2 *Except* W1,W5:2x4 SP No.3
WEDGE	Left: 2x4 SP No.2 Right: 2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-11-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 9-7-10 oc bracing.
WEBS	1 Row at midpt 4-6
	This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS (lb/size) 2=1341/0-3-8, (min. 0-1-13), 8=1265/ Mechanical, (min. 0-1-8)
Max Horiz 2=390 (LC 9)
Max Uplift 2=-395 (LC 10), 8=-352 (LC 11)
Max Grav 2=1556 (LC 18), 8=1483 (LC 19)

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

TOP CHORD	2-18=-2052/480, 3-18=-1931/523, 3-4=-1848/546, 4-19=-298/143, 5-19=-265/165, 5-20=-264/166, 6-20=-296/142, 6-7=-1850/553, 7-21=-1941/532, 8-21=-2067/500
BOT CHORD	2-22=-451/1818, 22-23=-451/1818, 11-23=-451/1818, 10-11=-229/1581, 9-10=-229/1581, 9-24=-300/1651, 24-25=-300/1651, 8-25=-300/1651
WEBS	3-11=-429/393, 4-11=-114/699, 6-9=-122/718, 4-6=-1294/427, 7-9=-443/406

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-11-8, Interior (1) 1-11-8 to 12-7-12, Exterior (2) 12-7-12 to 18-11-12, Interior (1) 18-11-12 to 28-6-0, Exterior (2) 28-6-0 to 31-8-0 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
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) Bottom chord live load (30.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-11
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 395 lb uplift at joint 2 and 352 lb uplift at joint 8.
8) 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.
9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B4	Truss	1	1	Job Reference (optional)

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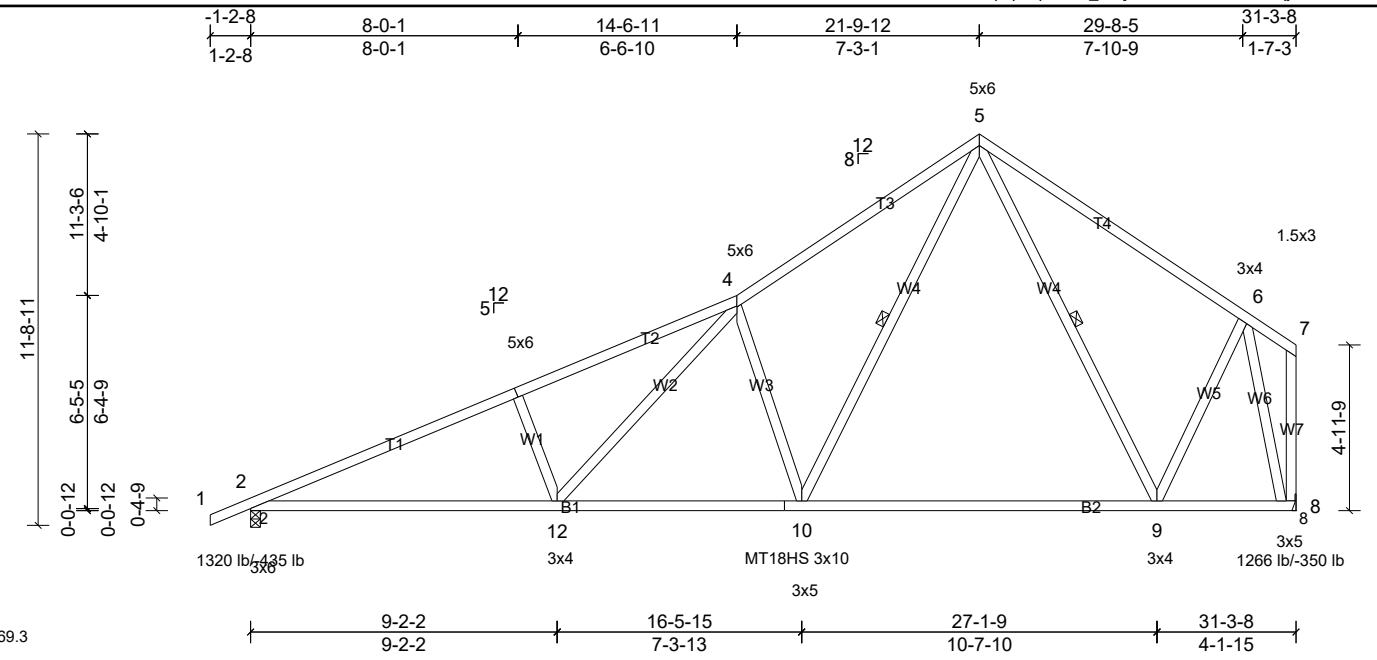

Scale = 1:69.3

Plate Offsets (X, Y): [3:0-3-0,0-3-4], [11:0-4-11,0-1-8]

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	0.89	Vert(LL)	-0.45	9-10	>837	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.75	9-10	>499	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 188 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* T3:2x4 SP No.1
BOT CHORD	2x4 SP No.2 *Except* B2:2x4 SP No.1
WEBS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-10, 5-9

REACTIONS (lb/size) 2=1320/0-3-8, (min. 0-1-9), 8=1244/ Mechanical, (min. 0-1-8)
Max Horiz 2=428 (LC 10)
Max Uplift 2=-435 (LC 10), 8=-350 (LC 10)
Max Grav 2=1320 (LC 1), 8=1266 (LC 2)

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

TOP CHORD	2-16=-2522/744, 3-16=-2447/774, 3-4=-2371/822, 4-17=-1737/633, 5-17=-1619/657, 5-18=-841/383, 18-19=-849/359, 6-19=-902/335, 7-8=-241/262
BOT CHORD	2-12=-1009/2259, 12-20=-653/1641, 20-21=-653/1641, 11-21=-653/1641, 10-11=-653/1641, 10-22=-234/785, 22-23=-234/785, 9-23=-234/785, 8-9=-133/369
WEBS	5-10=-529/1366, 4-10=-997/621, 5-9=-361/209, 6-9=-83/729, 3-12=-438/362, 4-12=-354/780, 6-8=-1584/560

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 18-9-12, Exterior (2) 18-9-12 to 24-9-12, Interior (1) 24-9-12 to 28-1-12, Exterior (2) 28-1-12 to 31-1-12 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 435 lb uplift at joint 2 and 350 lb uplift at joint 8.
8) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B5	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:53 — Page: 1

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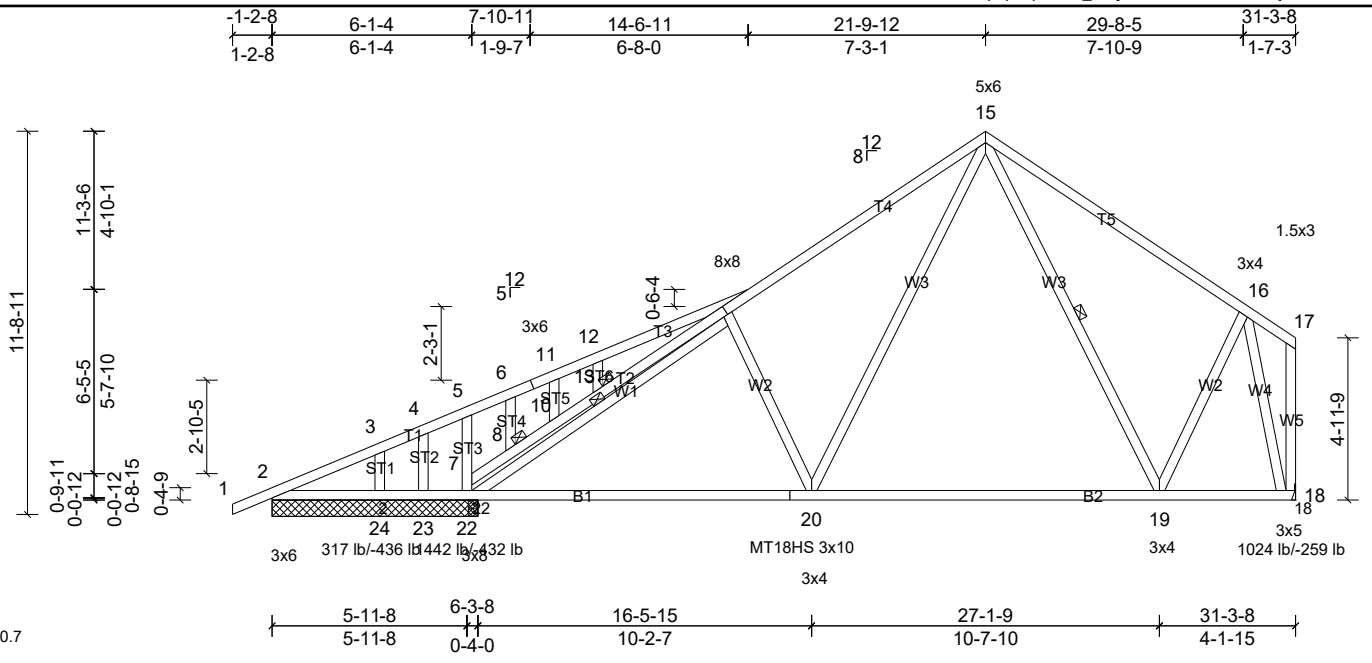

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.42	19-20	>719	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.63	19-20	>481	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 213 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* B2:2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 15-19, 14-22
JOINTS	1 Brace at Jt(s): 13, 8

REACTIONS All bearings 6-3-8. except 18= Mechanical, 22=0-3-8

(lb) - Max Horiz 2=428 (LC 10), 25=428 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) except 2=-115 (LC 6), 18=-260 (LC 10), 22=-433 (LC 10), 23=-437 (LC 3), 24=-136 (LC 10), 25=-115 (LC 6)

Max Grav All reactions 250 (lb) or less at joint(s) 2, 23, 25 except 18=1024 (LC 18), 22=1443 (LC 2), 24=318 (LC 1)

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

TOP CHORD	12-14=-28/255, 7-8=-437/120, 8-10=-441/141, 10-13=-450/143, 13-14=-398/78, 14-29=-1199/442, 15-29=-1099/465, 15-30=-697/342, 30-31=-704/318, 16-31=-762/294, 17-18=-244/269
BOT CHORD	22-32=-471/1066, 32-33=-471/1066, 21-33=-471/1066, 20-21=-471/1066, 20-34=-156/611, 34-35=-156/611, 19-35=-156/611, 18-19=-117/317
WEBS	16-18=-1366/498, 15-20=-310/784, 14-20=-431/451, 16-19=-37/578, 7-22=-667/425, 5-7=-467/378, 14-22=-933/268

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 18-9-12, Exterior (2) 18-9-12 to 24-9-12, Interior (1) 24-9-12 to 28-1-12, Exterior (2) 28-1-12 to 31-1-12 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
3) Truss designed for wind loads in the plane of the truss only.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x3 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) * 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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 2, 259 lb uplift at joint 18, 436 lb uplift at joint 23, 135 lb uplift at joint 24, 432 lb uplift at joint 22 and 114 lb uplift at joint 2.
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.
12) 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

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B6	Truss	1	1	Job Reference (optional)

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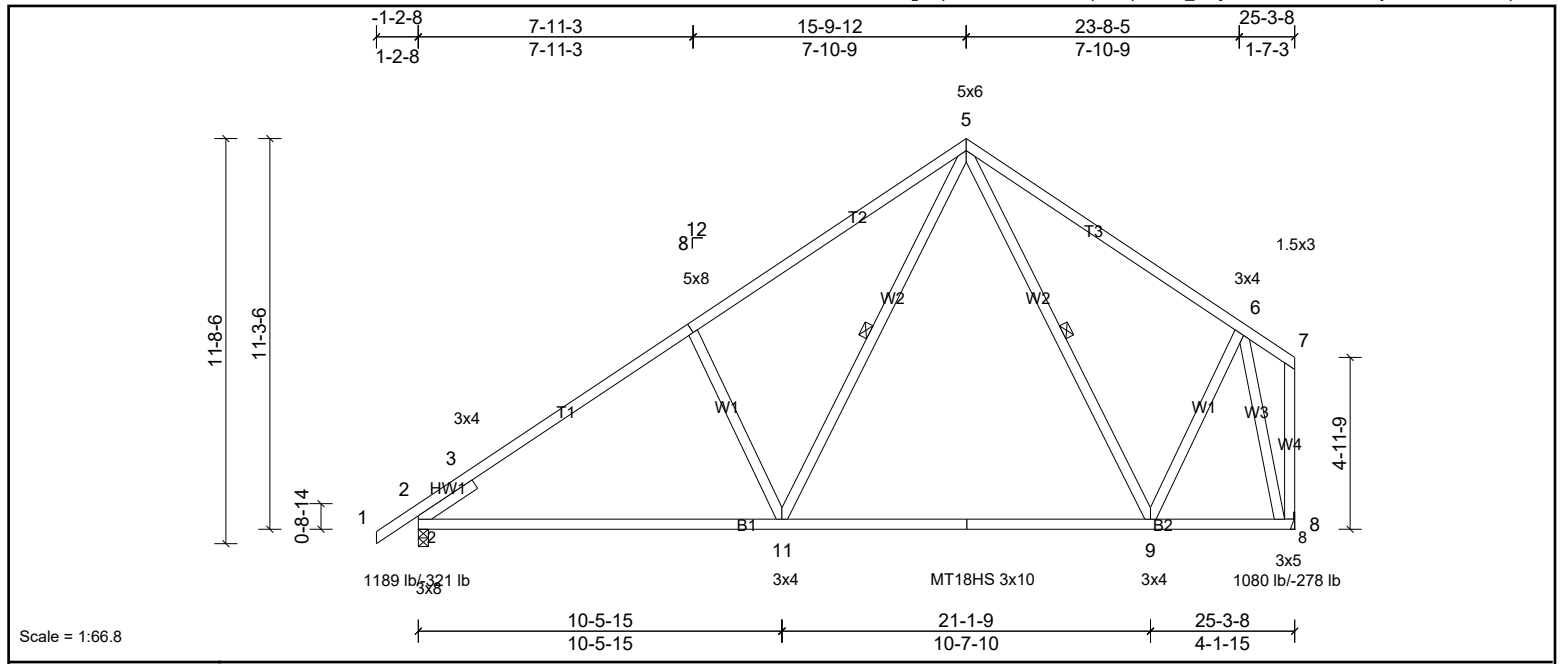

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Plate Offsets (X, Y): [2:0-4-11,Edge], [4:0-4-0,0-3-0]

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	0.82	Vert(LL)	-0.44	9-11	>682	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.66	9-11	>458	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 156 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1 *Except* B2:2x4 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-11, 5-9

REACTIONS (lb/size) 2=1080/0-3-8, (min. 0-1-8), 8=1004/ Mechanical, (min. 0-1-8)
Max Horiz 2=423 (LC 10)
Max Uplift 2=-321 (LC 10), 8=-278 (LC 10)
Max Grav 2=1189 (LC 17), 8=1080 (LC 17)

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

TOP CHORD	2-3=-809/0, 3-16=-1434/336, 4-16=-1274/380, 4-17=-1331/479, 5-17=-1258/502, 5-18=-735/347, 18-19=-742/323, 6-19=-790/299, 7-8=-244/270
BOT CHORD	2-20=-605/1328, 20-21=-539/1328, 11-21=-539/1328, 11-22=-173/680, 10-22=-173/680, 10-23=-173/680, 9-23=-173/680, 8-9=-119/322
WEBS	4-11=-590/490, 5-11=-364/985, 5-9=-282/162, 6-9=-39/632, 6-8=-1377/505

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 12-9-12, Exterior (2) 12-9-12 to 18-9-12, Interior (1) 18-9-12 to 22-1-12, Exterior (2) 22-1-12 to 25-1-12 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 2 and 278 lb uplift at joint 8.
8) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B7	Truss	6	1	Job Reference (optional)

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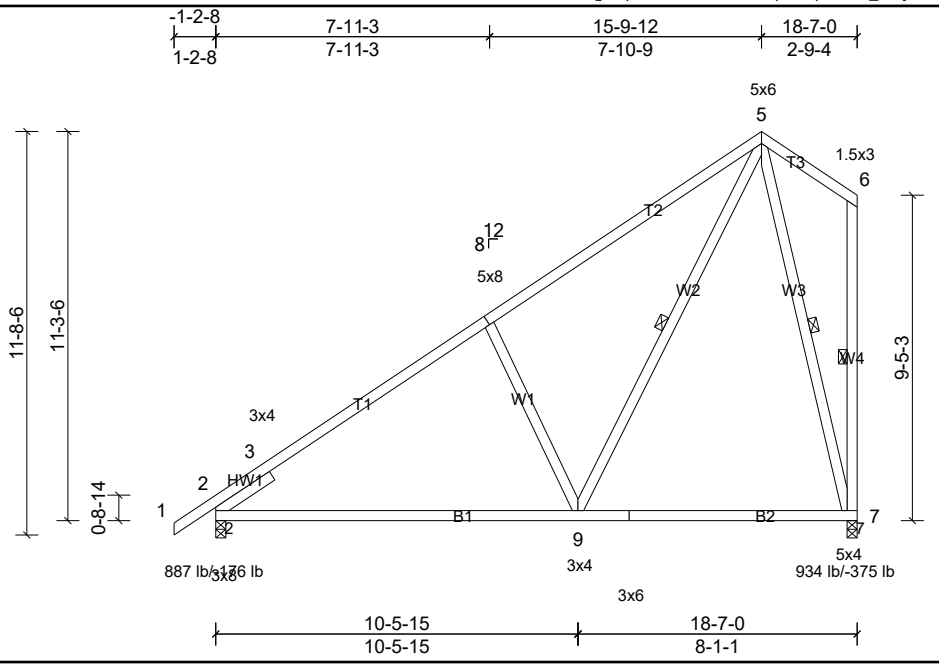

Scale = 1:67

Plate Offsets (X, Y): [2:0-4-11,Edge], [4:0-4-0,0-3-4]

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	0.86	Vert(LL)	-0.21	9-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.45	9-12	>491	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 123 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 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 5-9, 6-7, 5-7

REACTIONS (lb/size) 2=812/0-3-8, (min. 0-1-8), 7=735/0-3-8, (min. 0-1-8)
Max Horiz 2=562 (LC 10)
Max Uplift 2=-176 (LC 10), 7=-375 (LC 10)
Max Grav 2=887 (LC 17), 7=934 (LC 17)

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

TOP CHORD	2-3=-797/0, 3-14=-900/95, 4-14=-753/135, 4-15=-813/240, 5-15=-675/263
BOT CHORD	2-16=-662/853, 16-17=-483/853, 9-17=-483/853
WEBS	4-9=-626/499, 5-9=-391/970, 5-7=-840/443

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 12-9-12, Exterior (2) 12-9-12 to 18-5-4 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
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 176 lb uplift at joint 2 and 375 lb uplift at joint 7.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B8	Truss	5	1	Job Reference (optional)

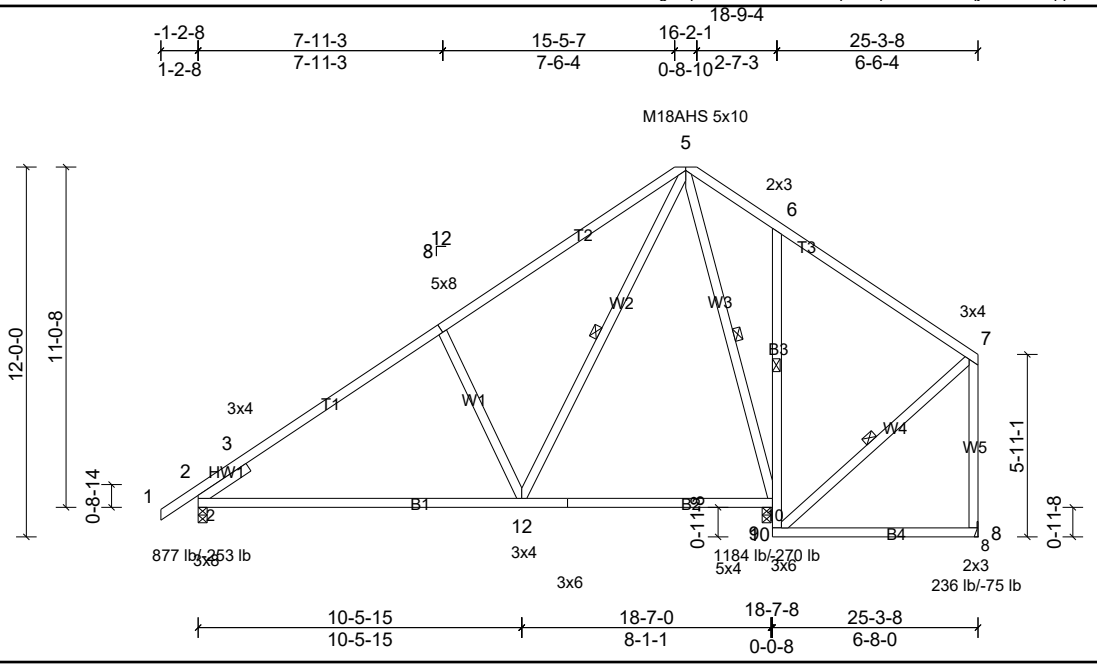

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Plate Offsets (X, Y): [2:0-4-11,Edge], [4:0-4-0,0-3-4], [7:0-1-4,0-1-8], [10:0-2-0,0-3-0]

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	0.85	Vert(LL)	-0.21	12-15	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.44	12-15	>508	180	MT20	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 166 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* B3:2x4 SP No.3
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-11-0

REACTIONS (lb/size) 2=819/0-3-8, (min. 0-1-8), 8=236/ Mechanical, (min. 0-1-8), 10=1029/0-3-8, (min. 0-1-8)
Max Horiz 2=420 (LC 10)
Max Uplift 2=-253 (LC 10), 8=-75 (LC 10), 10=-270 (LC 10)
Max Grav 2=877 (LC 17), 8=236 (LC 1), 10=1184 (LC 17)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-2-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 2-12.
1 Row at midpt	6-10
WEBS	1 Row at midpt 5-10, 7-9, 5-12

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

TOP CHORD	2-3=-808/0, 3-17=-884/226, 4-17=-800/266, 4-18=-880/367, 5-18=-826/389, 5-6=-307/295
BOT CHORD	2-20=-580/889, 20-21=-447/889, 12-21=-447/889, 6-10=-416/359
WEBS	4-12=-612/489, 5-10=-857/239, 5-12=-381/968

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 12-9-12, Exterior (2) 12-9-12 to 18-10-4, Interior (1) 18-10-4 to 22-1-12, Exterior (2) 22-1-12 to 25-1-12 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 10, 75 lb uplift at joint 8 and 253 lb uplift at joint 2.
8) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	B9	Truss	1	1	Job Reference (optional)

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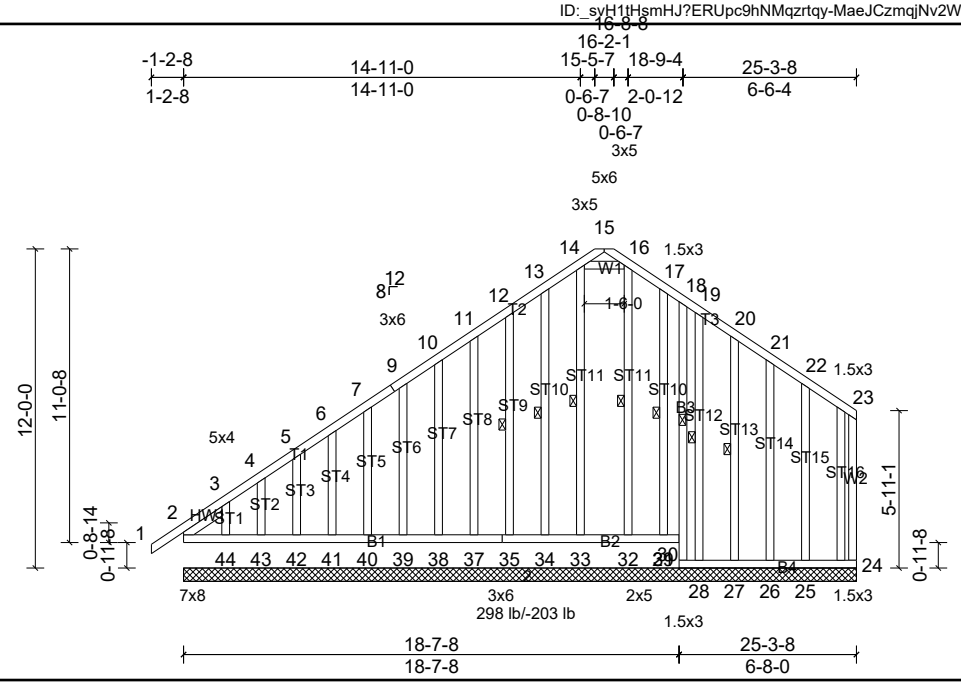

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Plate Offsets (X, Y): [2:Edge,0-3-4], [36:0-2-4,0-1-8]

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 291 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* B3:2x4 SP No.3
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 1-9-6

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. Except:
1 Row at midpt	18-30
WEBS	1 Row at midpt 14-33, 16-32, 13-34, 12-35, 17-31, 19-28, 20-27

REACTIONS All bearings 25-3-8.

(lb) - Max Horiz 2=420 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 24, 25, 26, 27, 28, 30, 31, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43 except 2=-203 (LC 6), 44=-191 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44 except 2=299 (LC 7)

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

TOP CHORD 3-4=-365/329, 4-5=-334/309, 5-6=-300/288, 6-7=-267/267, 7-8=-250/252, 8-9=-240/257, 9-10=-234/253, 10-11=-218/271, 11-12=-201/304, 12-13=-233/341, 13-14=-269/362, 16-17=-266/336, 17-18=-241/302, 18-19=-211/266

WEBS 14-16=-230/321

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-8 to 1-7-0, Exterior (2) 1-7-0 to 12-9-12, Corner (3) 12-9-12 to 18-10-4, Exterior (2) 18-10-4 to 22-0-8, Corner (3) 22-0-8 to 25-1-12 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
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) 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) * 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) Bearing at joint(s) 30 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 31, 28, 27, 26, 25, 30 except (jt=lb) 2=203, 44=190.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 33, 32, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 31.
12) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C1	Truss	1	1	Job Reference (optional)

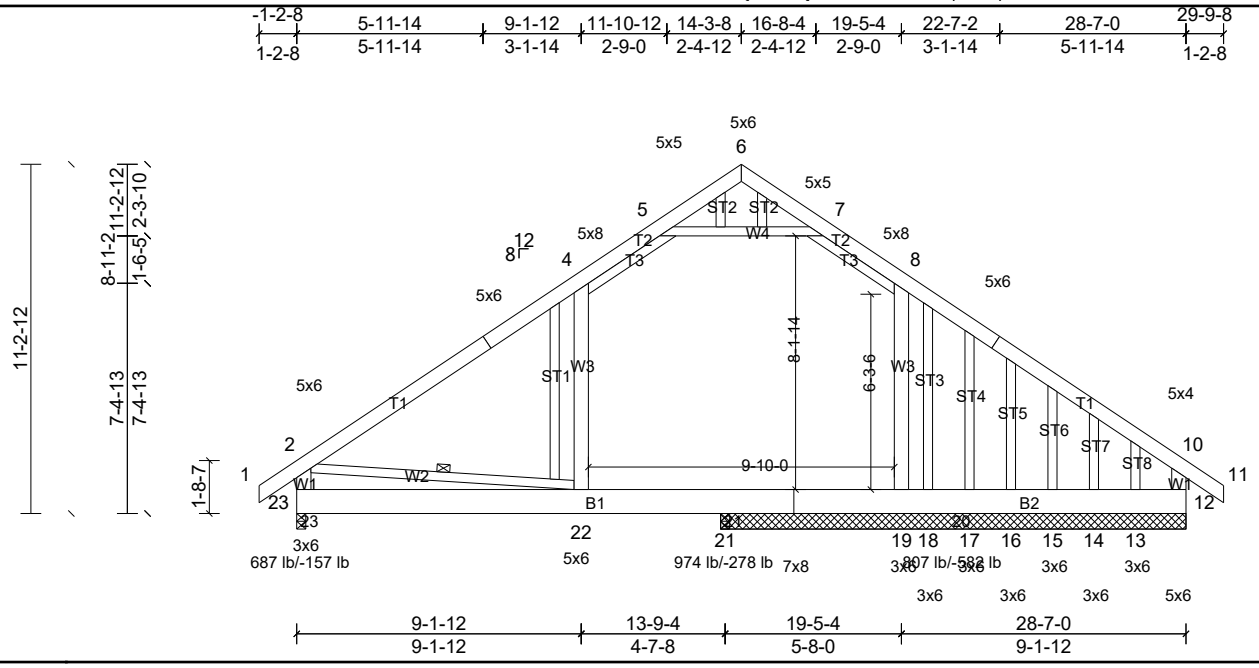

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Plate Offsets (X, Y): [2:0-1-4,0-2-8], [6:0-3-0,Edge], [12:0-3-0,0-0-12]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	0.10	22-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.11	22-23	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.05	21-22	>999	360	Weight: 311 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T3:2x4 SP No.2
BOT CHORD	2x10 SP No.2
WEBS	2x6 SP No.2 *Except* W4:2x4 SP No.2, W2:2x4 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 2-22

REACTIONS All bearings 14-11-8. except 23=0-3-8, 21=0-3-8

(lb) - Max Horiz 23=340 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 14, 15, 16, 17 except 12=-130 (LC 7), 13=-516 (LC 11), 18=-365 (LC 10), 19=-583 (LC 8), 21=-278 (LC 10), 23=-158 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 13, 14, 15, 16, 17 except 12=807 (LC 18), 18=461 (LC 18), 19=457 (LC 7), 21=974 (LC 18), 23=688 (LC 18)

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

TOP CHORD 2-36=-543/34, 3-36=-425/55, 3-4=-412/76, 4-5=-479/199, 7-8=-497/214, 8-9=-510/153, 9-37=-524/131, 10-37=-641/111, 2-23=-525/196, 10-12=-516/220

BOT CHORD 22-23=-425/691, 21-22=-97/491, 20-21=-97/491, 19-20=-97/491, 18-19=-97/491, 17-18=-97/491, 16-17=-97/491, 16-38=-97/491, 15-38=-97/491, 14-15=-97/491, 13-14=-97/491, 12-13=-97/491

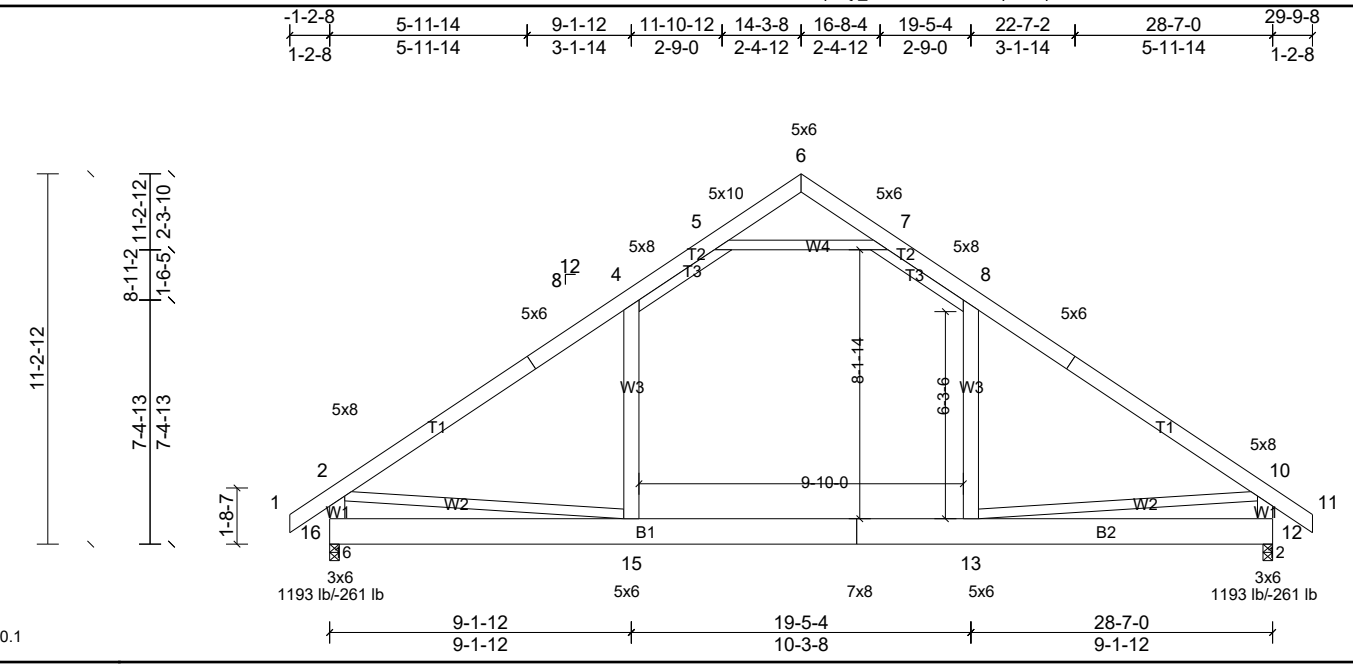
WEBS 8-19=-380/368, 4-22=-288/271, 5-7=-598/336, 2-22=-355/441

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-3-8, Exterior (2) 11-3-8 to 17-0-3, Interior (1) 17-0-3 to 26-9-8, Exterior (2) 26-9-8 to 29-9-8 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.
4) All plates are 2x3 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 21-22, 19-21
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 15, 14 except (jt=lb) 23=157, 19=582, 12=130, 18=365, 13=515, 21=278.
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.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C2	Truss	2	1	Job Reference (optional)



Scale = 1:70.1

Plate Offsets (X, Y): [2:0-5-0,0-1-0], [6:0-3-0,Edge], [7:0-2-9,0-2-4], [10:0-5-0,0-1-0]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.18	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.28	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.07	13-15	>999	360	Weight: 278 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T3:2x4 SP No.2
BOT CHORD	2x10 SP No.2
WEBS	2x6 SP No.2 *Except* W4:2x4 SP No.2, W2:2x4 SP No.3

BRACING

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

REACTIONS (lb/size) 12=1010/0-3-8, (min. 0-1-8), 16=1010/0-3-8, (min. 0-1-8)
Max Horiz 16=340 (LC 9)
Max Uplift 12=-261 (LC 11), 16=-261 (LC 10)
Max Grav 12=1193 (LC 19), 16=1193 (LC 18)

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

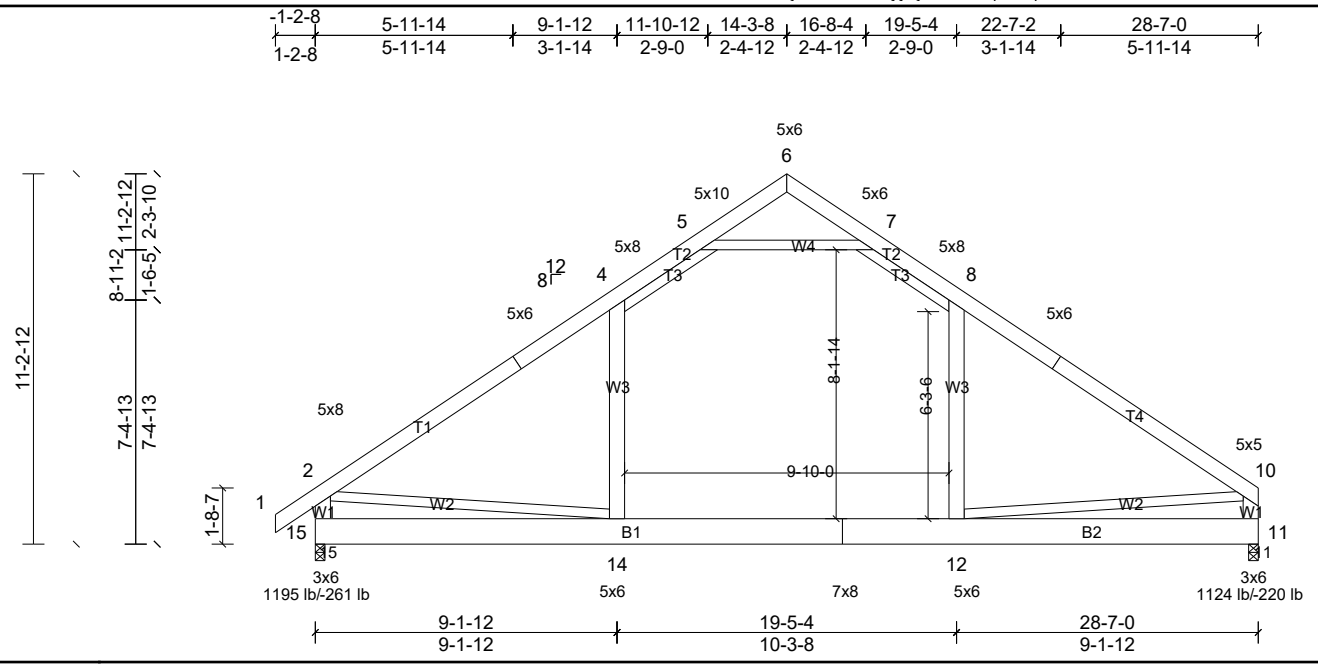
TOP CHORD	2-17=-1457/252, 3-17=-1327/274, 3-4=-1297/295, 4-5=-1021/328, 5-6=-153/464, 6-7=-153/463, 7-8=-1021/328, 8-9=-1297/295, 9-18=-1327/274, 10-18=-1457/252, 2-16=-1082/324, 10-12=-1083/324
BOT CHORD	15-16=-476/835, 14-15=-102/1146, 13-14=-102/1146, 12-13=-331/596
WEBS	8-13=-51/438, 4-15=-52/438, 5-7=-1569/539, 2-15=-163/773, 10-13=-178/786

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-3-8, Exterior (2) 11-3-8 to 17-0-3, Interior (1) 17-0-3 to 26-9-8, Exterior (2) 26-9-8 to 29-9-8 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) 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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 16 and 261 lb uplift at joint 12.
8) 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.
9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C3	Truss	3	1	Job Reference (optional)



Scale = 1:70.1

Plate Offsets (X, Y): [2:0-5-0,0-1-0], [6:0-3-0,Edge], [7:0-2-9,0-2-4], [10:0-1-8,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.18	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	12-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.08	12-14	>999	360	Weight: 275 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.1 *Except* T3:2x4 SP No.2, T1,T4:2x6 SP No.2
BOT CHORD	2x10 SP No.2
WEBS	2x6 SP No.2 *Except* W4:2x4 SP No.2, W2:2x4 SP No.3

BRACING

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

REACTIONS (lb/size) 11=939/0-3-8, (min. 0-1-8), 15=1011/0-3-8, (min. 0-1-8)
Max Horiz 15=331 (LC 7)
Max Uplift 11=-220 (LC 11), 15=-261 (LC 10)
Max Grav 11=1124 (LC 19), 15=1195 (LC 18)

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

TOP CHORD	2-16=-1468/256, 3-16=-1337/278, 3-4=-1308/299, 4-5=-1025/331, 5-6=-166/487, 6-7=-170/489, 7-8=-1031/336, 8-9=-1313/290, 9-17=-1322/267, 10-17=-1453/259, 2-15=-1090/331, 10-11=-1041/250
BOT CHORD	14-15=-488/813, 13-14=-122/1140, 12-13=-122/1140, 11-12=-238/433
WEBS	8-12=-58/418, 4-14=-53/445, 5-7=-1612/572, 2-14=-165/794, 10-12=-138/891

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-3-8, Exterior (2) 11-3-8 to 17-0-3, Interior (1) 17-0-3 to 25-4-4, Exterior (2) 25-4-4 to 28-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 15 and 220 lb uplift at joint 11.
8) 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.
9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C4	Truss	2	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:56 — Page: 1

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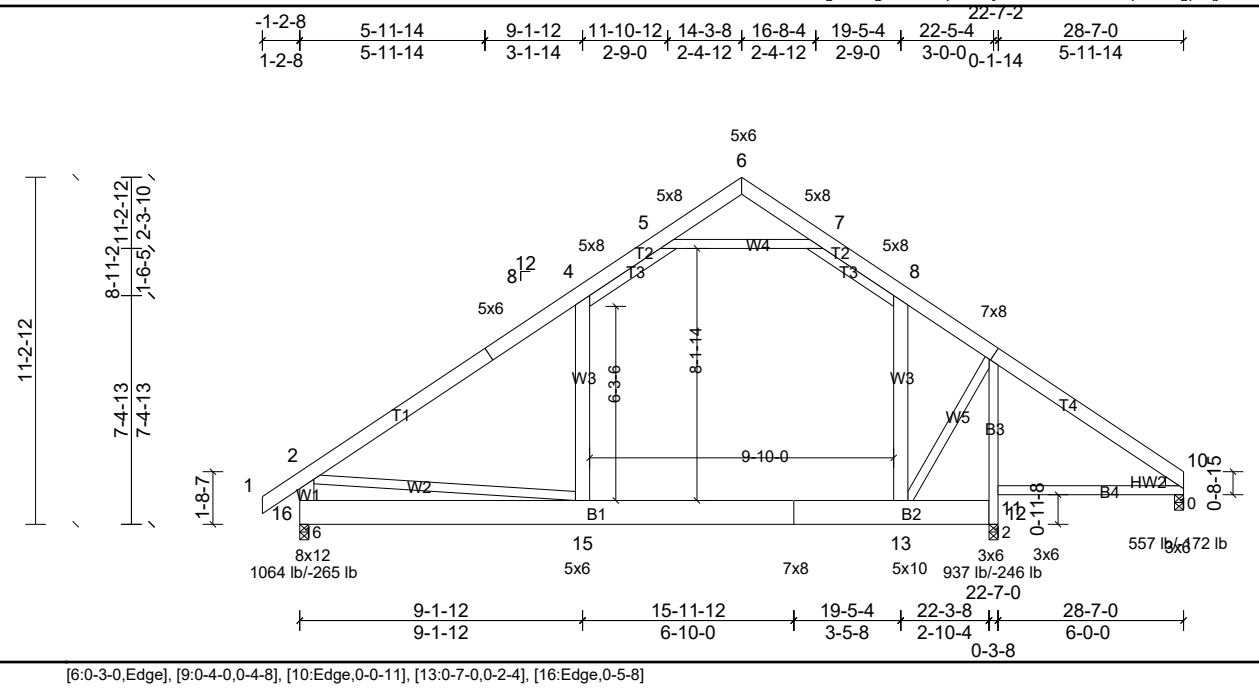

Scale = 1:74.8

Plate Offsets (X, Y): [6:0-3-0,Edge], [9:0-4-0,0-4-8], [10:Edge,0-0-11], [13:0-7-0,0-2-4], [16:Edge,0-5-8]

Loading	(psf)	Spacing	1-7-3	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	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.24	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.08	13-15	>999	360	Weight: 261 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T3:2x4 SP No.2
BOT CHORD	2x10 SP No.2 *Except* B3:2x4 SP No.3, B4:2x4 SP No.2
WEBS	2x6 SP No.2 *Except* W4:2x4 SP No.2, W2,W5:2x4 SP No.3
WEDGE	Right: 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, Except: 4-0-3 oc bracing: 11-12.

REACTIONS (lb/size) 10=502/0-3-8, (min. 0-1-8), 12=566/0-3-8, (min. 0-1-8), 16=896/0-3-8, (min. 0-1-8)
Max Horiz 16=-311 (LC 8)
Max Uplift 10=-172 (LC 10), 12=-246 (LC 11), 16=-265 (LC 10)
Max Grav 10=557 (LC 18), 12=937 (LC 19), 16=1064 (LC 18)

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

TOP CHORD	2-20=-1039/159, 3-20=-909/181, 3-4=-906/202, 4-5=-796/297, 5-6=-109/293, 6-7=-91/250, 7-8=-839/308, 8-9=-1115/368, 9-21=-701/291, 10-21=-768/274, 2-16=-892/281
BOT CHORD	15-16=-508/828, 14-15=-148/905, 13-14=-148/905, 12-13=-167/564, 11-12=-1180/238, 9-11=-1135/252, 10-11=-176/603
WEBS	4-15=-65/276, 8-13=-142/378, 5-7=-1144/489, 2-15=-136/421, 9-13=0/671

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-3-8, Exterior (2) 11-3-8 to 17-0-3, Interior (1) 17-0-3 to 25-7-0, Exterior (2) 25-7-0 to 28-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
7) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 265 lb uplift at joint 16, 172 lb uplift at joint 10 and 246 lb uplift at joint 12.
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) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C5	Truss	4	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:56 — Page: 1

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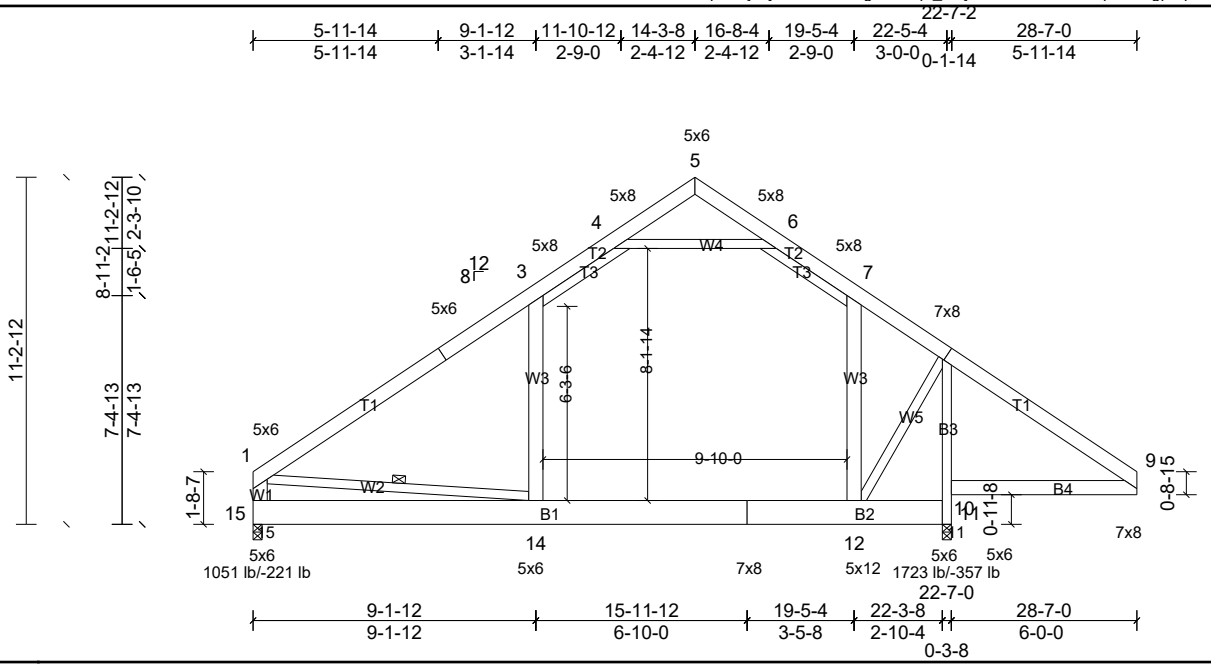


Scale = 1:74.8

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

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	0.64	Vert(LL)	0.29	14-15	>932	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.38	14	>698	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	12-14	>999	360	Weight: 262 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T3:2x4 SP No.2
BOT CHORD	2x10 SP No.2 *Except* B3:2x4 SP No.1, B4:2x6 SP No.1, B2:2x10 SP No.1
WEBS	2x6 SP No.2 *Except* W5,W2:2x4 SP No.3, W4:2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 3-9-5 oc bracing.
WEBS	1 Row at midpt 1-14

REACTIONS (lb/size) 11=1513/0-3-8, (min. 0-1-8), 15=858/0-3-8, (min. 0-1-8)
Max Horiz 15=-378 (LC 8)
Max Uplift 11=-357 (LC 11), 15=-221 (LC 10)
Max Grav 11=1723 (LC 2), 15=1051 (LC 18)

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

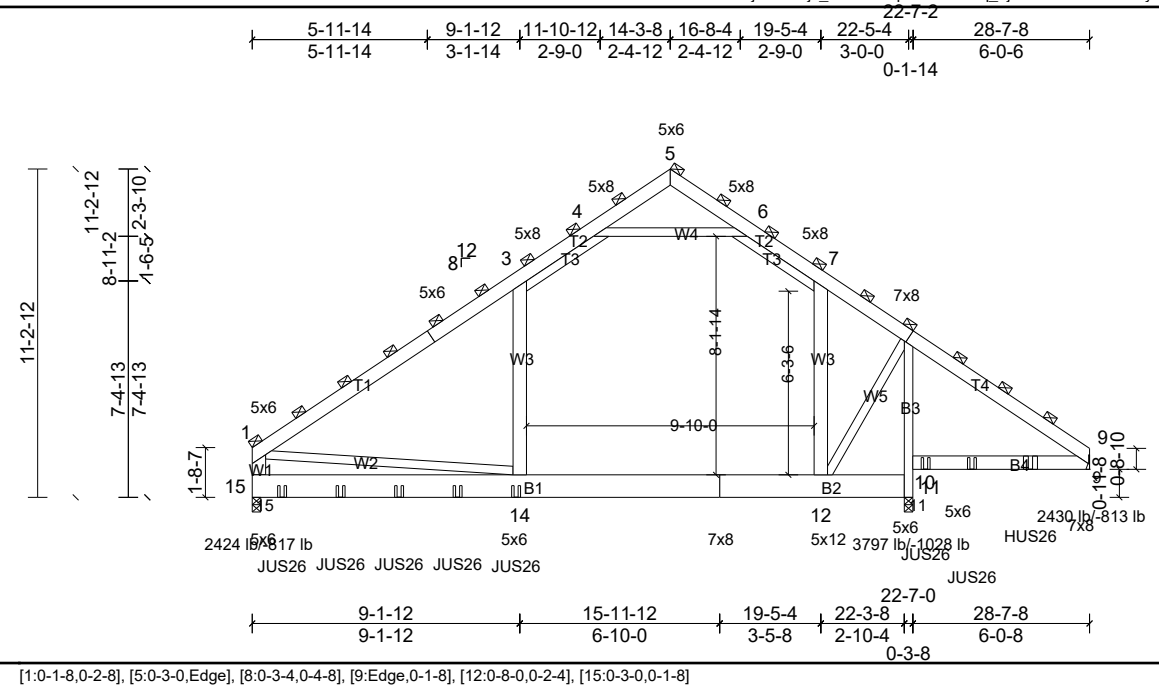
TOP CHORD	1-19=-1050/146, 2-19=-887/155, 2-3=-884/185, 3-4=-745/282, 4-5=-112/264, 6-7=-803/311, 7-8=-955/325, 8-20=-332/438, 9-20=-346/329, 1-15=-771/171
BOT CHORD	14-15=-494/877, 13-14=-92/825, 12-13=-92/825, 11-12=-328/374, 10-11=-2644/1040, 8-10=-2554/855, 9-10=-312/364
WEBS	3-14=-273/322, 7-12=-283/244, 8-12=-481/2013, 4-6=-980/485, 1-14=-274/406

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 3-2-12, Interior (1) 3-2-12 to 11-3-8, Exterior (2) 11-3-8 to 17-0-3, Interior (1) 17-0-3 to 25-7-0, Exterior (2) 25-7-0 to 28-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 15 and 357 lb uplift at joint 11.
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) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C6	Truss	1	**2**	Job Reference (optional)



Scale = 1:79.1

Plate Offsets (X, Y): [1:0-1-8,0-2-8], [5:0-3-0,Edge], [8:0-3-4,0-4-8], [9:Edge,0-1-8], [12:0-8-0,0-2-4], [15:0-3-0,0-1-8]

Loading	(psf)	Spacing	3-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	0.26	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.30	14-15	>879	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.08	12-14	>999	360	Weight: 525 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T3:2x4 SP No.2
BOT CHORD	2x10 SP No.1 *Except* B3:2x4 SP No.1, B4:2x6 SP No.1, B1:2x10 SP No.2
WEBS	2x6 SP No.2 *Except* W4:2x4 SP No.2, W5,W2:2x4 SP No.3

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 5-1-8 oc bracing: 10-11.

REACTIONS (lb/size) 9=2430/ Mechanical, (min. 0-1-8), 11=2894/0-3-8, (min. 0-1-8), 15=2424/0-3-8, (min. 0-1-8)
Max Horiz 15=-567 (LC 6)
Max Uplift 9=-813 (LC 8), 11=-1028 (LC 9), 15=-817 (LC 8)
Max Grav 9=2430 (LC 1), 11=3797 (LC 17), 15=2424 (LC 1)

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

TOP CHORD	1-2=-2229/483, 2-3=-1984/515, 3-4=-1701/698, 4-5=-330/713, 5-6=-298/637, 6-7=-1777/731, 7-8=-2468/940, 8-9=-1803/792, 1-15=-1712/518
BOT CHORD	15-19=-922/1551, 19-20=-922/1551, 20-21=-922/1551, 21-22=-922/1551, 14-22=-922/1551, 13-14=-461/1946, 12-13=-461/1946, 11-12=-507/1357, 10-11=-4353/1095, 8-10=-2347/554, 10-23=-571/1571, 23-24=-571/1571, 24-25=-571/1571, 9-25=-571/1571
WEBS	3-14=-187/638, 7-12=-441/1019, 4-6=-2592/1253, 8-12=-21/1219, 1-14=-116/818

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, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-6-0 oc.
   Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 813 lb uplift at joint 9, 817 lb uplift at joint 15 and 1028 lb uplift at joint 11.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 14-0-0 oc max. starting at 1-0-4 from the left end to 24-7-4 to connect truss(es) B8 (1 ply 2x4 SP), B6 (1 ply 2x4 SP), B5 (1 ply 2x4 SP) to front face of bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	C6	Truss	1	**2**	Job Reference (optional)

15) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 26-7-4 from the left end to connect truss(es) B4 (1 ply 2x4 SP) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.
17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-90, 3-4=-105, 4-5=-90, 5-6=-90, 6-7=-105, 7-9=-90, 11-15=-30, 10-16=-30, 4-6=-15
Concentrated Loads (lb)
Vert: 14=-206 (F), 19=-209 (F), 20=-206 (F), 21=-206 (F), 22=-206 (F), 23=-974 (F), 24=-966 (F), 25=-1214 (F)

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	D1	Truss	1	1	Job Reference (optional)

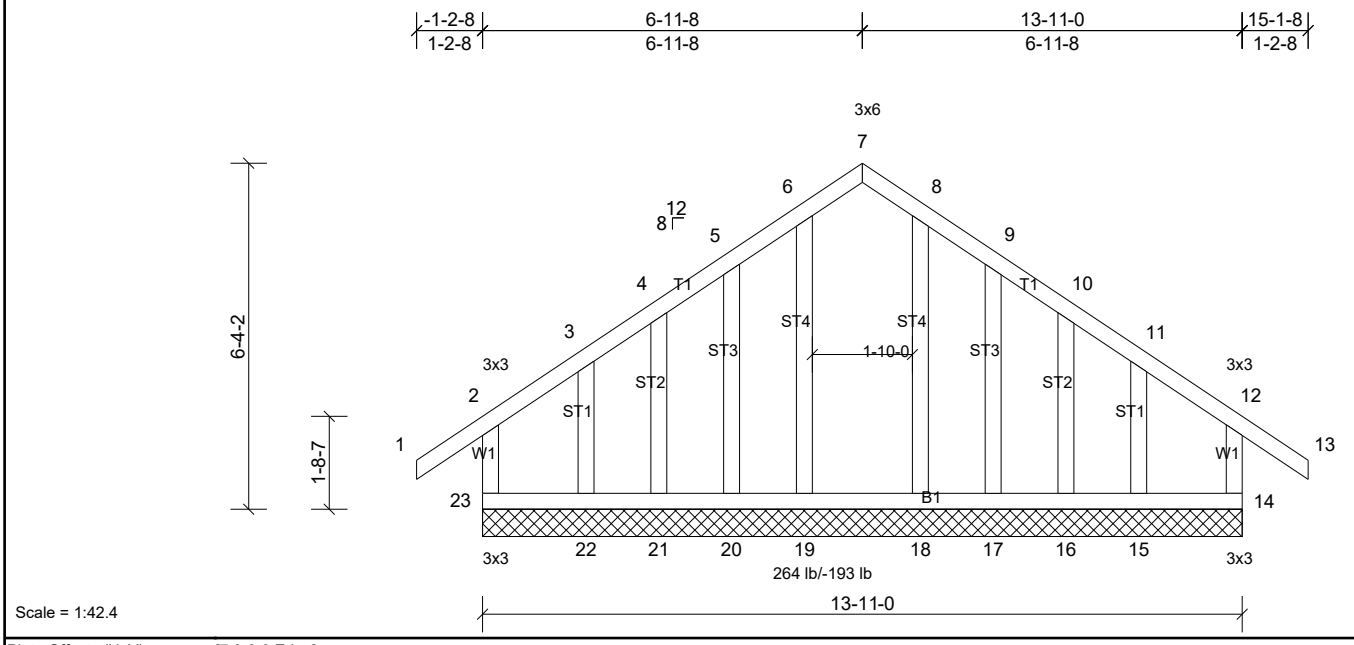


Plate Offsets (X, Y): [7:0-3-0,Edge]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 99 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 13-11-0.

(lb) - Max Horiz 23=267 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 16, 21 except 14=-137 (LC 7), 15=-184 (LC 6), 17=-131 (LC 11), 20=-131 (LC 10), 22=-193 (LC 7), 23=-147 (LC 6)

Max Grav All reactions 250 (lb) or less at joint(s) 14, 16, 17, 18, 19, 20, 21, 23 except 15=254 (LC 9), 22=264 (LC 8)

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

TOP CHORD 5-6=-208/323, 8-9=-208/323

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-8 to 1-10-12, Exterior (2) 1-10-12 to 3-11-8, Corner (3) 3-11-8 to 9-11-8, Exterior (2) 9-11-8 to 12-0-4, Corner (3) 12-0-4 to 15-1-8 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.
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 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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) 21, 16 except (jt=lb) 23=147, 14=136, 20=130, 22=193, 17=130, 15=184.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	E1	Truss	1	1	Job Reference (optional)

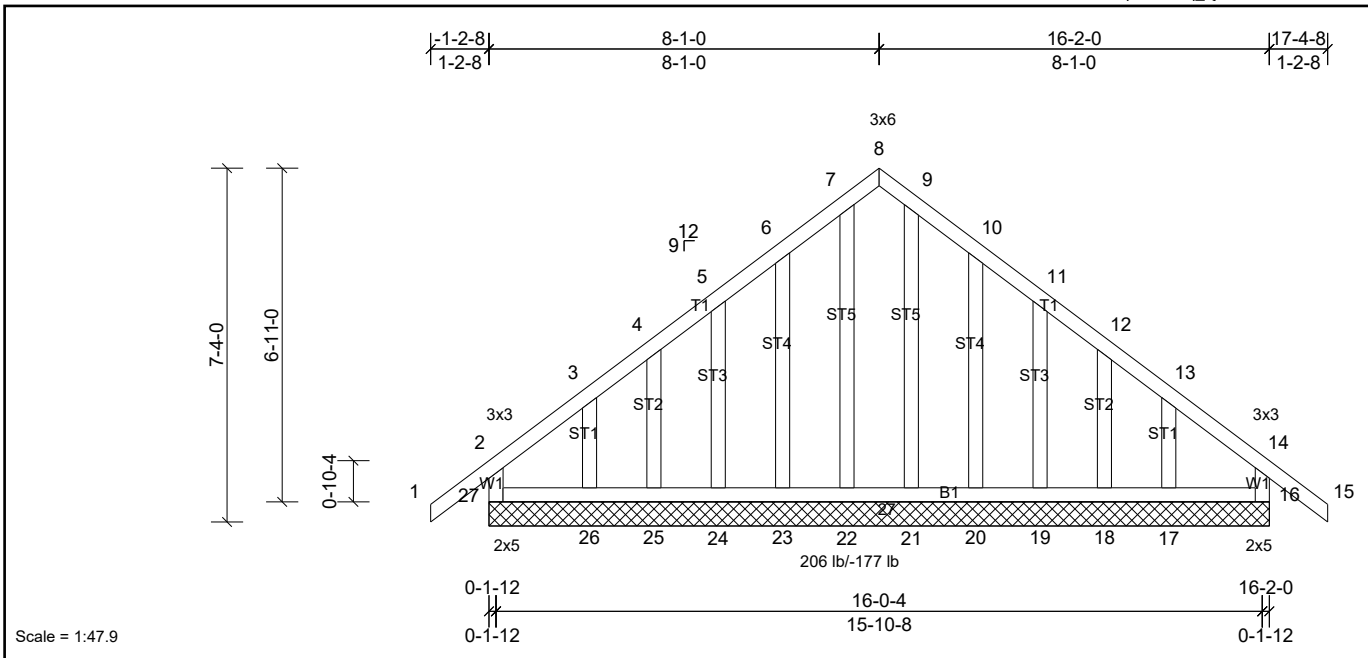


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Plate Offsets (X, Y): [8:0-3-0,Edge]

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 118 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 16-2-0.

(lb) - Max Horiz 27=-278 (LC 8)

Max Uplift All uplift 100 (lb) or less at joint(s) 16, 18, 19, 24, 25, 27 except 17=-169 (LC 11), 20=-111 (LC 11), 23=-109 (LC 10), 26=-178 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27

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

TOP CHORD 6-7=-239/261, 9-10=-239/261

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-8 to 2-1-0, Exterior (2) 2-1-0 to 5-1-0, Corner (3) 5-1-0 to 11-1-0, Exterior (2) 11-1-0 to 14-1-0, Corner (3) 14-1-0 to 17-4-8 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
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 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 27, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 16, 24, 25, 19, 18 except (jt=lb) 23=108, 26=177, 20=111, 17=168.
12) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	E2	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:56:58 — Page: 1

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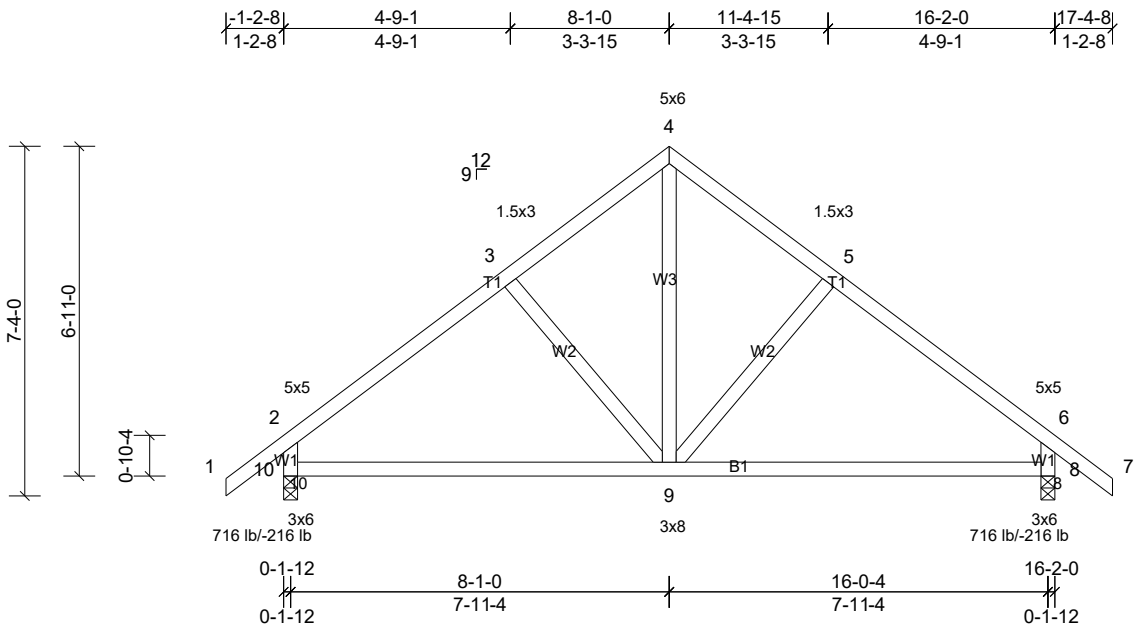

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Plate Offsets (X, Y): [2:0-2-8,0-1-12], [6:0-2-8,0-1-12]

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	0.73	Vert(LL)	-0.08	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.16	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 84 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) 8=716/0-3-8, (min. 0-1-8), 10=716/0-3-8, (min. 0-1-8)
Max Horiz 10=-278 (LC 8)
Max Uplift 8=-216 (LC 11), 10=-216 (LC 10)

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

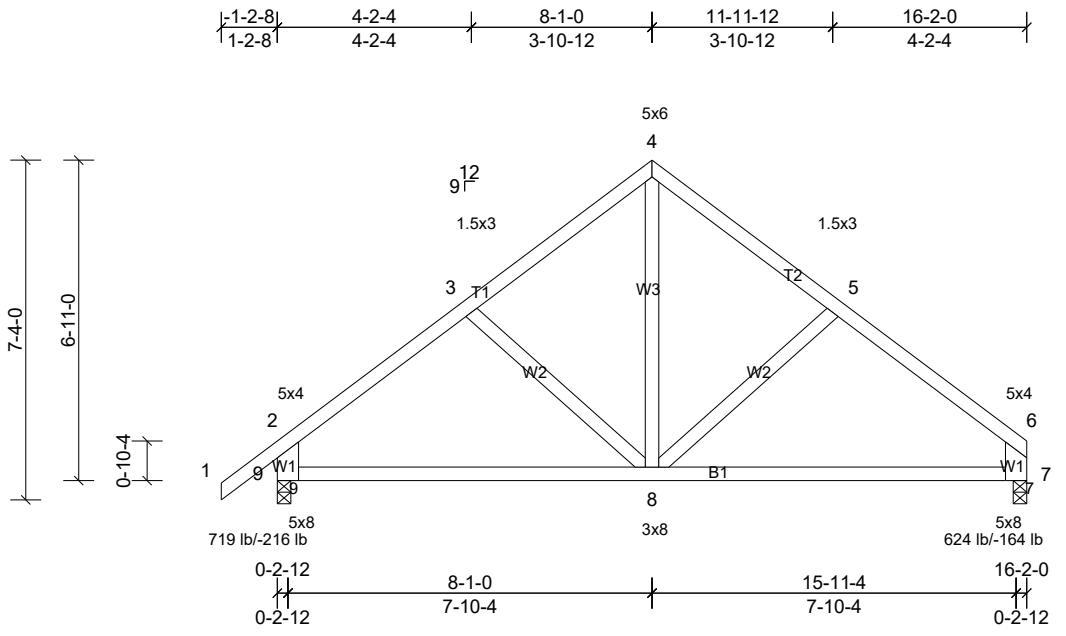
TOP CHORD	2-11=-738/229, 3-11=-708/259, 3-12=-667/249, 4-12=-644/271, 4-13=-644/271, 5-13=-667/249, 5-14=-708/259, 6-14=-738/229, 2-10=-633/327, 6-8=-633/327
BOT CHORD	9-10=-162/593, 8-9=-67/492
WEBS	4-9=-189/578, 3-9=-272/259, 5-9=-272/260

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-1-0, Exterior (2) 5-1-0 to 11-1-0, Interior (1) 11-1-0 to 14-4-8, Exterior (2) 14-4-8 to 17-4-8 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
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) Bearing at joint(s) 10, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 10 and 216 lb uplift at joint 8.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	E3	Truss	3	1	Job Reference (optional)



Scale = 1:49.9

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	0.58	Vert(LL)	-0.08	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 84 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* W1:2x6 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 7=624/0-3-8, (min. 0-1-8), 9=719/0-3-8, (min. 0-1-8)
Max Horiz 9=252 (LC 7)
Max Uplift 7=-164 (LC 11), 9=-216 (LC 10)

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

TOP CHORD	2-10=-733/243, 3-10=-692/268, 3-11=-638/239, 4-11=-615/261, 4-12=-614/263, 5-12=-637/237, 5-13=-691/275, 6-13=-732/250, 2-9=-633/333, 6-7=-570/235
BOT CHORD	8-9=-219/569, 7-8=-133/498
WEBS	4-8=-143/480, 5-8=-250/256

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-1-0, Exterior (2) 5-1-0 to 11-1-0, Interior (1) 11-1-0 to 12-11-4, Exterior (2) 12-11-4 to 15-11-4 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
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) Bearing at joint(s) 9, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 9 and 164 lb uplift at joint 7.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	G1	Truss	1	1	Job Reference (optional)

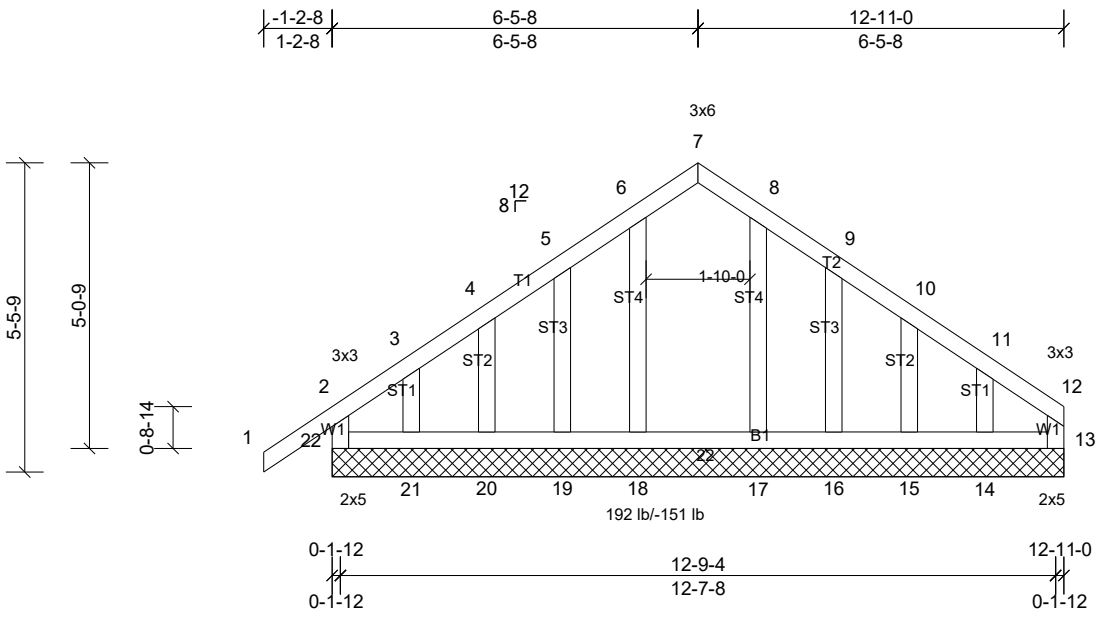


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Plate Offsets (X, Y): [7:0-3-0,Edge]

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	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 75 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 All bearings 12-11-0.

(lb) - Max Horiz 22=196 (LC 7)

Max Uplift All uplift 100 (lb) or less at joint(s) 13, 15, 18, 20, 22 except 14=-152 (LC 11), 16=-106 (LC 11), 19=-101 (LC 10), 21=-125 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

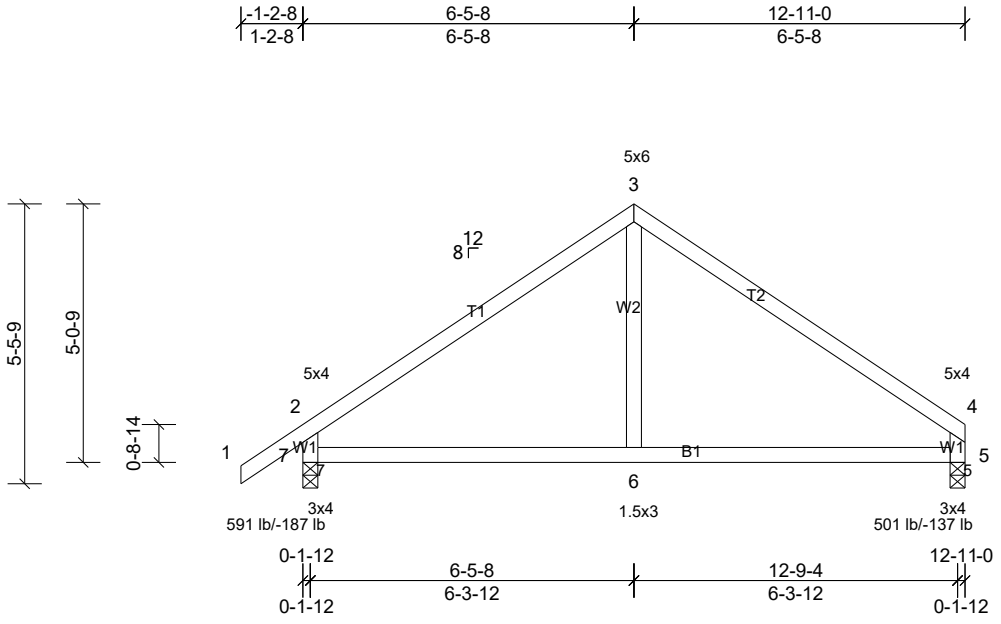
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-8 to 1-9-8, Exterior (2) 1-9-8 to 3-5-8, Corner (3) 3-5-8 to 9-5-8, Exterior (2) 9-5-8 to 9-9-4, Corner (3) 9-9-4 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 22, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 13, 18, 20, 15 except (jt=lb) 19=101, 21=124, 16=106, 14=151.
12) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	G2	Truss	2	1	Job Reference (optional)



Scale = 1:45.1

Plate Offsets (X, Y): [2:0-2-0,0-1-12]

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	0.59	Vert(LL)	0.04	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	0.10	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 52 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.

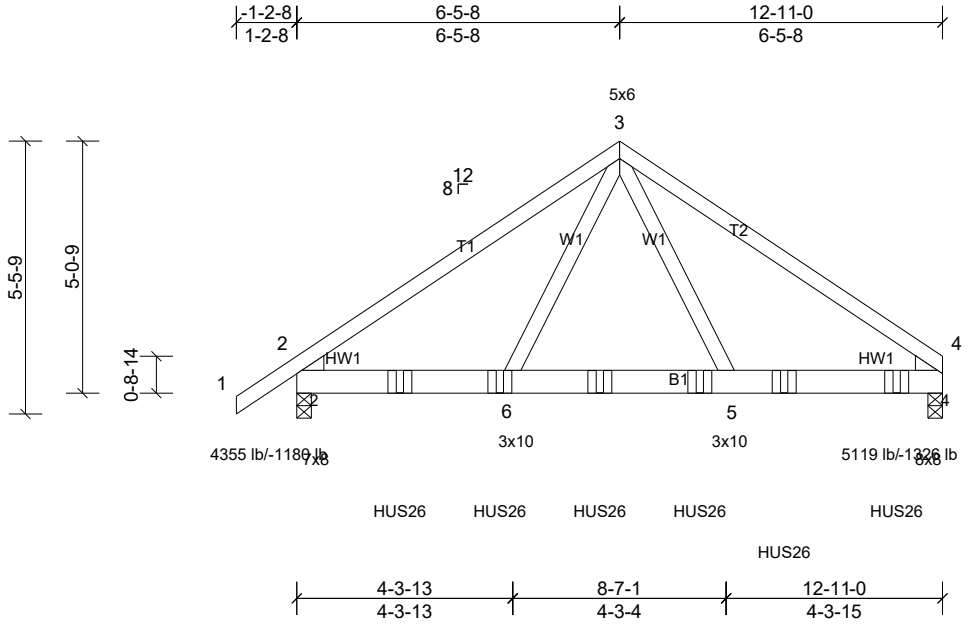
REACTIONS (lb/size) 5=501/0-3-8, (min. 0-1-8), 7=591/0-3-8, (min. 0-1-8)
Max Horiz 7=196 (LC 7)
Max Uplift 5=-137 (LC 11), 7=-187 (LC 10)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-560/182, 8-9=-518/192, 3-9=-517/213, 3-10=-514/204, 10-11=-516/182, 4-11=-554/182, 2-7=-534/324, 4-5=-485/226
BOT CHORD 6-7=-54/392, 5-6=-54/392
WEBS 3-6=0/274

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 3-5-8, Exterior (2) 3-5-8 to 9-5-8, Interior (1) 9-5-8 to 9-9-4, Exterior (2) 9-9-4 to 12-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 7 and 137 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	G3	Truss	1	**2**	Job Reference (optional)



Scale = 1:46.3

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

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	0.58	Vert(LL)	0.07	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.14	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 143 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 Right: 2x4 SP No.2

BRACING

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

REACTIONS (lb/size) 2=4001/0-3-8, (min. 0-2-9), 4=4577/0-3-8, (min. 0-3-0)
Max Horiz 2=170 (LC 7)
Max Uplift 2=-1180 (LC 8), 4=-1326 (LC 9)
Max Grav 2=4355 (LC 15), 4=5119 (LC 16)

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

TOP CHORD	2-3=-5760/1541, 3-4=-5979/1588
BOT CHORD	2-13=-1230/4789, 6-13=-1230/4789, 6-14=-852/3368, 14-15=-852/3368, 5-15=-852/3368, 5-16=-1220/4920, 16-17=-1220/4920, 4-17=-1220/4920
WEBS	3-5=-952/3680, 3-6=-865/3252

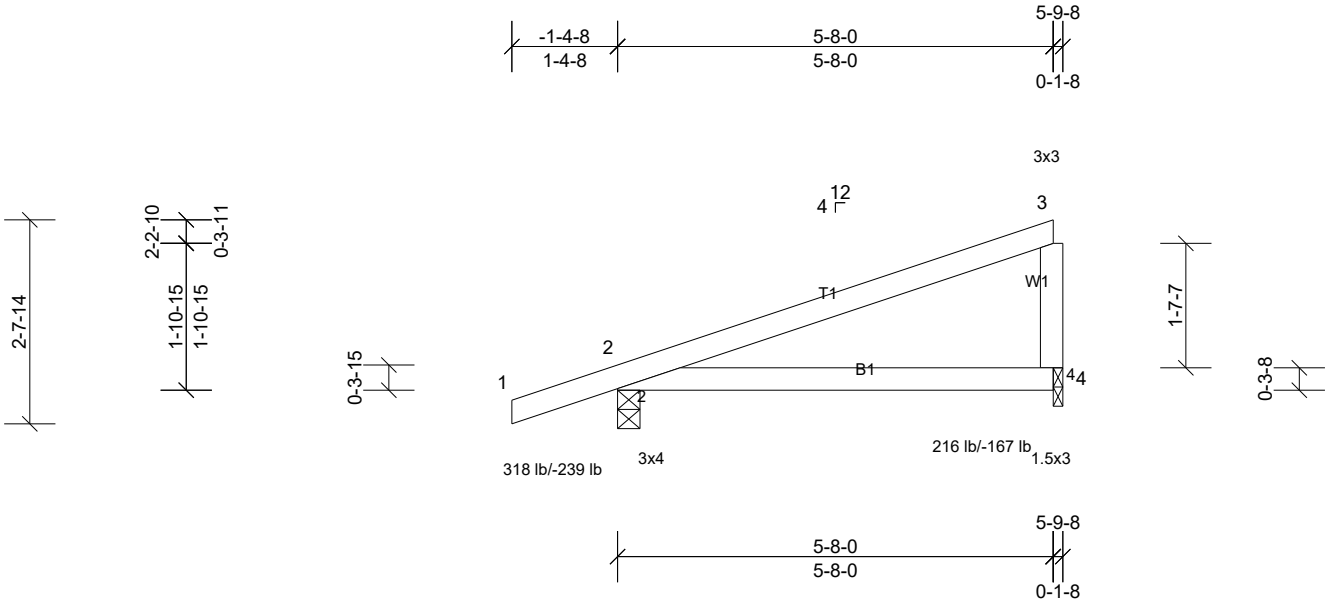
NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 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=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1180 lb uplift at joint 2 and 1326 lb uplift at joint 4.
8) 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.
9) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 2-0-12 from the left end to 12-0-0 to connect truss(es) B2 (1 ply 2x4 SP), B3 (1 ply 2x6 SP) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 7-10=-20
Concentrated Loads (lb)
Vert: 6=-1245 (B), 13=-1245 (B), 14=-1245 (B), 15=-1245 (B), 16=-1245 (B), 17=-1246 (B)

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	P1	Truss	14	1	Job Reference (optional)



Scale = 1:30.1

Plate Offsets (X, Y): [3:0-0-14,0-1-8]

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	0.45	Vert(LL)	0.15	4-7	>452	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	0.12	4-7	>589	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-MP							Weight: 22 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 5-9-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=318/0-3-8, (min. 0-1-8), 4=216/0-1-8, (min. 0-1-8)
Max Horiz 2=137 (LC 6)
Max Uplift 2=-239 (LC 6), 4=-167 (LC 6)

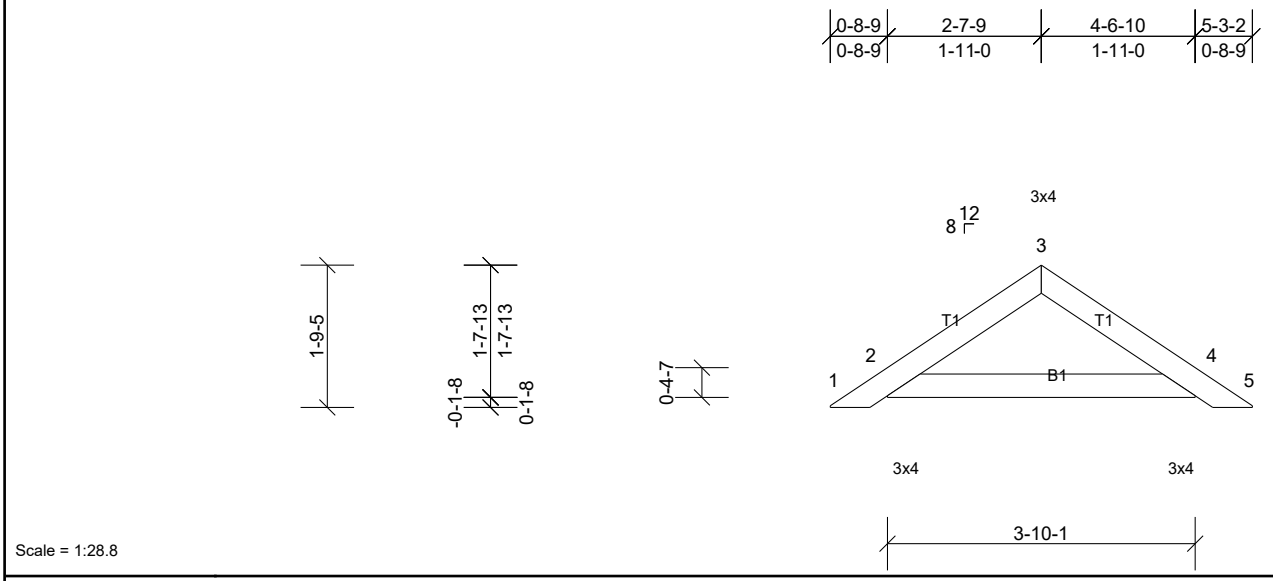
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

1) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-8 to 1-7-8, Interior (1) 1-7-8 to 2-7-12, Exterior (2) 2-7-12 to 5-7-12 zone; cantilever left and right exposed ; end vertical left exposed; porch 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) 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.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 239 lb uplift at joint 2 and 167 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	PB1	Truss	16	1	Job Reference (optional)



Scale = 1:28.8

Plate Offsets (X, Y): [3:0-2-0,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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 15 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 5-3-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

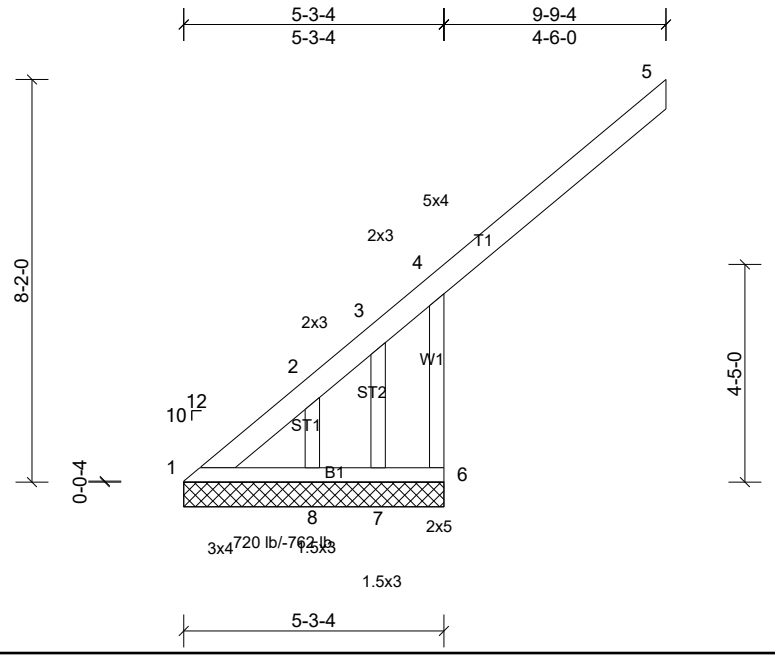
REACTIONS All bearings 3-10-1.
(lb) - Max Horiz 2=-56 (LC 8), 6=-56 (LC 8)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 10
Max Grav All reactions 250 (lb) or less at joint(s) 2, 4, 6, 10

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=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 2, 4.
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) See standard piggyback truss connection detail for connection to base truss.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V1	Truss	1	1	Job Reference (optional)



Scale = 1:46.9

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

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 48 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x4 SP SS
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING

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

REACTIONS All bearings 5-3-4.

(lb) - Max Horiz 1=321 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 8 except 6=-762 (LC 7), 7=-329 (LC 17)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 8 except 6=721 (LC 17), 7=412 (LC 7)

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

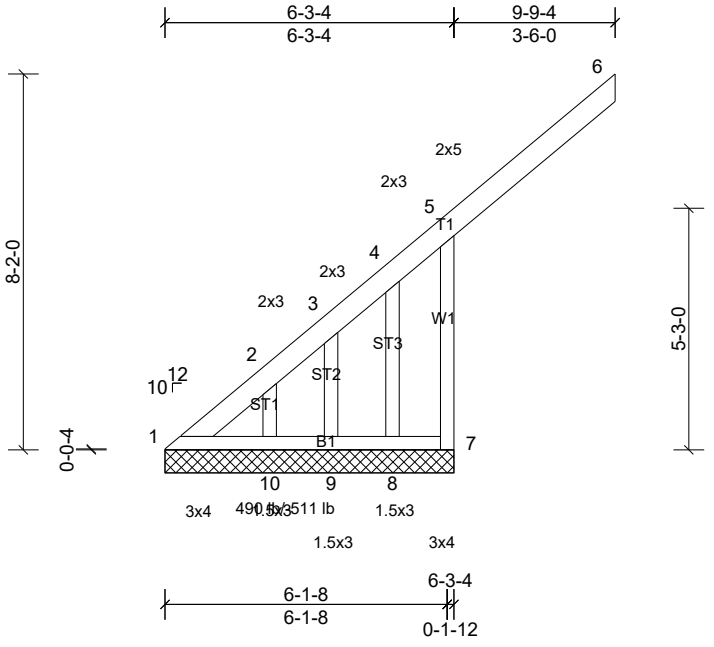
TOP CHORD 1-2=-519/128, 2-11=-503/88, 3-11=-501/98, 3-4=-995/348, 4-6=-717/1473
WEBS 3-7=-783/346

NOTES

1) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-6-11, Exterior (2) 5-6-11 to 9-9-9 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) Truss designed for wind loads in the plane of the truss only.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8 except (jt=lb) 6=762, 7=329.
8) 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V1A	Truss	1	1	Job Reference (optional)



Scale = 1:50.2

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 55 lb	FT = 20%

LUMBER

TOP CHORD	2x6 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 6-3-4.

(lb) - Max Horiz 1=326 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 9, 10 except 7=-512 (LC 7), 8=-133 (LC 17)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 8, 9, 10 except 7=491 (LC 17)

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

TOP CHORD 1-2=-491/134, 2-13=-426/83, 3-13=-421/94, 3-4=-408/89, 4-14=-666/207, 5-14=-660/223, 5-7=-487/982
WEBS 4-8=-417/161

NOTES

1) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-6-11, Exterior (2) 5-6-11 to 9-9-9 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) Truss designed for wind loads in the plane of the truss only.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 10 except (jt=lb) 7=511, 8=132.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V2	Truss	1	1	Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Eric Graham — Run: 8.62 S Sep 22 2022 Print: 8.620 S Sep 22 2022 MiTek Industries, Inc. Thu Feb 01 11:57:00 — Page: 1

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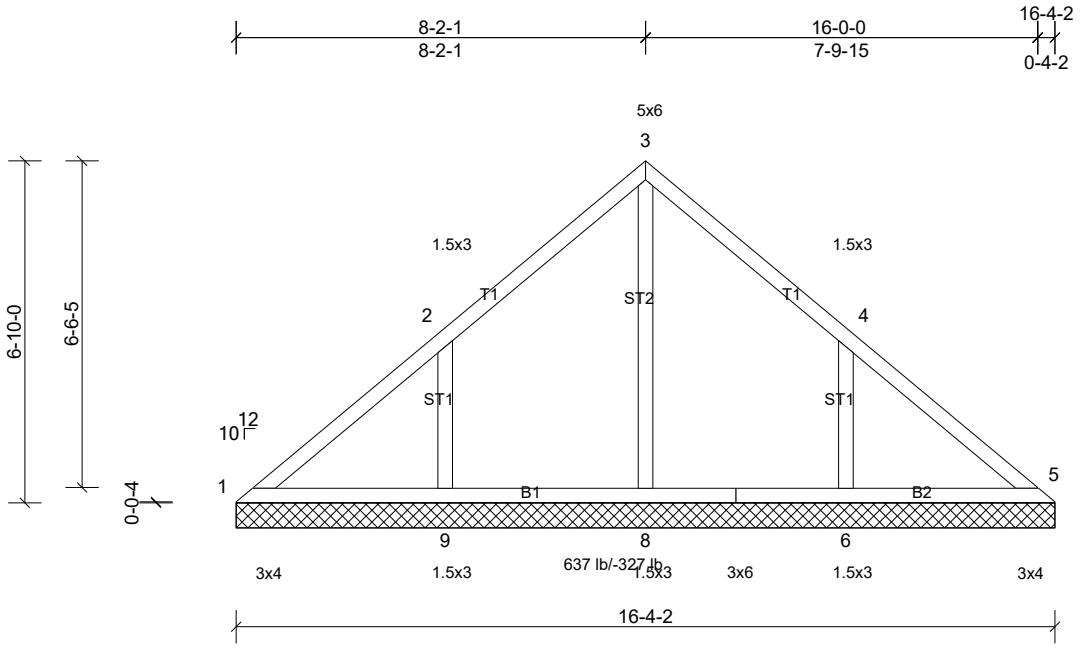


Scale = 1:46.2

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	0.28	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	0.35	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 73 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 16-4-2.

(lb) - Max Horiz 1=233 (LC 7)

Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 14 except 6=-320 (LC 11), 9=-328 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 1, 5, 14 except 6=481 (LC 18), 8=638 (LC 17), 9=481 (LC 17)

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

TOP CHORD 1-15=-180/300, 2-15=-157/369, 3-16=-25/300, 3-17=-25/282, 4-21=-43/260

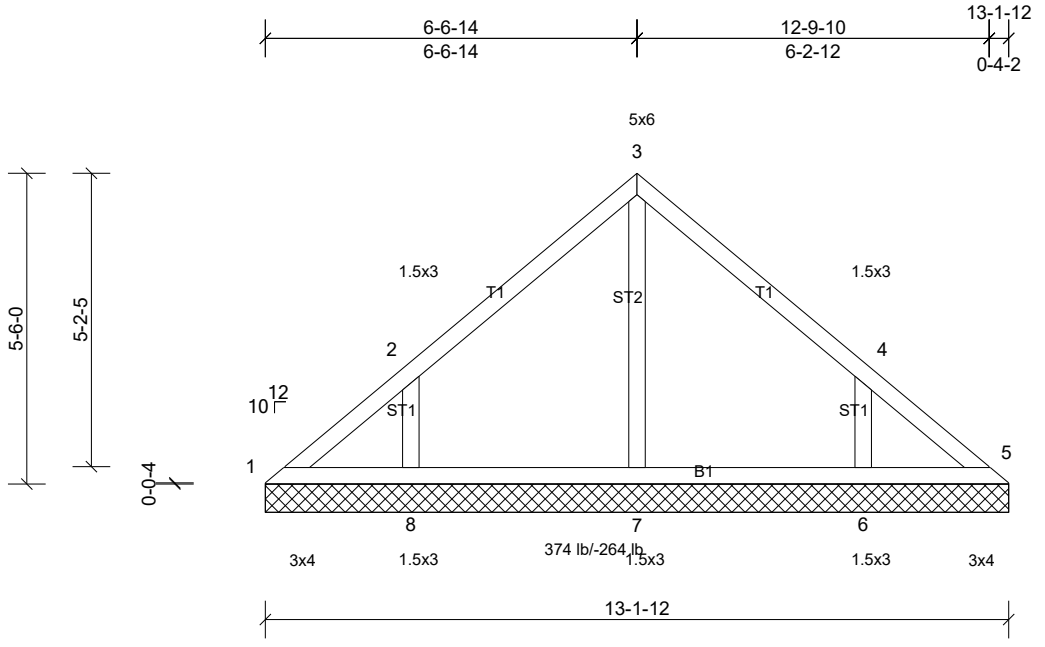
WEBS 3-8=-441/0, 2-9=-407/349, 4-6=-406/347

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-2-6, Exterior (2) 5-2-6 to 11-2-6, Interior (1) 11-2-6 to 12-11-15, Exterior (2) 12-11-15 to 15-11-15 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, 5, 5 except (jt=lb) 9=327, 6=320.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V3	Truss	1	1	Job Reference (optional)



Scale = 1:40.9

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	0.09	Horiz(TL)	0.00	5	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

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 13-1-12.

(lb) - Max Horiz 1=187 (LC 9)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 6=-260 (LC 11), 8=-265 (LC 10)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=370 (LC 18), 7=263 (LC 17), 8=375 (LC 17)

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

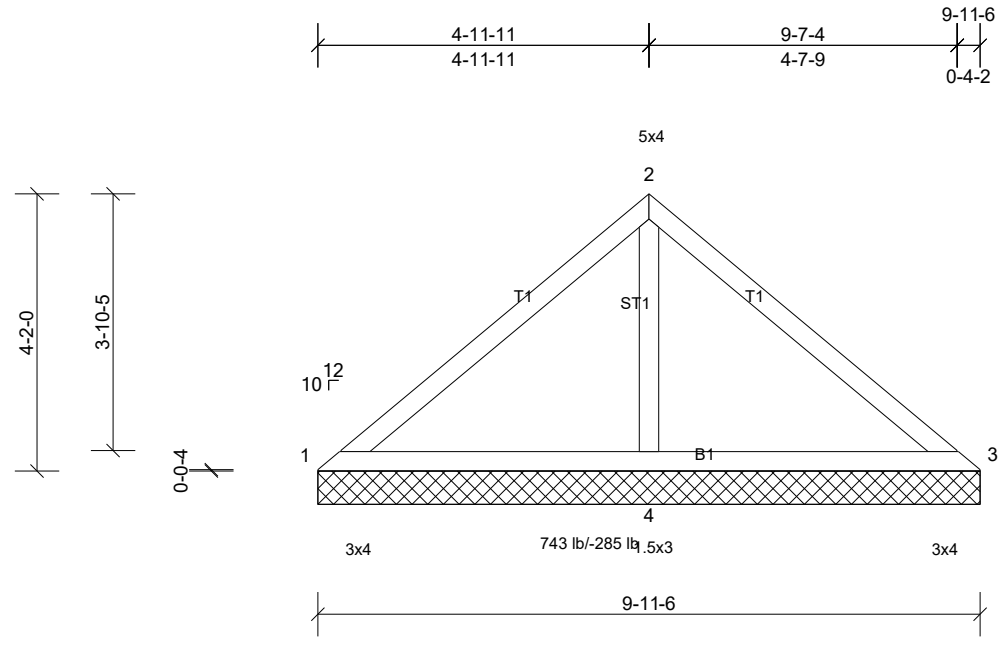
WEBS 2-8=-361/311, 4-6=-361/309

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 3-7-3, Exterior (2) 3-7-3 to 9-7-3, Interior (1) 9-7-3 to 10-2-1, Exterior (2) 10-2-1 to 13-2-1 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, 5 except (jt=lb) 8=264, 6=259.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V4	Truss	1	1	Job Reference (optional)



Scale = 1:34.8

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 38 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 9-11-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=27/9-11-6, (min. 0-1-8), 3=27/9-11-6, (min. 0-1-8), 4=743/9-11-6, (min. 0-1-8)
Max Horiz 1=-140 (LC 6)
Max Uplift 1=-31 (LC 22), 3=-31 (LC 21), 4=-285 (LC 10)
Max Grav 1=69 (LC 21), 3=69 (LC 22), 4=743 (LC 1)

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

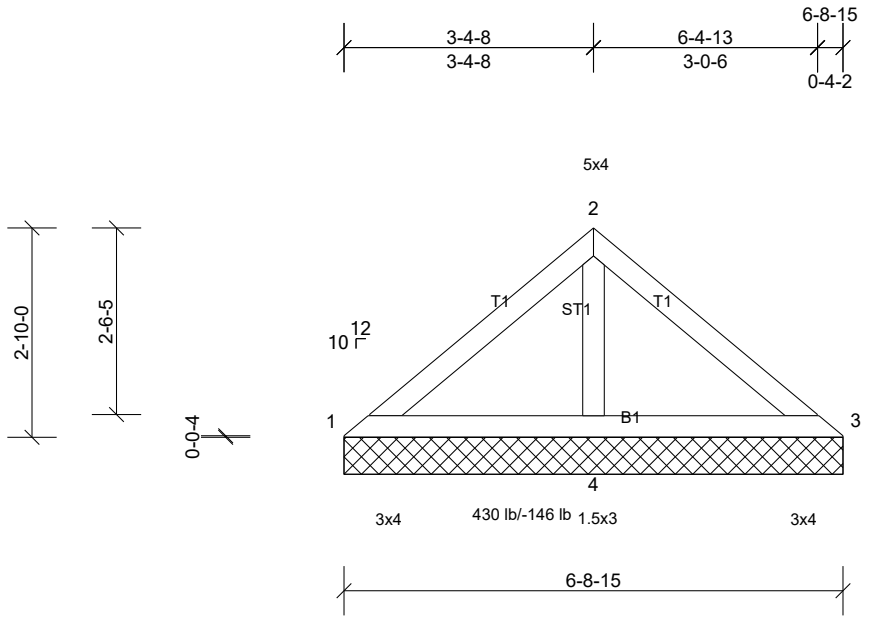
TOP CHORD	1-2=-171/332, 2-3=-171/332
BOT CHORD	1-4=-330/244, 3-4=-330/244
WEBS	2-4=-676/384

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 31 lb uplift at joint 1, 31 lb uplift at joint 3 and 285 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V5	Truss	1	1	Job Reference (optional)



Scale = 1:31.3

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	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
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-8-15 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=55/6-8-15, (min. 0-1-8), 3=55/6-8-15, (min. 0-1-8), 4=430/6-8-15, (min. 0-1-8)
Max Horiz 1=93 (LC 7)
Max Uplift 3=-15 (LC 11), 4=-146 (LC 10)
Max Grav 1=74 (LC 21), 3=74 (LC 22), 4=430 (LC 1)

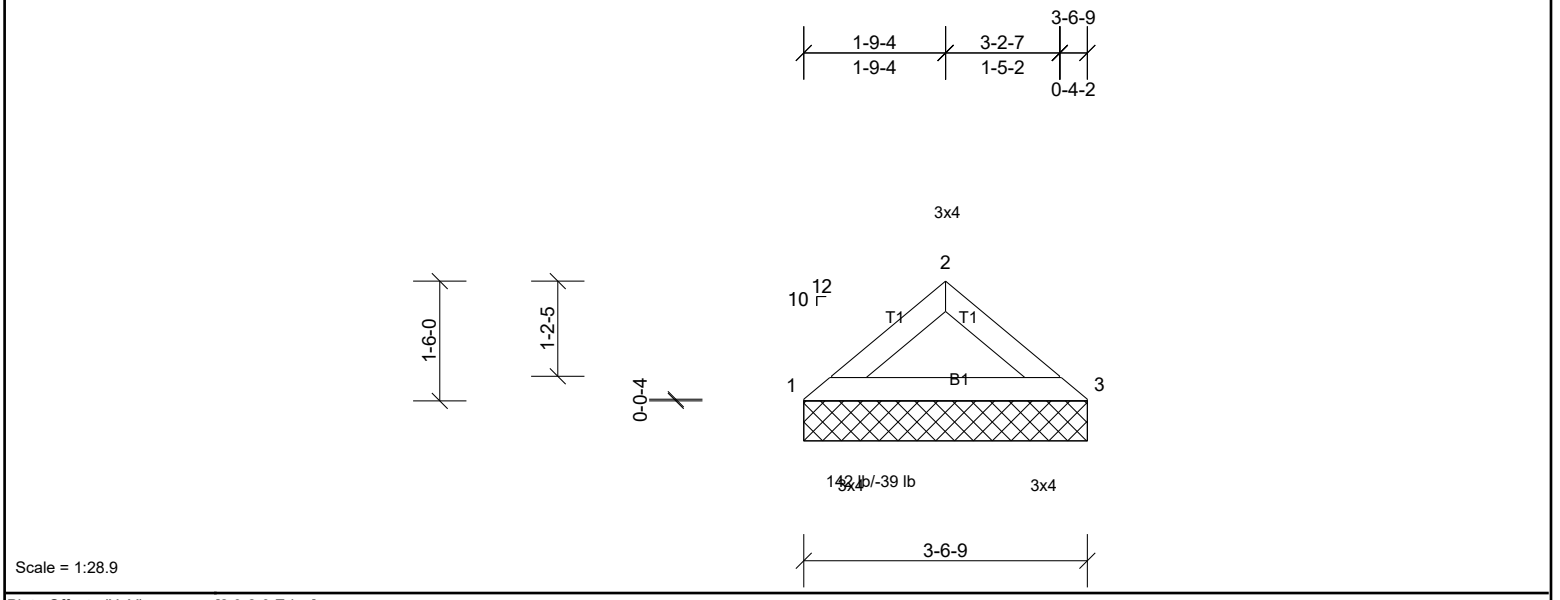
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-346/195

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 15 lb uplift at joint 3 and 146 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V6	Truss	1	1	Job Reference (optional)



Scale = 1:28.9

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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: 11 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

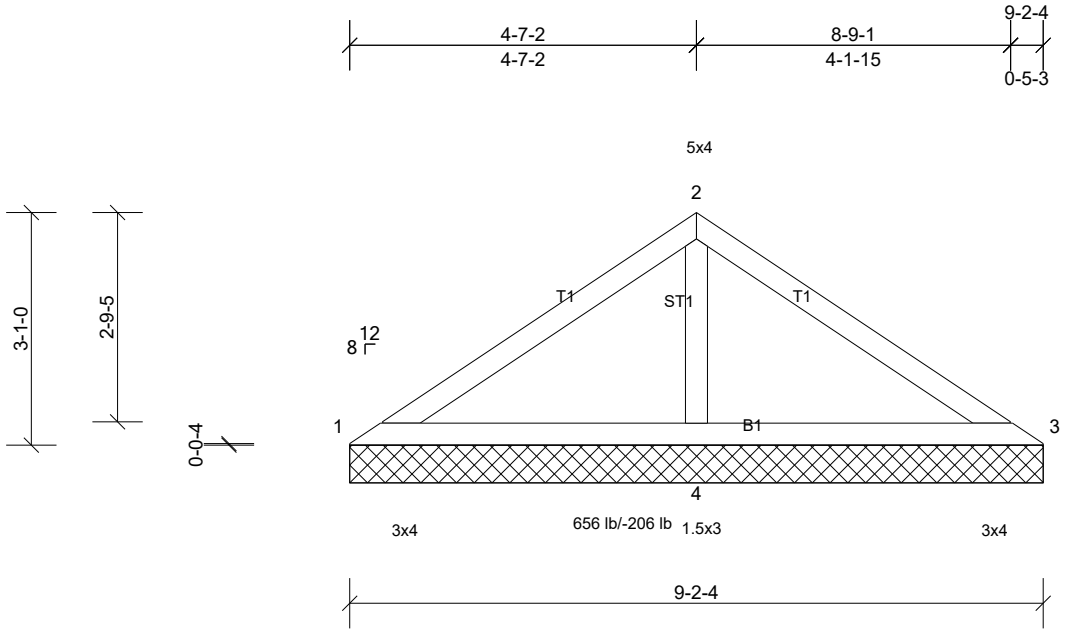
REACTIONS (lb/size) 1=142/3-6-9, (min. 0-1-8), 3=142/3-6-9, (min. 0-1-8)
Max Horiz 1=46 (LC 7)
Max Uplift 1=-39 (LC 10), 3=-39 (LC 11)

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=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 39 lb uplift at joint 1 and 39 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V7	Truss	1	1	Job Reference (optional)



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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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 32 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 9-2-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=39/9-2-4, (min. 0-1-8), 3=39/9-2-4, (min. 0-1-8), 4=656/9-2-4, (min. 0-1-8)
Max Horiz 1=-102 (LC 6)
Max Uplift 1=-17 (LC 22), 3=-27 (LC 6), 4=-206 (LC 10)
Max Grav 1=75 (LC 21), 3=75 (LC 22), 4=656 (LC 1)

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

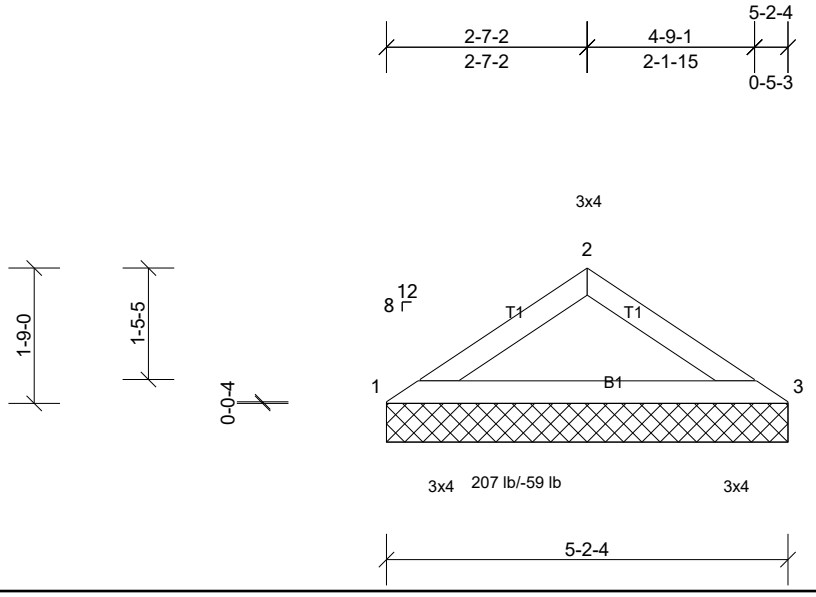
TOP CHORD	1-2=-127/295, 2-3=-127/294
BOT CHORD	1-4=-291/189, 3-4=-291/189
WEBS	2-4=-554/296

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 17 lb uplift at joint 1, 27 lb uplift at joint 3 and 206 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V8	Truss	1	1	Job Reference (optional)



Scale = 1:29.9

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: 15 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 5-2-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

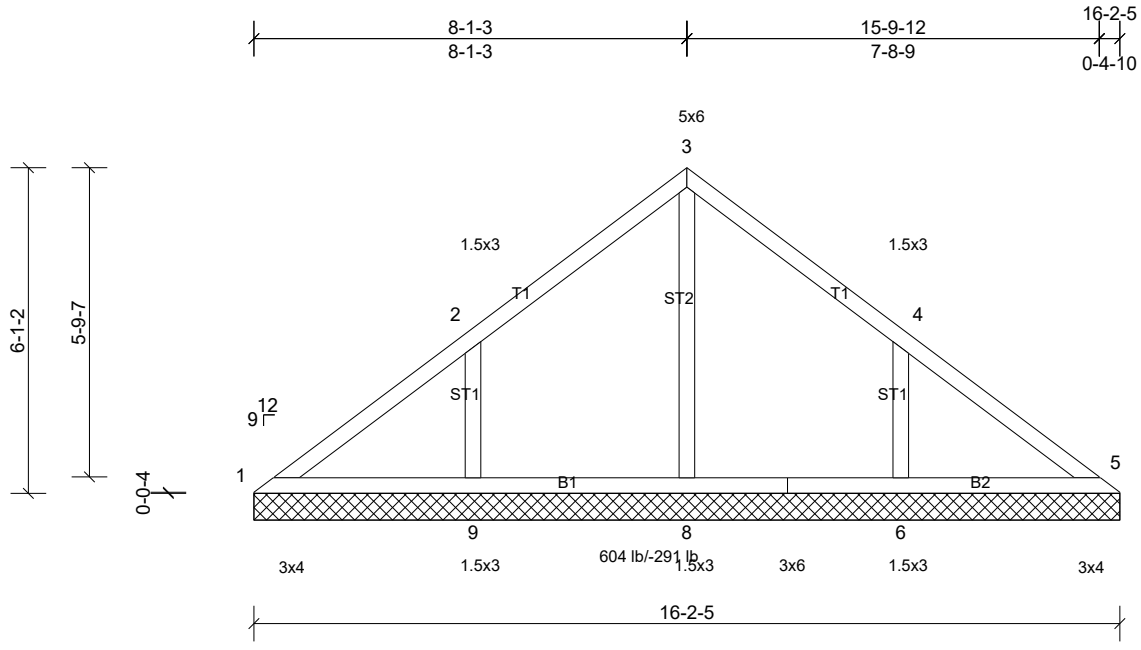
REACTIONS (lb/size) 1=207/5-2-4, (min. 0-1-8), 3=207/5-2-4, (min. 0-1-8)
Max Horiz 1=-55 (LC 6)
Max Uplift 1=-59 (LC 10), 3=-59 (LC 11)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-350/144
BOT CHORD 1-3=-106/281

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 59 lb uplift at joint 1 and 59 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V9	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	0.28	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	0.28	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 68 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 16-2-5.

(lb) - Max Horiz 1=207 (LC 7)

Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 14 except 6=-285 (LC 11), 9=-291 (LC 10)

Max Grav All reactions 250 (lb) or less at joint(s) 1, 5, 14 except 6=453 (LC 18), 8=604 (LC 17), 9=453 (LC 17)

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

TOP CHORD 1-15=-154/279, 2-15=-133/343, 3-16=-8/277, 3-17=0/262, 4-21=-47/257

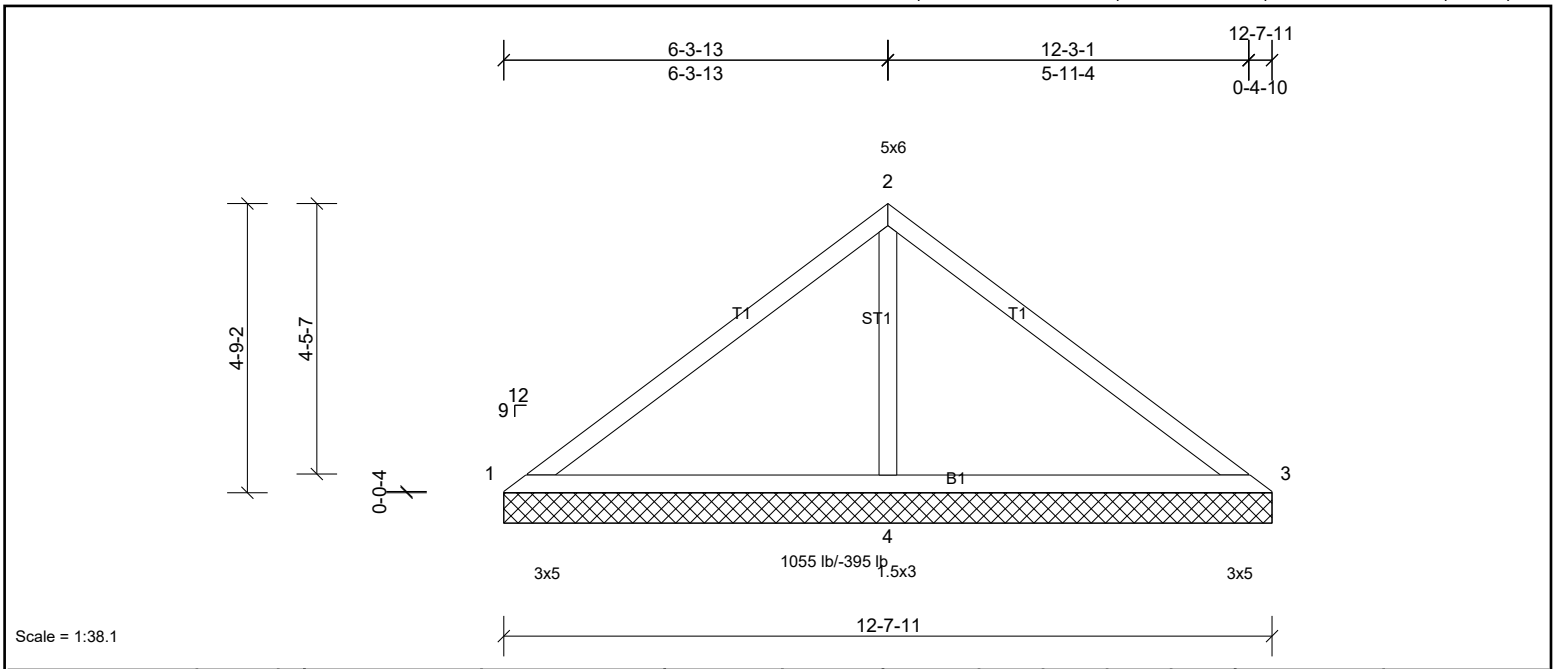
WEBS 3-8=-426/4, 2-9=-379/315, 4-6=-379/313

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-1-8, Exterior (2) 5-1-8 to 11-1-8, Interior (1) 11-1-8 to 12-9-12, Exterior (2) 12-9-12 to 15-9-12 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) 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) 9=291, 6=284.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V10	Truss	1	1	Job Reference (optional)



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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	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horiz(TL)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 47 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=-22/12-7-11, (min. 0-1-8), 3=-22/12-7-11, (min. 0-1-8), 4=1055/12-7-11, (min. 0-1-8)
Max Horiz 1=-161 (LC 6)
Max Uplift 1=-80 (LC 22), 3=-80 (LC 21), 4=-395 (LC 10)
Max Grav 1=67 (LC 11), 3=95 (LC 10), 4=1055 (LC 1)

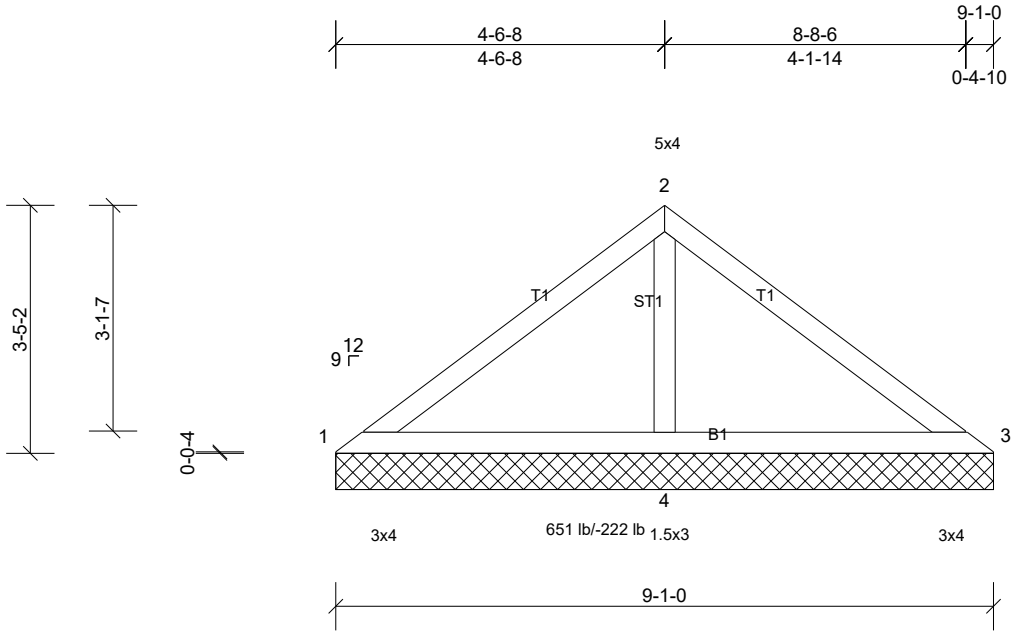
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-271/513, 9-10=-253/517, 2-10=-251/553, 2-11=-251/553, 11-12=-253/517, 3-12=-271/513
BOT CHORD 1-4=-523/337, 3-4=-523/337
WEBS 2-4=-988/529

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 3-4-3, Exterior (2) 3-4-3 to 9-4-3, Interior (1) 9-4-3 to 9-8-0, Exterior (2) 9-8-0 to 12-8-0 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
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 80 lb uplift at joint 1, 80 lb uplift at joint 3 and 395 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V11	Truss	1	1	Job Reference (optional)



Scale = 1:32

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	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 33 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 9-1-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=38/9-1-0, (min. 0-1-8), 3=38/9-1-0, (min. 0-1-8), 4=651/9-1-0, (min. 0-1-8)
Max Horiz 1=-114 (LC 6)
Max Uplift 1=-18 (LC 22), 3=-22 (LC 6), 4=-222 (LC 10)
Max Grav 1=73 (LC 21), 3=73 (LC 22), 4=651 (LC 1)

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

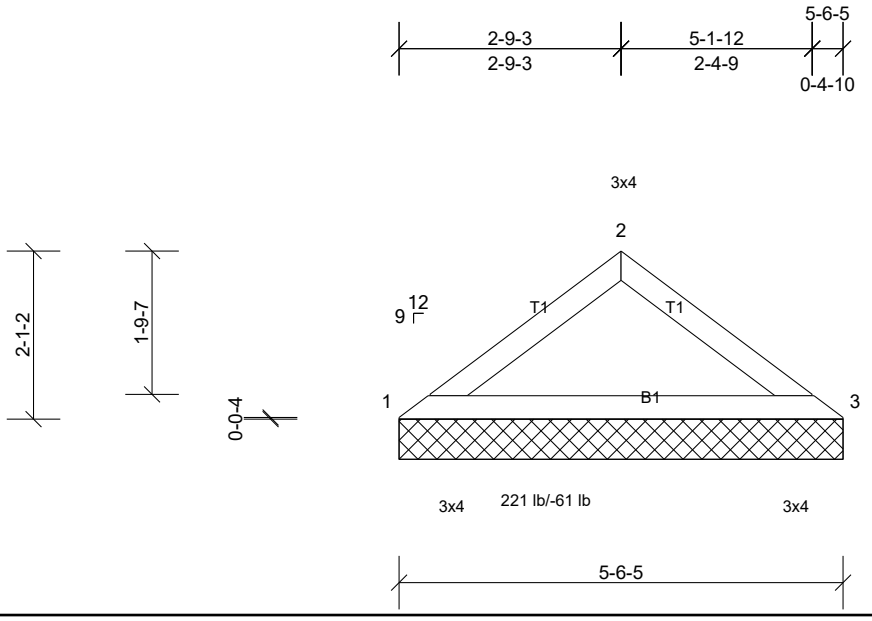
TOP CHORD	1-2=-130/286, 2-3=-130/279
BOT CHORD	1-4=-281/198, 3-4=-281/198
WEBS	2-4=-562/309

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 18 lb uplift at joint 1, 22 lb uplift at joint 3 and 222 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	AHP - SMITH RESIDENCE ROOF
72402902	V12	Truss	1	1	Job Reference (optional)



Scale = 1:28.8

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	0.21	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	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 17 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=221/5-6-5, (min. 0-1-8), 3=221/5-6-5, (min. 0-1-8)
Max Horiz 1=-67 (LC 6)
Max Uplift 1=-61 (LC 10), 3=-61 (LC 11)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-352/142
BOT CHORD 1-3=-100/279

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=155mph (3-second gust) Vasd=123mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 61 lb uplift at joint 1 and 61 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.

LOAD CASE(S) Standard