ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 3843084
WILLIAM ROBERT BAREFOOT - JAKE SMITH RESIDENCE

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Stock Building Supply.

Pages or sheets covered by this seal: T33208521 thru T33208567

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

March 13,2024

ORegan, Philip

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	A1	Common Supported Gable	1	1	T33208521 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:46 Page: 1
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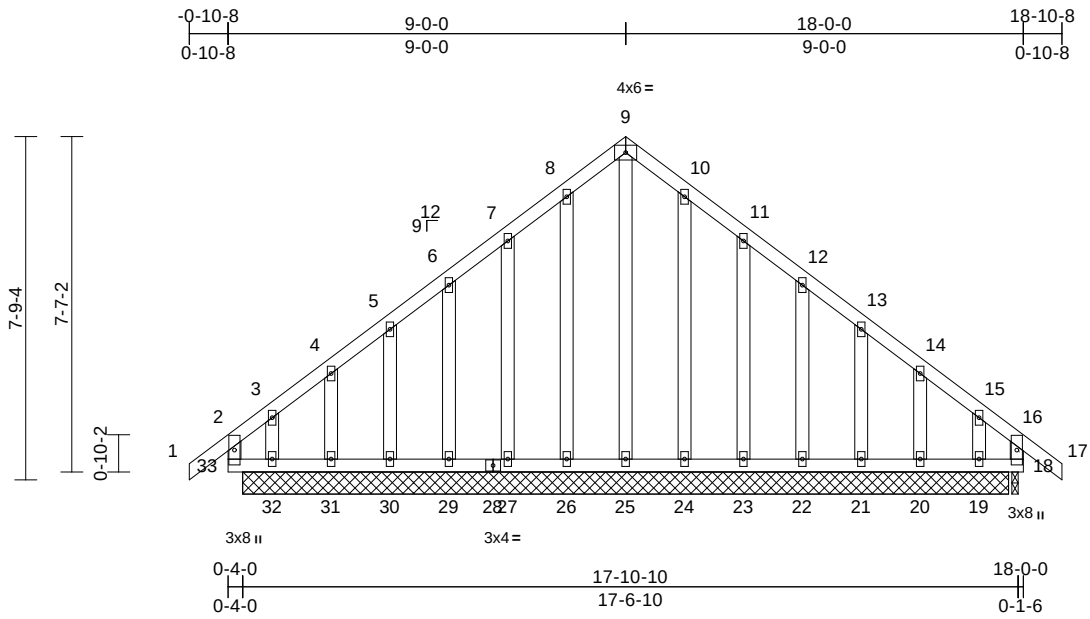


Scale = 1:52.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	0.00	31-32	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	31-32	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	18	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 139 lb	FT = 20%

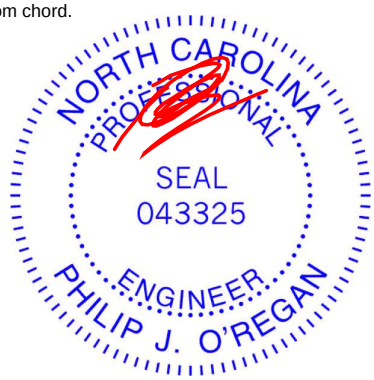
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

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

REACTIONS (size) 18=0-1-12, 19=17-4-0, 20=17-4-0, 21=17-4-0, 22=17-4-0, 23=17-4-0, 24=17-4-0, 25=17-4-0, 26=17-4-0, 27=17-4-0, 29=17-4-0, 30=17-4-0, 31=17-4-0, 32=17-4-0
Max Horiz 32=161 (LC 13)
Max Uplift 18=-125 (LC 11), 19=-101 (LC 10), 20=-22 (LC 15), 21=-33 (LC 15), 22=-30 (LC 15), 23=-38 (LC 15), 24=-13 (LC 15), 26=-8 (LC 14), 27=-39 (LC 14), 29=-33 (LC 14), 30=-18 (LC 14), 31=-85 (LC 14), 32=-13 (LC 10)
Max Grav 18=155 (LC 10), 19=157 (LC 27), 20=112 (LC 31), 21=112 (LC 27), 22=110 (LC 27), 23=108 (LC 27), 24=120 (LC 27), 25=194 (LC 28), 26=116 (LC 30), 27=110 (LC 26), 29=110 (LC 26), 30=121 (LC 30), 31=107 (LC 12), 32=200 (LC 30)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-33=-53/18, 1-2=0/61, 2-3=-54/97, 3-4=-47/89, 4-5=-35/93, 5-6=-63/91, 6-7=-93/116, 7-8=-127/156, 8-9=-143/177, 9-10=-143/177, 10-11=-127/160, 11-12=-93/134, 12-13=-65/117, 13-14=-76/120, 14-15=-95/131, 15-16=-137/145, 16-17=0/61, 16-18=-112/90
BOT CHORD 32-33=-79/67, 31-32=-117/113, 30-31=-117/113, 29-30=-117/113, 27-29=-117/113, 26-27=-117/113, 25-26=-117/113, 24-25=-117/113, 23-24=-117/113, 22-23=-117/113, 21-22=-117/113, 20-21=-117/113, 19-20=-117/113, 18-19=-117/113
WEBS 9-25=-167/89, 8-26=-90/24, 7-27=-83/55, 6-29=-84/47, 5-30=-84/42, 4-31=-83/70, 3-32=-100/28, 10-24=-94/29, 11-23=-83/54, 12-22=-84/46, 13-21=-84/47, 14-20=-85/46, 15-19=-88/69

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 18, 8 lb uplift at joint 26, 39 lb uplift at joint 27, 33 lb uplift at joint 29, 18 lb uplift at joint 30, 85 lb uplift at joint 31, 13 lb uplift at joint 32, 13 lb uplift at joint 24, 38 lb uplift at joint 23, 30 lb uplift at joint 22, 33 lb uplift at joint 21, 22 lb uplift at joint 20 and 101 lb uplift at joint 19.
14) 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.
15) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 13,2024

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	A2	Common	6	1	T33208522 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:48 Page: 1

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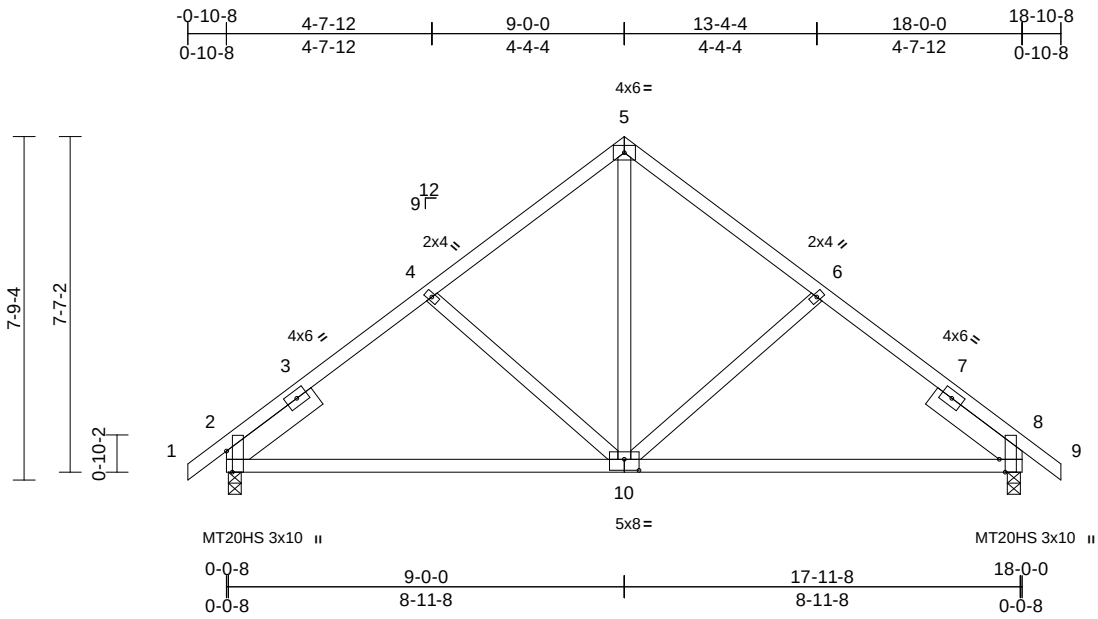

Scale = 1:52.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.08	10-17	>999	240	MT20HS	187/143
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.16	10-17	>999	180	MT20	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 103 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

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

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=143 (LC 13)
Max Uplift 2=-20 (LC 14), 8=-20 (LC 15)
Max Grav 2=773 (LC 2), 8=773 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/52, 2-4=-725/102, 4-5=-669/111, 5-6=-669/111, 6-8=-725/102, 8-9=0/53
BOT CHORD	2-8=-133/643
WEBS	5-10=-41/484, 6-10=-227/130, 4-10=-227/130

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 8 and 20 lb uplift at joint 2.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

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Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	B1	Piggyback Base Structural Gable	1	1	T33208523 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:49 Page: 1
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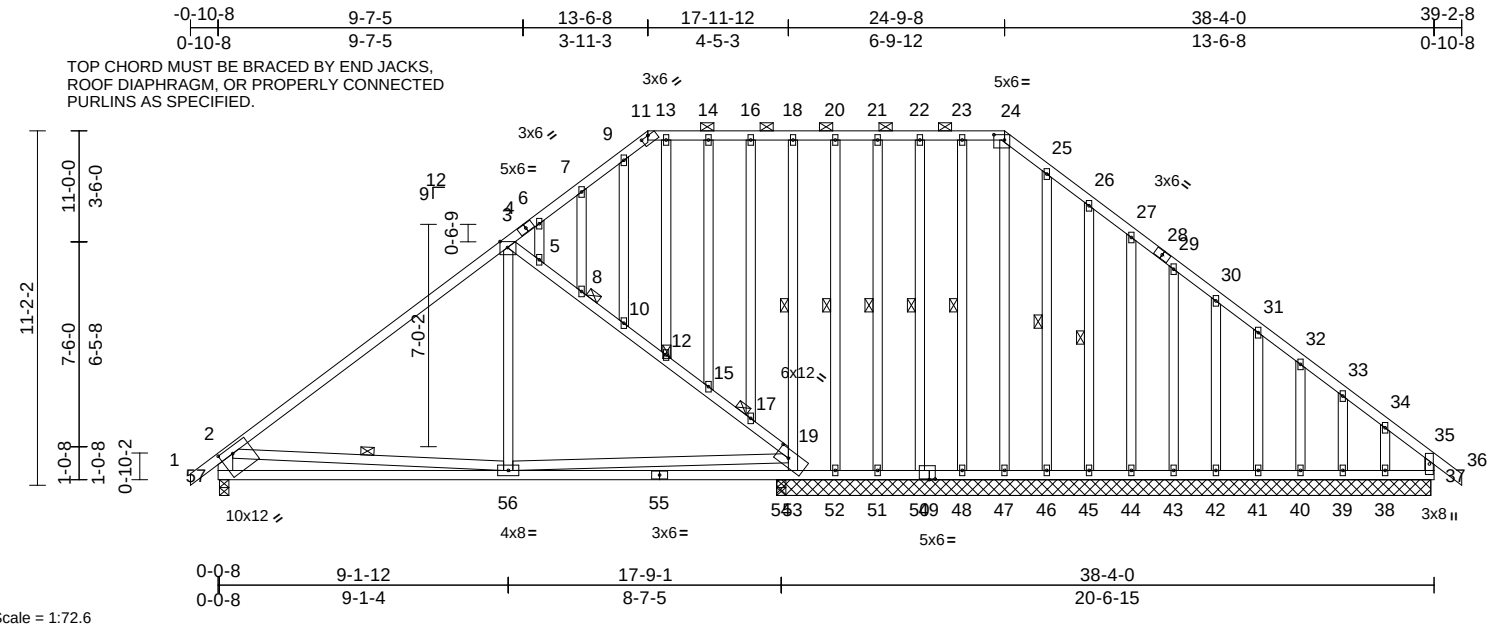

Scale = 1:72.6

Plate Offsets (X, Y): [3:0-2-13,Edge], [11:0-3-0,0-0-1], [19:0-4-12,0-3-0], [24:0-4-0,0-2-0], [50:0-2-4,0-0-4], [57:0-5-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.12	56-57	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.24	56-57	>872	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.02	37	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 398 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 57-2:2x6 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 (6-0-0 max.): 11-24, 3-19.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-56, 23-48, 22-50, 21-51, 20-52, 18-53, 25-46, 26-45
JOINTS 1 Brace at Jt(s): 17, 12, 8

REACTIONS (size) 37=20-7-8, 38=20-7-8, 39=20-7-8, 40=20-7-8, 41=20-7-8, 42=20-7-8, 43=20-7-8, 44=20-7-8, 45=20-7-8, 46=20-7-8, 47=20-7-8, 48=20-7-8, 50=20-7-8, 51=20-7-8, 52=20-7-8, 53=20-7-8, 54=0-3-8, 57=0-3-8
Max Horiz 57=-229 (LC 12)
Max Uplift 37=-88 (LC 11), 38=-192 (LC 15), 40=-40 (LC 15), 41=-29 (LC 15), 42=-31 (LC 15), 43=-31 (LC 15), 44=-31 (LC 15), 45=-34 (LC 15), 46=-25 (LC 15), 47=-44 (LC 31), 48=-2 (LC 10), 50=-11 (LC 11), 51=-11 (LC 10), 53=-301 (LC 14), 57=-20 (LC 14)
Max Grav 37=442 (LC 29), 38=145 (LC 13), 39=147 (LC 2), 40=108 (LC 27), 41=111 (LC 27), 42=110 (LC 27), 43=110 (LC 27), 44=110 (LC 27), 45=115 (LC 27), 46=100 (LC 27), 47=51 (LC 11), 48=88 (LC 32), 50=118 (LC 31), 51=97 (LC 32), 52=85 (LC 5), 53=300 (LC 2), 54=843 (LC 5), 57=892 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/66, 2-3=-948/80, 3-6=-346/91, 6-7=-313/102, 7-9=-296/131, 9-11=-251/133, 11-13=-206/129, 13-14=-206/129, 14-16=-206/129, 16-18=-206/129, 18-20=-206/130, 20-21=-206/130, 21-22=-206/130, 22-23=-206/130, 23-24=-207/130, 24-25=-269/144, 25-26=-285/113, 26-27=-281/88, 27-29=-281/91, 29-30=-281/94, 30-31=-283/96, 31-32=-303/99, 32-33=-325/102, 33-34=-332/101, 34-35=-416/132, 35-36=0/61, 2-57=-809/121, 35-37=-346/72, 3-5=-516/128, 5-8=-520/129, 8-10=-551/148, 10-12=-561/152, 12-15=-556/144, 15-17=-570/147, 17-19=-564/151
BOT CHORD 56-57=-320/794, 54-56=-101/283, 53-54=-101/283, 52-53=-112/289, 51-52=-112/289, 50-51=-112/289, 48-50=-112/289, 47-48=-112/289, 46-47=-112/289, 45-46=-112/289, 44-45=-112/289, 43-44=-112/289, 42-43=-112/289, 41-42=-112/289, 40-41=-112/289, 39-40=-112/289, 38-39=-112/289, 37-38=-112/289
WEBS 3-56=0/347, 2-56=-286/316, 19-56=-106/445, 24-47=-43/71, 23-48=-62/18, 22-50=-90/28, 21-51=-75/25, 20-52=-15/26, 19-53=-642/128, 18-19=-279/77, 16-17=-5/13, 14-15=-43/15, 12-13=-17/18, 9-10=-20/14, 7-8=-52/31, 5-6=-6/3, 25-46=-73/41, 26-45=-88/50, 27-44=-84/47, 29-43=-84/47, 30-42=-84/47, 31-41=-84/47, 32-40=-83/50, 33-39=-99/33, 34-38=-109/124

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33

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Continued on page 2

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3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 57, 88 lb uplift at joint 37, 44 lb uplift at joint 47, 2 lb uplift at joint 48, 11 lb uplift at joint 50, 11 lb uplift at joint 51, 301 lb uplift at joint 53, 25 lb uplift at joint 46, 34 lb uplift at joint 45, 31 lb uplift at joint 44, 31 lb uplift at joint 43, 31 lb uplift at joint 42, 29 lb uplift at joint 41, 40 lb uplift at joint 40 and 192 lb uplift at joint 38.
14) 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.
15) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
16) 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
   Uniform Loads (lb/ft)
   Vert: 1-2=-42, 2-3=-42, 3-11=-42, 11-24=-60, 24-35=-42, 35-36=-42, 37-57=-20

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	B2	Piggyback Base	5	1	T33208524 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:50 Page: 1
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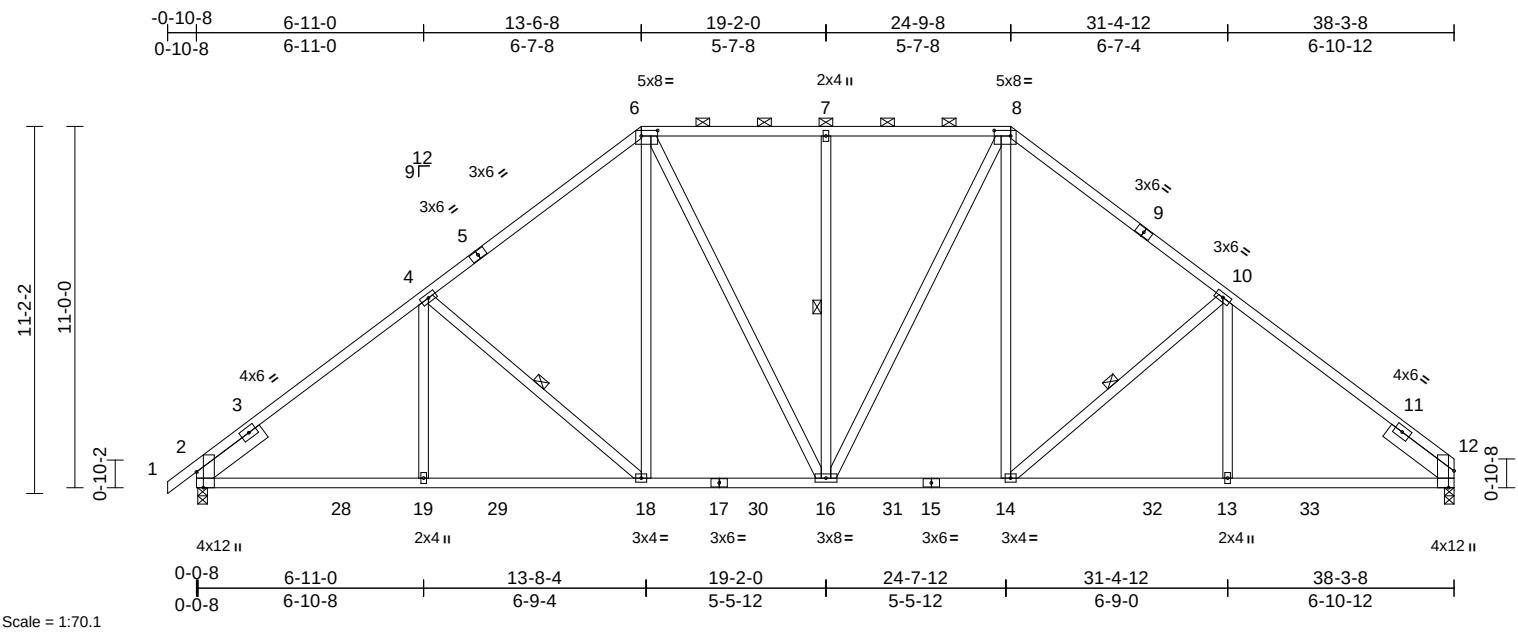

Scale = 1:70.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.12	14-16	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.24	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 261 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-8-1 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-18, 7-16, 10-14

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=206 (LC 11)
Max Uplift 2=-50 (LC 14), 12=-37 (LC 15)
Max Grav 2=1630 (LC 3), 12=1586 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/53, 2-4=-2143/184, 4-6=-1768/245, 6-7=-1455/253, 7-8=-1455/253, 8-10=-1766/245, 10-12=-2136/183
BOT CHORD 2-19=-203/1704, 18-19=-105/1704, 16-18=-4/1340, 14-16=0/1339, 13-14=-54/1632, 12-13=-113/1632
WEBS 4-19=0/265, 4-18=-495/161, 6-18=-24/533, 6-16=-122/362, 7-16=-351/121, 8-16=-122/364, 8-14=-24/531, 10-14=-489/161, 10-13=0/262

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2 and 37 lb uplift at joint 12.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-6=-42, 6-8=-60, 8-12=-42, 20-24=-20

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	C1	Piggyback Base	1	1	T33208525 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:50 Page: 1

ID:oAqQnmoB4ij3L_Snv08?XSzrtOr-RfC?PsB70Hq3NSgPqnL8w3ulTXhGKWrCDoi7J4zJC?f

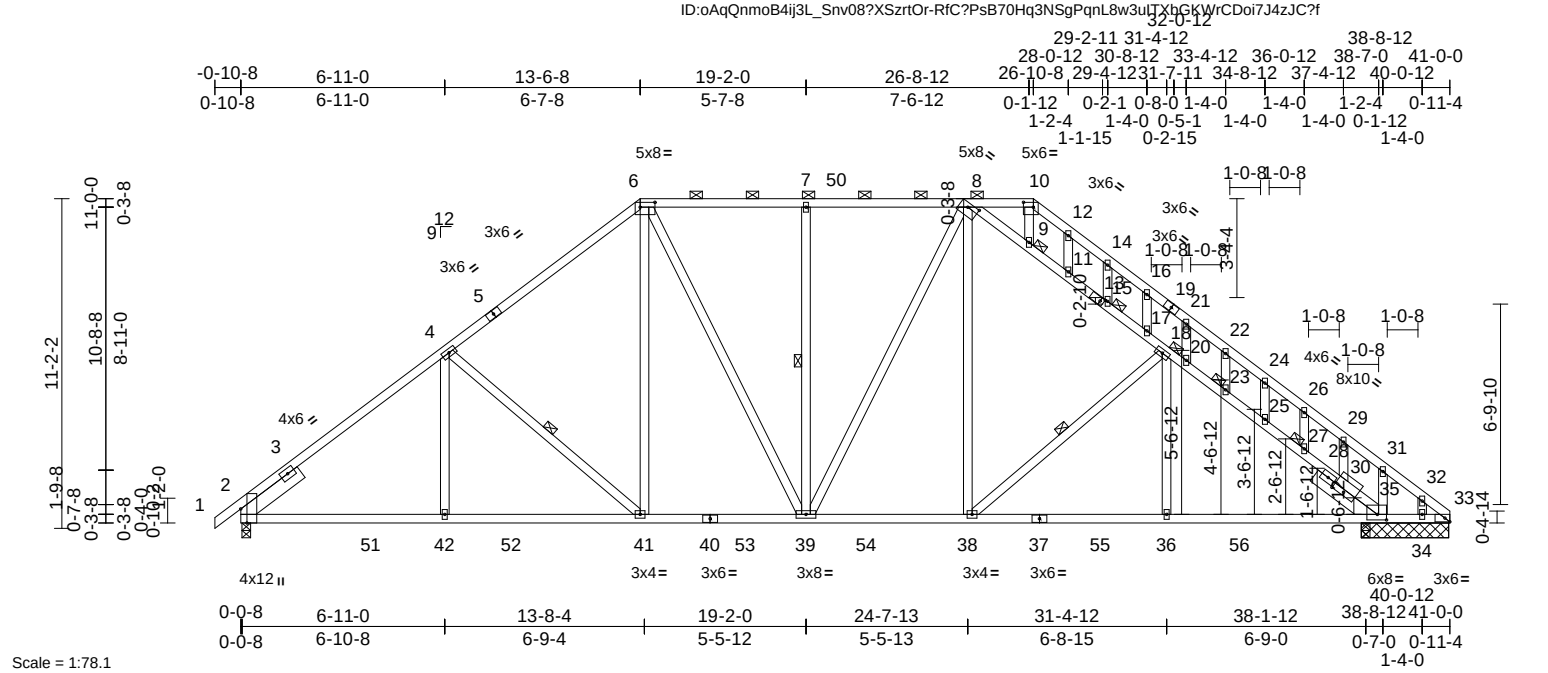

Plate Offsets (X, Y): [2:0-5-12,Edge], [6:0-6-0,0-2-0], [8:0-4-9,0-1-12], [10:0-4-0,0-2-0], [13:0-1-8,0-1-8], [30:0-5-0,0-1-4], [33:0-2-0,Edge], [35:0-3-12,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.11	39-41	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.23	41-42	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.10	33	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 317 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-6-5 max.): 6-10, 8-35.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-41, 7-39, 18-38
JOINTS	1 Brace at Jt(s): 18, 9, 15, 23, 27

REACTIONS (size) 2=0-3-8, 33=2-11-8, 34=2-11-8, 35=2-11-8, 43=2-11-8
Max Horiz 2=210 (LC 13)
Max Uplift 2=-50 (LC 14), 34=-19 (LC 11), 35=-231 (LC 15)
Max Grav 2=1648 (LC 3), 33=360 (LC 29), 34=146 (LC 32), 35=1351 (LC 27), 43=360 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/53, 2-4=-2170/171, 4-6=-1795/231, 6-7=-1488/238, 7-8=-1488/238, 8-10=-399/120, 10-12=-460/121, 12-14=-482/99, 14-16=-509/83, 16-21=-494/28, 21-22=-484/0, 22-24=-507/0, 24-26=-544/0, 26-29=-484/0, 29-31=-522/0, 31-32=-568/0, 32-33=-554/0, 8-9=-1267/131, 9-11=-1192/116, 11-15=-1207/128, 15-17=-1225/136, 17-18=-1275/181, 18-20=-1496/150, 20-23=-1546/195, 23-25=-1563/203, 25-27=-1570/214, 27-30=-1693/252, 30-35=-1715/297

BOT CHORD 2-42=-196/1721, 41-42=-97/1721, 39-41=-33/1362, 38-39=0/1370, 36-38=0/1620, 35-36=0/1620, 34-35=0/445, 33-34=0/445

WEBS 4-42=0/264, 4-41=-495/161, 6-41=-24/532, 6-39=-123/383, 7-39=-368/121, 8-39=-94/324, 8-38=0/476, 18-38=-417/104, 18-36=0/285, 9-10=-30/140, 11-12=-35/23, 14-15=-33/13, 16-17=-119/84, 20-21=-119/85, 22-23=-31/12, 24-25=-23/22, 26-27=-191/54, 29-30=-83/66, 31-35=-51/56, 32-34=-85/28

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

TOP CHORD MUST BE BRACED BY END JACKS, ROOF DIAPHRAGM, OR PROPERLY CONNECTED PURLINS AS SPECIFIED.

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2, 231 lb uplift at joint 35 and 19 lb uplift at joint 34.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)

March 13,2024

Continued on page 2

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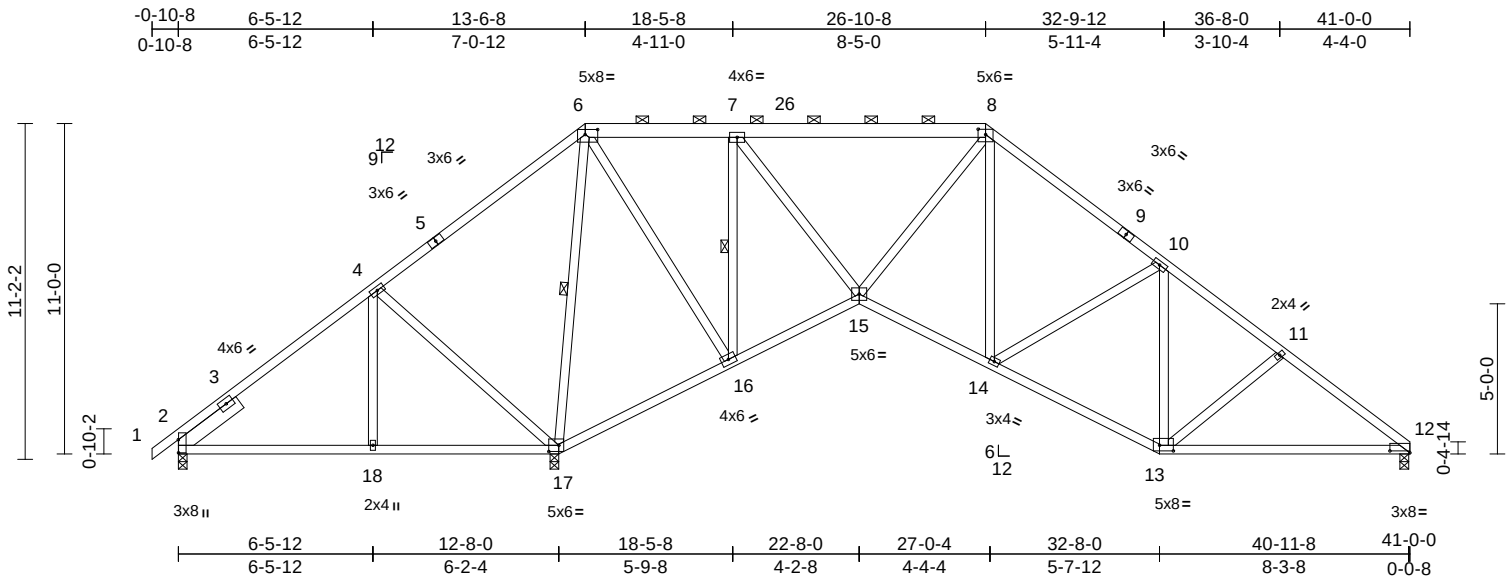
818 Soundside Road
Edenton, NC 27932

Vert: 1-6=-42, 6-8=-60, 8-10=-60, 10-33=-42, 43-46=-20

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	C2	Piggyback Base	9	1	T33208526 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:51 Page: 1
ID:KQ8mmbEDRnrnjzoBptVWBZzrtcT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.7

Plate Offsets (X, Y): [2:0-5-4,0-0-2], [6:0-5-0,0-2-0], [8:0-3-0,0-2-2], [12:0-8-0,0-0-12], [13:0-5-8,0-2-4], [17:0-4-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	-0.12	13-25	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.26	13-25	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 271 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 6-8:2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 7-16

REACTIONS (size) 2=0-3-8, 12=0-3-8, 17=0-3-8
Max Horiz 2=210 (LC 13)
Max Uplift 2=-78 (LC 14), 12=-79 (LC 15)
Max Grav 2=312 (LC 30), 12=984 (LC 2), 17=2122 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/53, 2-4=-254/330, 4-6=0/637, 6-7=-309/195, 7-8=-766/144, 8-10=-1093/196, 10-11=-1179/183, 11-12=-1360/177
BOT CHORD 2-18=-217/231, 17-18=-217/231, 16-17=-381/185, 15-16=-127/370, 14-15=0/900, 13-14=-26/1015, 12-13=-77/1058
WEBS 10-13=-171/48, 11-13=-222/94, 4-18=0/279, 4-17=-527/156, 6-17=-1533/1, 8-15=-146/162, 8-14=-81/308, 10-14=-218/152, 7-15=0/802, 7-16=-1114/63, 6-16=0/1098

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 79 lb uplift at joint 12.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-6=-42, 6-8=-60, 8-12=-42, 17-19=-20, 15-17=-20, 13-15=-20, 13-23=-20

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	C3	Piggyback Base	6	1	T33208527 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:52 Page: 1
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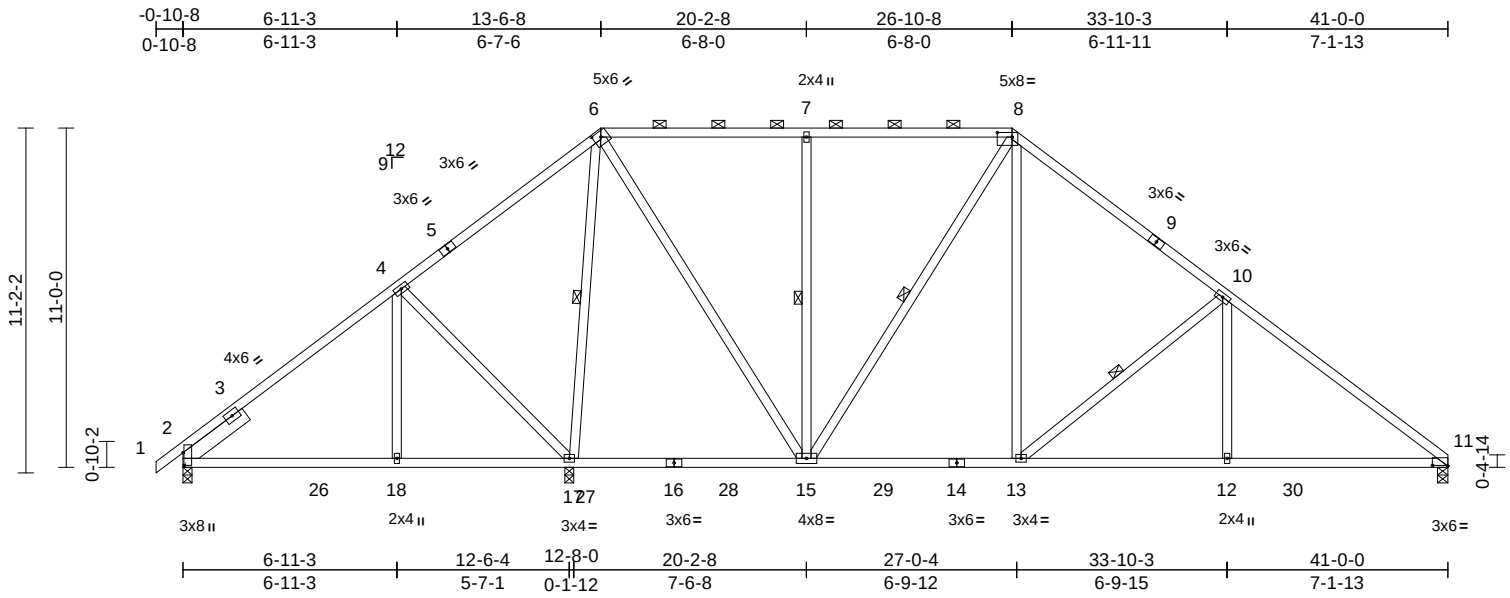


Scale = 1:74.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.12	15-17	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.18	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.04	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 263 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 15-6,15-8:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 7-15, 8-15, 10-13

REACTIONS (size) 2=0-3-8, 11=0-4-0, 17=0-3-8
Max Horiz 2=210 (LC 13)
Max Uplift 2=-69 (LC 14), 11=-69 (LC 15)
Max Grav 2=577 (LC 30), 11=1127 (LC 2), 17=1715 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/52, 2-4=-414/133, 4-6=-168/195, 6-7=-617/231, 7-8=-617/231, 8-10=-1098/228, 10-11=-1575/170
BOT CHORD 2-18=-212/448, 17-18=-133/448, 15-17=-113/180, 13-15=0/772, 12-13=-43/1178, 11-12=-57/1178
WEBS 4-18=0/249, 4-17=-537/164, 6-17=-1206/48, 7-15=-441/142, 6-15=-47/1029, 8-15=-367/56, 8-13=-21/580, 10-12=0/297, 10-13=-597/166

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 11 and 69 lb uplift at joint 2.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-6=-42, 6-8=-60, 8-11=-42, 19-22=-20

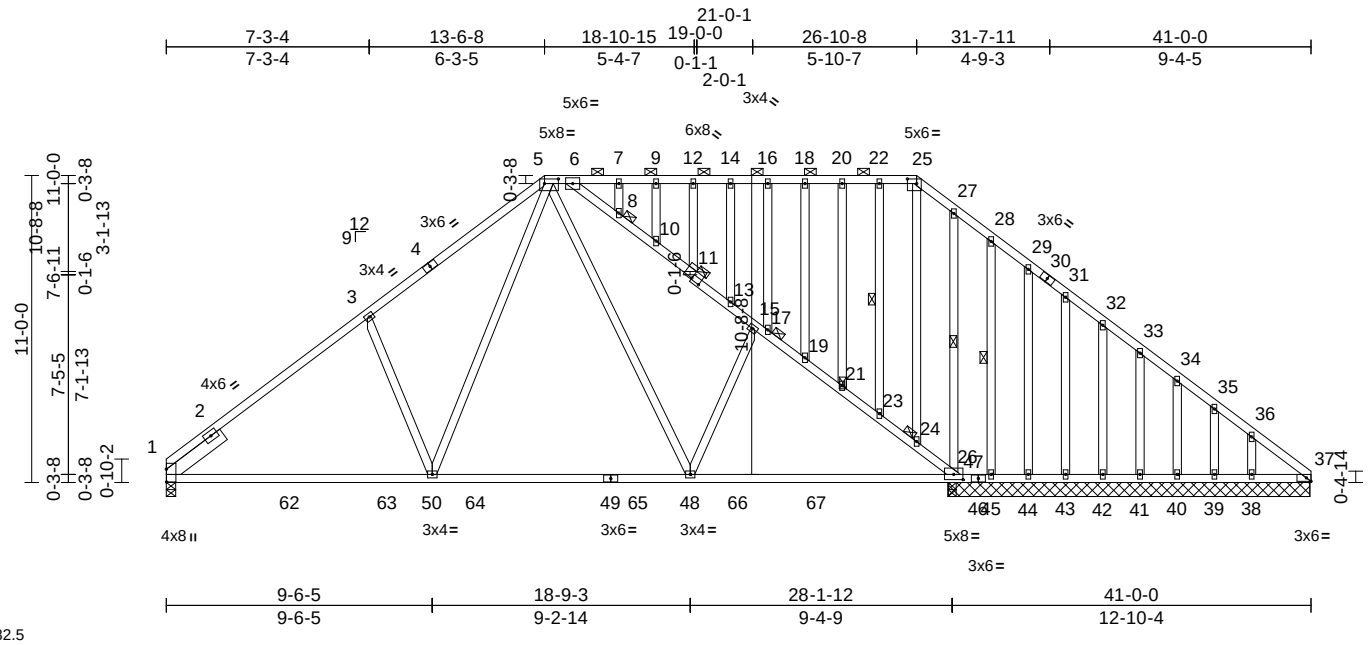
March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	C4	Piggyback Base Structural Gable	1	1	T33208528 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:52 Page: 1

ID:z5gCD_6uRwNvlQOIU0GlKmzru9V-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:82.5

Plate Offsets (X, Y): [1:0-5-8,0-0-2], [5:0-6-0,0-2-0], [11:0-4-0,0-0-10], [25:0-4-0,0-2-0], [26:0-4-0,0-2-4], [37:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.27	48-50	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.43	48-50	>793	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	55	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 360 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 50-5:2x4 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-3 max.): 5-25, 6-61.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 22-23, 26-27, 28-45
JOINTS	1 Brace at Jt(s): 24, 21, 17, 11, 8

REACTIONS (size) 1=0-4-0, 37=12-11-8, 38=12-11-8, 39=12-11-8, 40=12-11-8, 41=12-11-8, 42=12-11-8, 43=12-11-8, 44=12-11-8, 45=12-11-8, 47=0-3-8, 55=12-11-8

Max Horiz 1=-205 (LC 10)

Max Uplift 1=-15 (LC 14), 38=-65 (LC 15), 39=-19 (LC 15), 40=-34 (LC 15), 41=-31 (LC 15), 42=-30 (LC 15), 43=-37 (LC 15), 44=-6 (LC 15), 45=-142 (LC 15)

Max Grav 1=1246 (LC 25), 37=285 (LC 28), 38=170 (LC 26), 39=90 (LC 26), 40=115 (LC 26), 41=109 (LC 26), 42=112 (LC 26), 43=104 (LC 26), 44=140 (LC 26), 45=-13 (LC 13), 47=1104 (LC 3), 55=285 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-1453/147, 3-5=-1502/243, 5-6=-1138/202, 6-7=-274/146, 7-9=-274/146, 9-12=-274/146, 12-14=-274/146, 14-16=-274/146, 16-18=-274/146, 18-20=-274/146, 20-22=-274/146, 22-25=-274/146, 25-27=-320/149, 27-28=-300/143, 28-29=-301/96, 29-31=-307/61, 31-32=-315/32, 32-33=-323/24, 33-34=-331/27, 34-35=-343/30, 35-36=-365/30, 36-37=-394/40, 6-8=-1125/60, 8-10=-1133/66, 10-13=-1185/78, 13-15=-1218/100, 15-17=-1165/76, 17-19=-1252/114, 19-21=-1263/118, 21-23=-1282/125, 23-24=-1301/130, 24-26=-1271/135, 26-47=-132/1348

BOT CHORD 1-50=-210/1327, 48-50=-80/931, 47-48=-120/1260, 45-47=-27/309, 44-45=-27/309, 43-44=-27/309, 42-43=-27/309, 41-42=-27/309, 40-41=-27/309, 39-40=-27/309, 38-39=-27/309, 37-38=-27/309

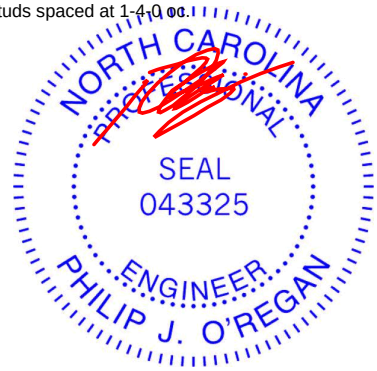
WEBS 24-25=-18/81, 22-23=-36/10, 20-21=-37/12, 18-19=-22/6, 16-17=-202/78, 13-14=-97/49, 11-12=-16/4, 9-10=-75/15, 7-8=-29/17, 26-27=-168/18, 28-45=-66/75, 29-44=-86/46, 31-43=-85/46, 32-42=-83/47, 33-41=-83/47, 34-40=-85/48, 35-39=-74/41, 36-38=-116/67, 3-50=-379/216, 5-50=-105/757, 15-48=-331/133, 5-48=-14/626

NOTES

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

TOP CHORD MUST BE BRACED BY END JACKS, ROOF DIAPHRAGM, OR PROPERLY CONNECTED PURLINS AS SPECIFIED.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=11.0 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.



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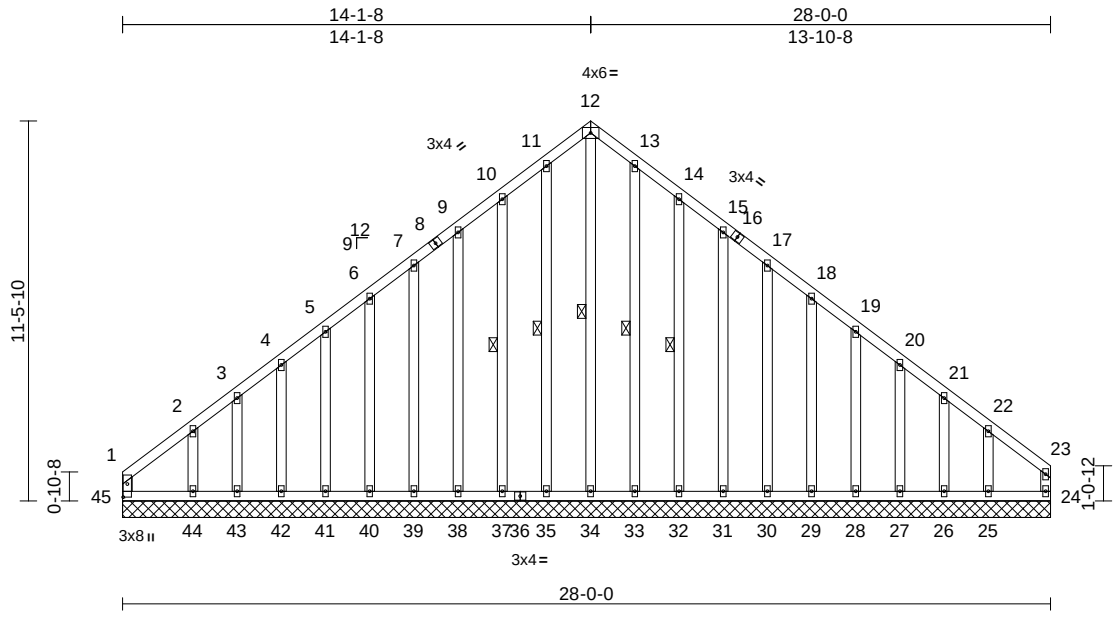
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1, 142 lb uplift at joint 45, 6 lb uplift at joint 44, 37 lb uplift at joint 43, 30 lb uplift at joint 42, 31 lb uplift at joint 41, 34 lb uplift at joint 40, 19 lb uplift at joint 39 and 65 lb uplift at joint 38.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
   Uniform Loads (lb/ft)
   Vert: 1-5=-42, 5-6=-60, 6-25=-60, 25-37=-42, 51-55=-20

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	D1	Common Supported Gable	1	1	T33208529 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:53 Page: 1
ID:0p9EL7UyEJ9dwS?JdOsnxpzs6Ys-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:69.5

Plate Offsets (X, Y): [45:0-4-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 270 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 12-34, 11-35, 10-37, 13-33, 14-32

REACTIONS (size) 24=28-0-0, 25=28-0-0, 26=28-0-0, 27=28-0-0, 28=28-0-0, 29=28-0-0, 30=28-0-0, 31=28-0-0, 32=28-0-0, 33=28-0-0, 34=28-0-0, 35=28-0-0, 37=28-0-0, 38=28-0-0, 39=28-0-0, 40=28-0-0, 41=28-0-0, 42=28-0-0, 43=28-0-0, 44=28-0-0, 45=28-0-0
Max Horiz 45=223 (LC 13)
Max Uplift 24=-57 (LC 13), 25=-130 (LC 15), 26=-1 (LC 14), 27=-38 (LC 15), 28=-30 (LC 15), 29=-31 (LC 15), 30=-31 (LC 15), 31=-31 (LC 15), 32=-43 (LC 15), 37=-42 (LC 14), 38=-31 (LC 14), 39=-31 (LC 14), 40=-31 (LC 14), 41=-30 (LC 14), 42=-38 (LC 14), 43=-7 (LC 15), 44=-132 (LC 14), 45=-105 (LC 10)
Max Grav 24=138 (LC 28), 25=190 (LC 26), 26=100 (LC 2), 27=115 (LC 26), 28=109 (LC 26), 29=111 (LC 26), 30=110 (LC 26), 31=110 (LC 26), 32=113 (LC 26), 33=106 (LC 30), 34=225 (LC 15), 35=112 (LC 25), 37=111 (LC 25), 38=110 (LC 25), 39=110 (LC 25), 40=111 (LC 25), 41=109 (LC 25), 42=118 (LC 25), 43=93 (LC 2), 44=221 (LC 25), 45=181 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-45=-138/88, 1-2=-197/173, 2-3=-149/125, 3-4=-145/131, 4-5=-133/127, 5-6=-123/139, 6-7=-127/160, 7-9=-157/181, 9-10=-186/204, 10-11=-223/247, 11-12=-227/255, 12-13=-227/255, 13-14=-223/247, 14-15=-186/204, 15-17=-157/168, 17-18=-127/133, 18-19=-97/104, 19-20=-75/82, 20-21=-83/64, 21-22=-89/62, 22-23=-139/101, 23-24=-100/44
BOT CHORD 44-45=-85/107, 43-44=-85/107, 42-43=-85/107, 41-42=-85/107, 40-41=-85/107, 39-40=-85/107, 38-39=-85/107, 37-38=-85/107, 35-37=-85/107, 34-35=-85/107, 33-34=-85/107, 32-33=-85/107, 31-32=-85/107, 30-31=-85/107, 29-30=-85/107, 28-29=-85/107, 27-28=-85/107, 26-27=-85/107, 25-26=-85/107, 24-25=-85/107
WEBS 12-34=-235/169, 11-35=-85/14, 10-37=-88/58, 9-38=-84/47, 7-39=-84/47, 6-40=-84/47, 5-41=-83/47, 4-42=-87/50, 3-43=-71/33, 2-44=-145/104, 13-33=-80/6, 14-32=-88/59, 15-31=-84/47, 17-30=-84/47, 18-29=-84/47, 19-28=-84/47, 20-27=-85/49, 21-26=-75/34, 22-25=-127/100

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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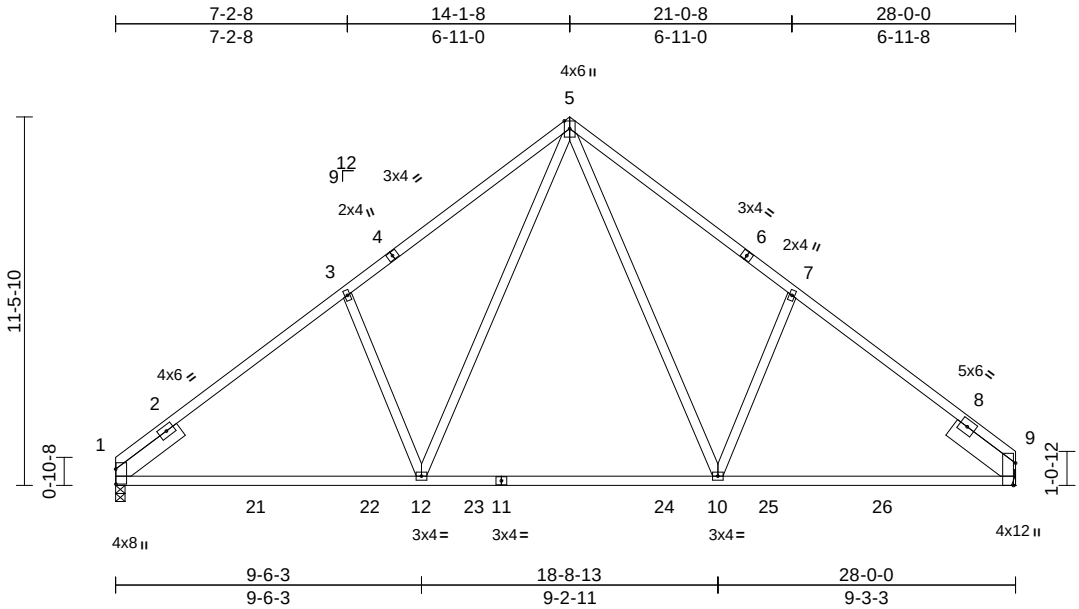
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 45, 57 lb uplift at joint 24, 42 lb uplift at joint 37, 31 lb uplift at joint 38, 31 lb uplift at joint 39, 31 lb uplift at joint 40, 30 lb uplift at joint 41, 38 lb uplift at joint 42, 7 lb uplift at joint 43, 132 lb uplift at joint 44, 43 lb uplift at joint 32, 31 lb uplift at joint 31, 31 lb uplift at joint 30, 31 lb uplift at joint 29, 30 lb uplift at joint 28, 38 lb uplift at joint 27, 1 lb uplift at joint 26 and 130 lb uplift at joint 25.
13) 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.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	D2	Common	6	1	T33208530 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:53 Page: 1
ID:zHVi95_DgXEBPXTiTpkM0bzs9?k-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:71.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.26	10-12	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.40	10-12	>836	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.06	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 161 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x8 SP 2400F 2.0E or DSS -- 2-6-0

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

REACTIONS (size) 1=0-3-8, 9= Mechanical
Max Horiz 1=205 (LC 11)
Max Uplift 1=-14 (LC 14), 9=-12 (LC 15)
Max Grav 1=1206 (LC 25), 9=1207 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1487/138, 3-5=-1422/240, 5-7=-1391/238, 7-9=-1465/137
BOT CHORD 1-12=-218/1270, 10-12=0/850, 9-10=-97/1112
WEBS 5-10=-114/695, 7-10=-328/223, 5-12=-114/750, 3-12=-360/226

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 12 lb uplift at joint 9.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

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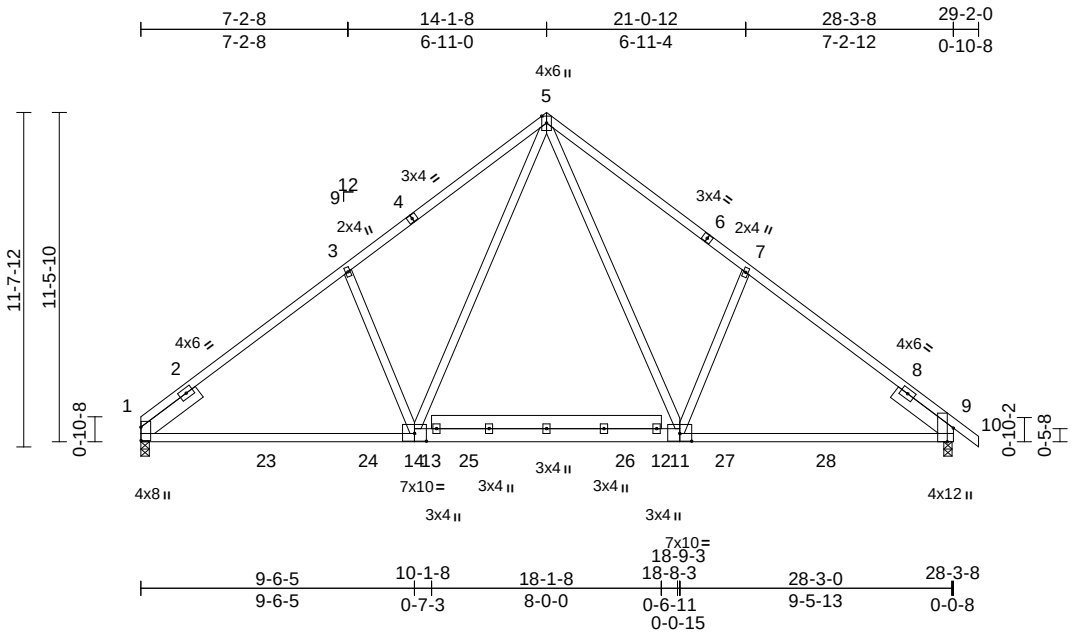
Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	D3	Common	1	1	T33208531 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:54 Page: 1
ID:dZk1MSWPkn0BfoQx92ZKp1zruNB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:80.2

Plate Offsets (X, Y): [1:0-5-10,0-0-2], [9:0-5-12,Edge], [11:0-5-0,0-3-4], [14:0-5-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.12	14-17	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.24	11-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 188 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 14-11,13-12:2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

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

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=-214 (LC 10)
Max Uplift 1=-13 (LC 14), 9=-26 (LC 15)
Max Grav 1=1210 (LC 26), 9=1259 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1487/141, 3-5=-1423/242, 5-7=-1428/243, 7-9=-1491/141, 9-10=0/52
BOT CHORD 1-9=-212/1279
WEBS 3-14=-365/225, 5-14=-116/737, 5-11=-116/742, 7-11=-368/225

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 26 lb uplift at joint 9.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	D4	Common	5	1	T33208532 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 E Feb 9 2023 Print: 8.630 E Feb 9 2023 MiTek Industries, Inc. Wed Mar 13 13:51:51 Page: 1
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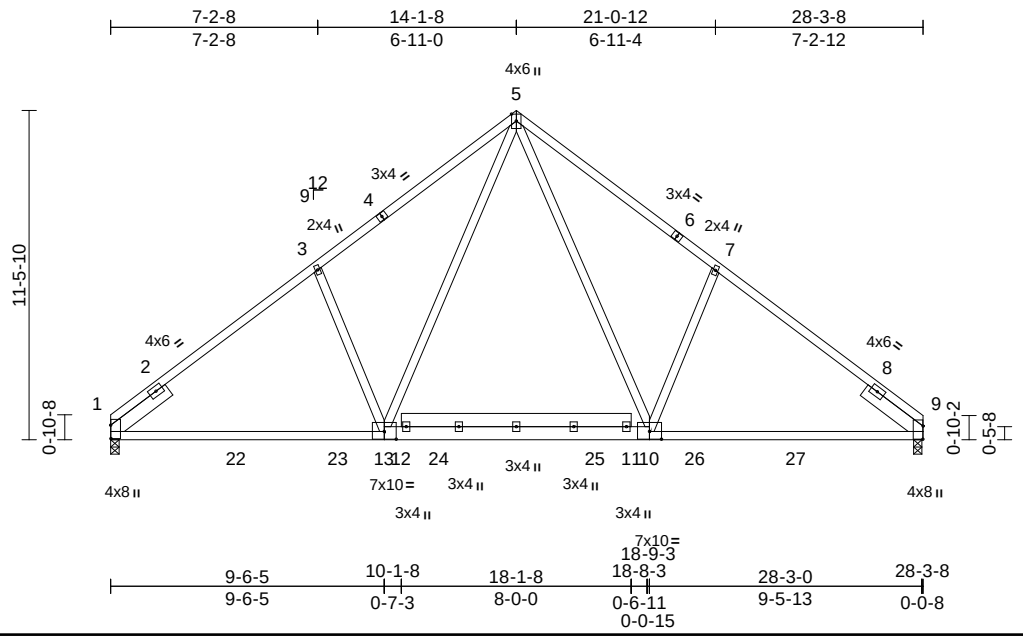

Scale = 1:80.2

Plate Offsets (X, Y): [1:0-5-10,0-0-2], [9:0-5-8,0-0-2], [10:0-5-0,0-3-4], [13:0-5-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.12	13-16	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.24	10-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 186 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 13-10,12-11:2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

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

REACTIONS (lb/size) 1=878/0-3-8, 9=878/0-3-8
Max Horiz 1=-206 (LC 10)
Max Uplift 1=-13 (LC 14), 9=-14 (LC 15)
Max Grav 1=1210 (LC 25), 9=1210 (LC 26)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-750/0, 2-3=-1488/141, 3-4=-1424/197, 4-5=-1313/243, 5-6=-1320/243, 6-7=-1432/198, 7-8=-1493/142, 8-9=-742/0
BOT CHORD 1-22=-220/1274, 22-23=-86/1274, 13-23=-86/1274, 12-13=0/824, 12-24=0/857, 24-25=0/857, 11-25=0/857, 10-11=0/827, 10-26=-16/1154, 26-27=-16/1154, 9-27=-16/1154
WEBS 3-13=-365/225, 5-13=-116/737, 5-10=-117/746, 7-10=-370/225

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 14 lb uplift at joint 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	F1	Common Supported Gable	1	1	T33208533 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 E Feb 9 2023 Print: 8.630 E Feb 9 2023 MiTek Industries, Inc. Wed Mar 13 13:52:50 Page: 1
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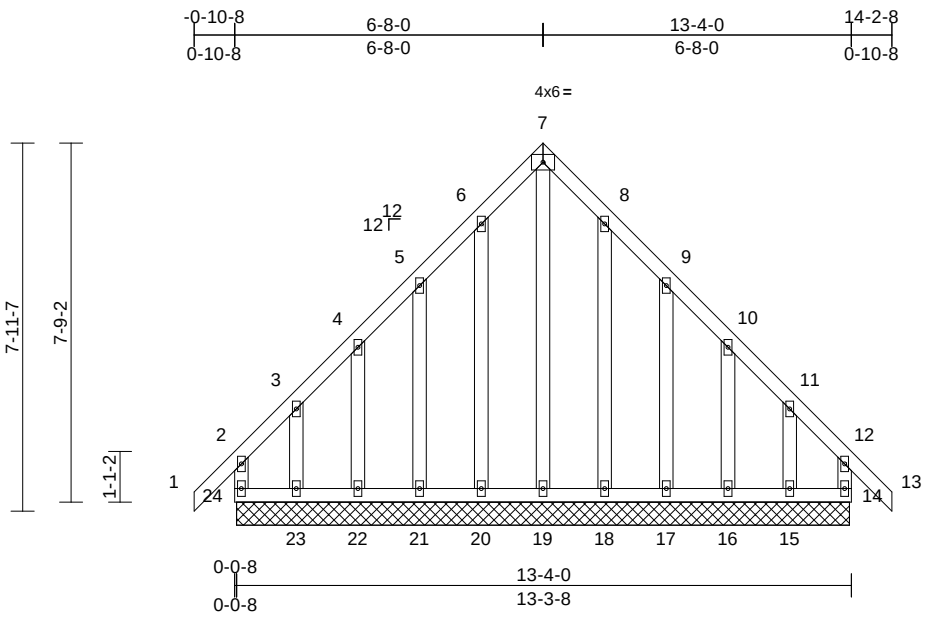

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 111 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 13-3-0.
(lb) - Max Horiz 24=171 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 14, 16, 17, 18, 20, 21, 22 except 15=-121 (LC 15), 23=-126 (LC 14), 24=-102 (LC 10)
Max Grav All reactions 250 (lb) or less at joint (s) 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 20, 21, 22, 18, 17, 16 except (jt=lb) 24=102, 23=126, 15=120.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	F2	Common	1	1	T33208534 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:55 Page: 1
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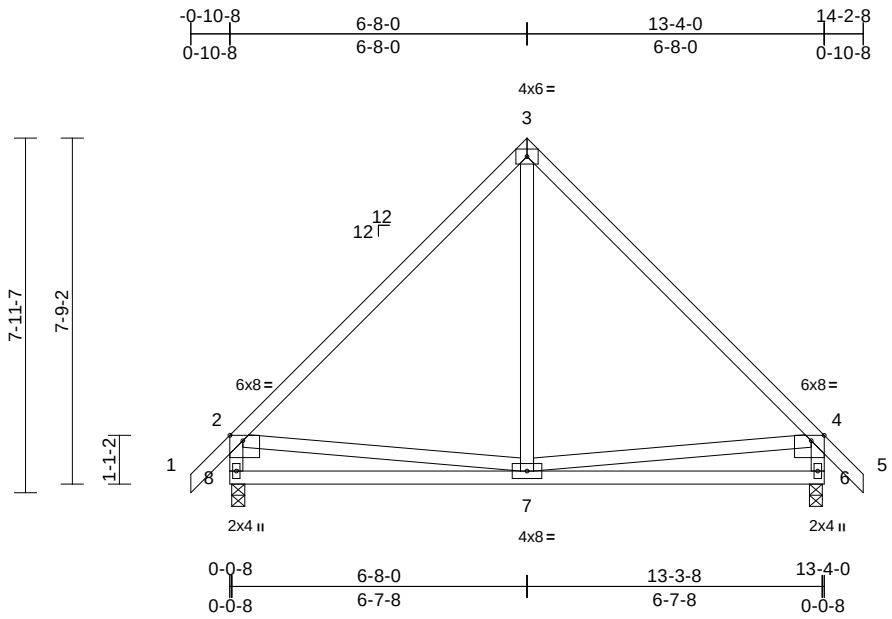

Scale = 1:51.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.76	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.07	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										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 (size) 6=0-3-8, 8=0-3-8
Max Horiz 8=171 (LC 13)
Max Uplift 6=-7 (LC 15), 8=-7 (LC 14)
Max Grav 6=583 (LC 2), 8=583 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/72, 2-3=-507/84, 3-4=-507/84, 4-5=0/72, 2-8=-525/105, 4-6=-525/105
BOT CHORD 7-8=-241/408, 6-7=-167/332
WEBS 3-7=0/281, 2-7=-170/293, 4-7=-173/296

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 8 and 7 lb uplift at joint 6.
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.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	F3	Common Girder	1	2	T33208535 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:55 Page: 1
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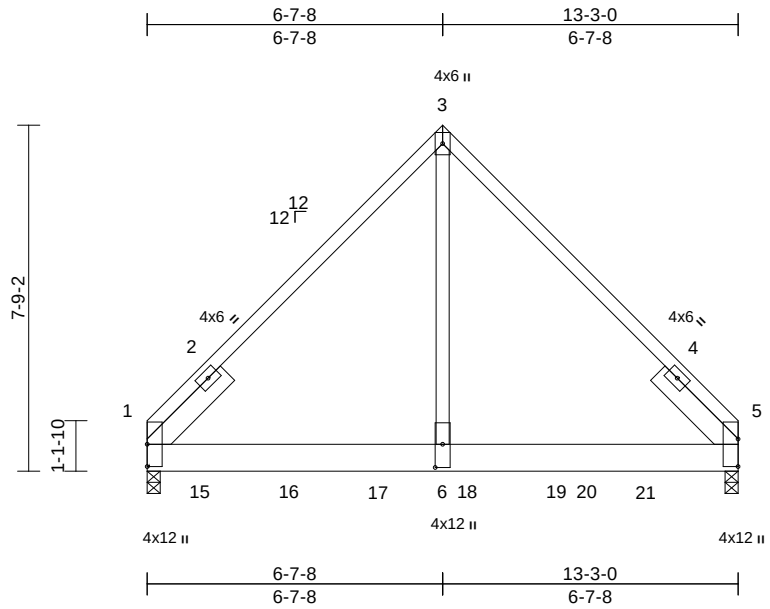

Scale = 1:51.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.05	6-9	>999	240	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.09	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.01	1	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 182 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E or 2x8 SP DSS
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-4-13, Right 2x6 SP No.2 -- 2-4-13

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.

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-128 (LC 6)
Max Uplift 1=-79 (LC 11), 5=-70 (LC 10)
Max Grav 1=4327 (LC 22), 5=3854 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-3394/224, 3-5=-3393/222
BOT CHORD 1-6=-94/2424, 5-6=-37/2424
WEBS 3-6=-102/4487

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
6) Roof design snow load has been reduced to account for slope.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 1 and 70 lb uplift at joint 5.
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.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1187 lb down and 24 lb up at 1-2-4, 1175 lb down and 24 lb up at 3-2-4, 1157 lb down and 24 lb up at 5-2-4, 1162 lb down and 24 lb up at 7-2-4, and 1162 lb down and 24 lb up at 9-2-4, and 1187 lb down and 24 lb up at 11-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-37, 3-5=-37, 7-11=-20
Concentrated Loads (lb)
Vert: 15=-849 (B), 16=-849 (B), 17=-849 (B), 18=-849 (B), 19=-849 (B), 21=-849 (B)

NORTH CAROLINA PROFESSIONAL SEAL 043325 ENGINEER PHILIP J. O'REGAN

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	G1	Common Supported Gable	1	1	T33208536 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:56 Page: 1
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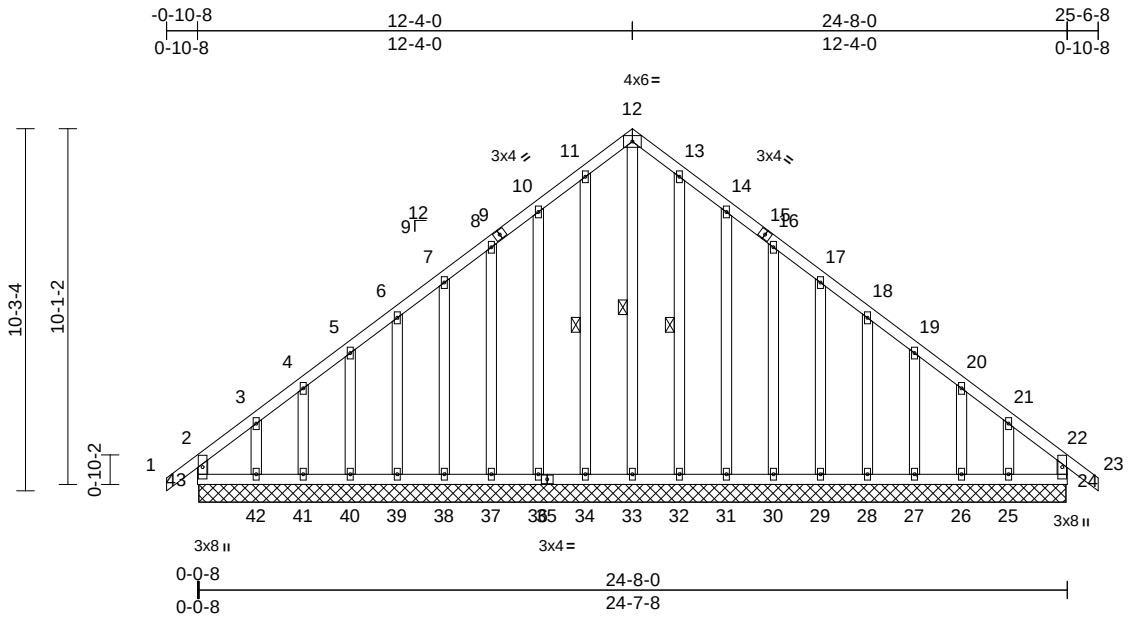

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 222 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 12-33, 11-34, 13-32

REACTIONS (size) 24=24-7-0, 25=24-7-0, 26=24-7-0, 27=24-7-0, 28=24-7-0, 29=24-7-0, 30=24-7-0, 31=24-7-0, 32=24-7-0, 33=24-7-0, 34=24-7-0, 36=24-7-0, 37=24-7-0, 38=24-7-0, 39=24-7-0, 40=24-7-0, 41=24-7-0, 42=24-7-0, 43=24-7-0
Max Horiz 43=-209 (LC 12)
Max Uplift 24=-43 (LC 11), 25=-106 (LC 15), 26=-10 (LC 15), 27=-36 (LC 15), 28=-30 (LC 15), 29=-31 (LC 15), 30=-31 (LC 15), 31=-41 (LC 15), 34=-3 (LC 14), 36=-40 (LC 14), 37=-31 (LC 14), 38=-31 (LC 14), 39=-30 (LC 14), 40=-36 (LC 14), 41=-6 (LC 14), 42=-120 (LC 14), 43=-89 (LC 10)
Max Grav 24=165 (LC 26), 25=144 (LC 27), 26=109 (LC 2), 27=113 (LC 27), 28=110 (LC 27), 29=110 (LC 27), 30=110 (LC 27), 31=112 (LC 27), 32=109 (LC 31), 33=188 (LC 15), 34=114 (LC 26), 36=110 (LC 26), 37=110 (LC 26), 38=111 (LC 26), 39=110 (LC 26), 40=114 (LC 26), 41=109 (LC 2), 42=163 (LC 26), 43=201 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-43=-162/73, 1-2=0/61, 2-3=-171/151, 3-4=-121/116, 4-5=-115/107, 5-6=-103/104, 6-7=-93/117, 7-8=-108/139, 8-10=-138/160, 10-11=-173/196, 11-12=-183/211, 12-13=-183/211, 13-14=-173/196, 14-16=-138/155, 16-17=-108/119, 17-18=-79/92, 18-19=-57/70, 19-20=-67/62, 20-21=-77/70, 21-22=-136/98, 22-23=0/61, 22-24=-133/37
BOT CHORD 42-43=-88/122, 41-42=-88/122, 40-41=-88/122, 39-40=-88/122, 38-39=-88/122, 37-38=-88/122, 36-37=-88/122, 34-36=-88/122, 33-34=-88/122, 32-33=-88/122, 31-32=-88/122, 30-31=-88/122, 29-30=-88/122, 28-29=-88/122, 27-28=-88/122, 26-27=-88/122, 25-26=-88/122, 24-25=-88/122
WEBS 12-33=-192/127, 11-34=-87/19, 10-36=-85/56, 8-37=-84/47, 7-38=-84/47, 6-39=-84/47, 5-40=-85/49, 4-41=-82/39, 3-42=-106/91, 13-32=-82/15, 14-31=-85/57, 16-30=-84/47, 17-29=-84/47, 18-28=-84/47, 19-27=-84/48, 20-26=-82/39, 21-25=-108/85

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

March 13,2024

Continued on page 2

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 43, 43 lb uplift at joint 24, 3 lb uplift at joint 34, 40 lb uplift at joint 36, 31 lb uplift at joint 37, 31 lb uplift at joint 38, 30 lb uplift at joint 39, 36 lb uplift at joint 40, 6 lb uplift at joint 41, 120 lb uplift at joint 42, 41 lb uplift at joint 31, 31 lb uplift at joint 30, 31 lb uplift at joint 29, 30 lb uplift at joint 28, 36 lb uplift at joint 27, 10 lb uplift at joint 26 and 106 lb uplift at joint 25.
13) n/a
14) 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.
15) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	G2	Common	14	1	T33208537 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:56 Page: 1
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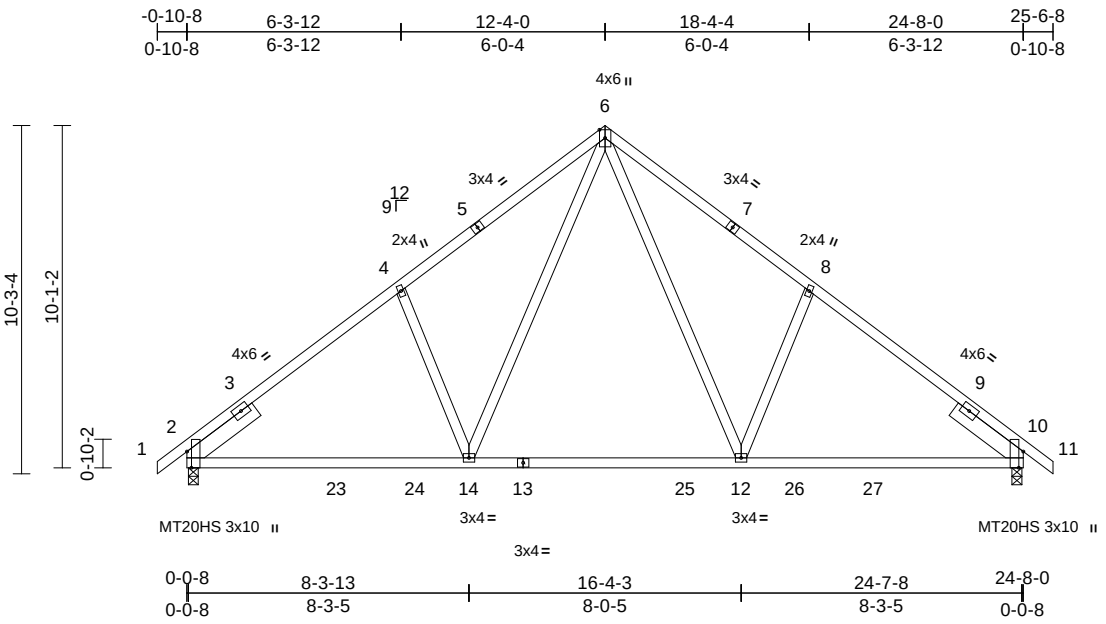

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Plate Offsets (X, Y): [2:0-5-12,Edge], [10:0-5-12,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.34	Vert(LL)	-0.16	12-14	>999	240	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.25	12-14	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 145 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

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

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-192 (LC 12)
Max Uplift 2=-24 (LC 14), 10=-24 (LC 15)
Max Grav 2=1081 (LC 26), 10=1081 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/52, 2-4=-1262/121, 4-6=-1209/210, 6-8=-1209/210, 8-10=-1262/121, 10-11=0/53
BOT CHORD 2-14=-168/1087, 12-14=0/739, 10-12=-82/978
WEBS 6-12=-100/619, 8-12=-305/196, 6-14=-100/620, 4-14=-305/196

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2 and 24 lb uplift at joint 10.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

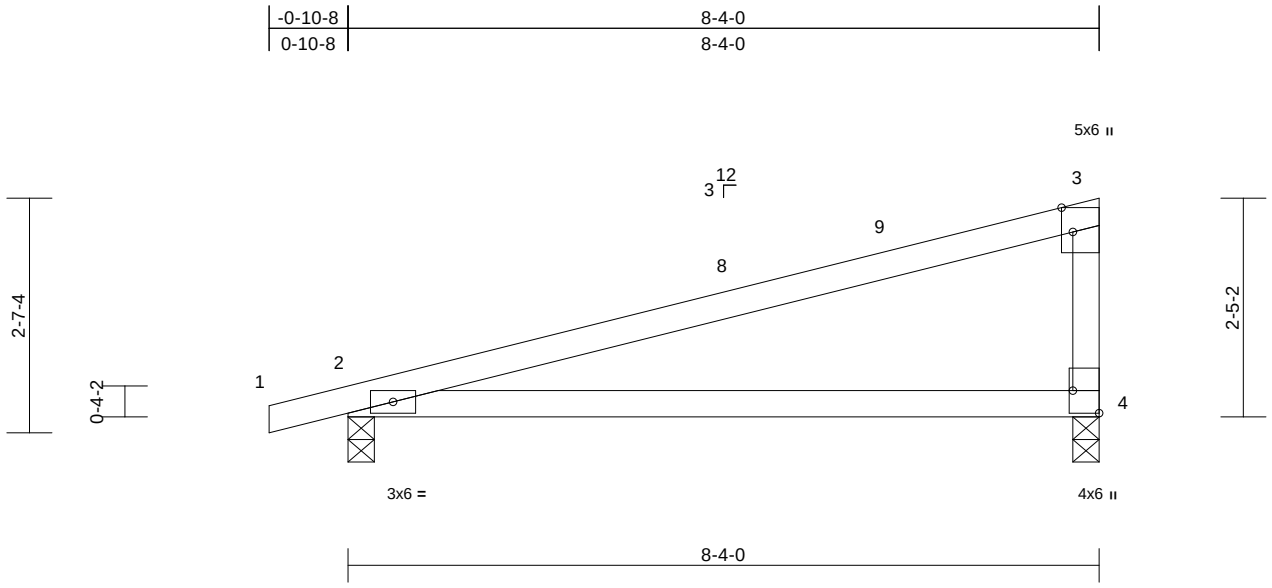
LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H1	Roof Special	11	1	T33208538 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:57 Page: 1
ID:_jG5wFt3rkd8RlAi?Pbuxfzs8Rj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:25.6

Plate Offsets (X, Y): [3:0-3-4,Edge], [4:Edge,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	1.00	TC	0.71	Vert(LL)	0.21	4-7	>461	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.25	4-7	>388	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=69 (LC 15)
Max Uplift 2=-107 (LC 12), 4=-87 (LC 12)
Max Grav 2=383 (LC 2), 4=353 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-247/171, 3-4=-232/119
BOT CHORD 2-4=-202/226

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: , Joint 4 SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 2 and 87 lb uplift at joint 4.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

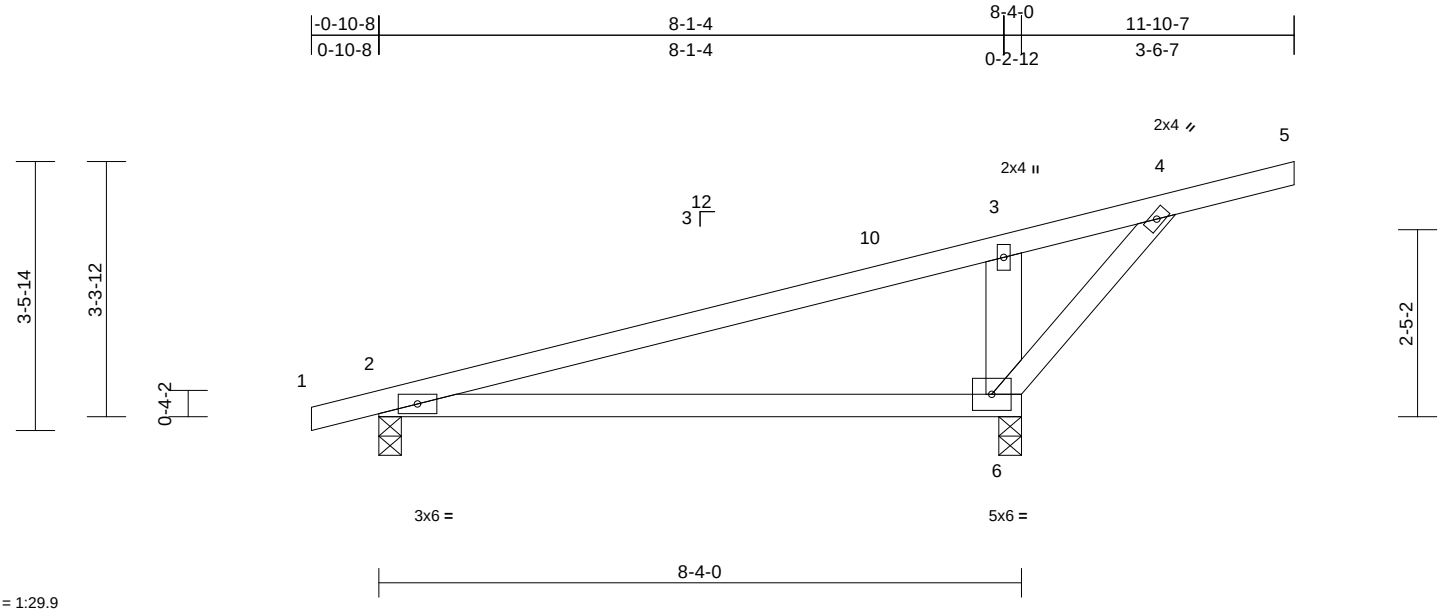
March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H2	Monopitch	2	1	T33208539 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:57 Page: 1
ID:J_ojlquZi2rY8P3_qF8Cltzs8UI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:29.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	0.30	6-9	>326	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.34	6-9	>281	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 41 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except* 6-4:2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=97 (LC 12)
Max Uplift 2=-78 (LC 12), 6=-175 (LC 12)
Max Grav 2=320 (LC 2), 6=691 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-178/234, 3-4=-74/209, 4-5=-39/0
BOT CHORD 2-6=-203/156
WEBS 3-6=-489/288, 4-6=-304/68

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 6 and 78 lb uplift at joint 2.
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.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H3	Monopitch	2	1	T33208540 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:57 Page: 1
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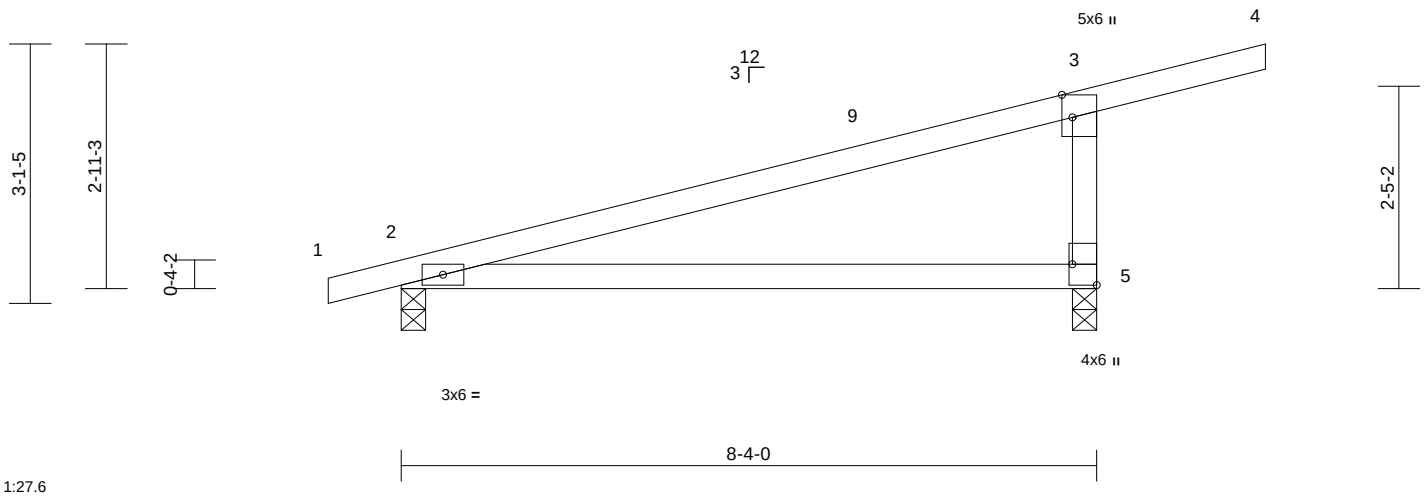

Scale = 1:27.6

Plate Offsets (X, Y): [3:0-3-4,Edge], [5:Edge,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	1.00	TC	0.96	Vert(LL)	0.20	5-8	>495	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.23	5-8	>427	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 32 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 5=0-3-8
Max Horiz 2=85 (LC 13)
Max Uplift 2=-99 (LC 12), 5=-125 (LC 12)
Max Grav 2=366 (LC 2), 5=530 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-226/149, 3-4=-53/0, 3-5=-417/219
BOT CHORD 2-5=-197/207

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 5 and 99 lb uplift at joint 2.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H4	Monopitch	2	1	T33208541 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:57 Page: 1
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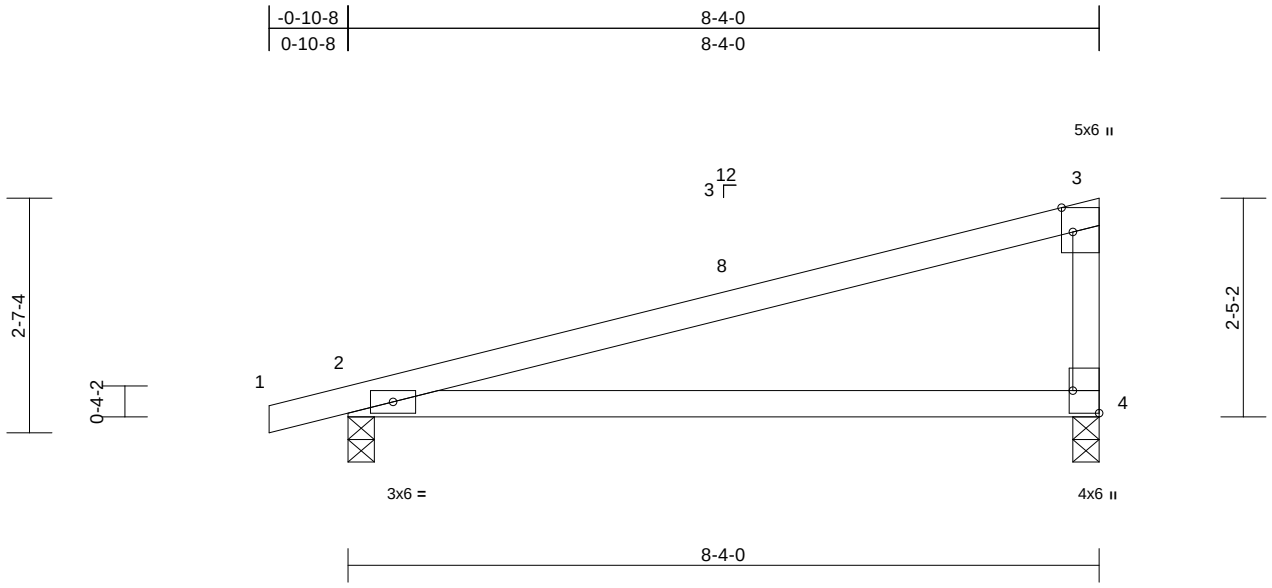


Scale = 1:25.6

Plate Offsets (X, Y): [3:0-3-4,Edge], [4:Edge,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	1.00	TC	0.70	Vert(LL)	0.21	4-7	>465	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.25	4-7	>389	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=69 (LC 15)
Max Uplift 2=-107 (LC 12), 4=-87 (LC 12)
Max Grav 2=383 (LC 2), 4=353 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-248/169, 3-4=-232/117
BOT CHORD 2-4=-200/226

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 4 and 107 lb uplift at joint 2.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

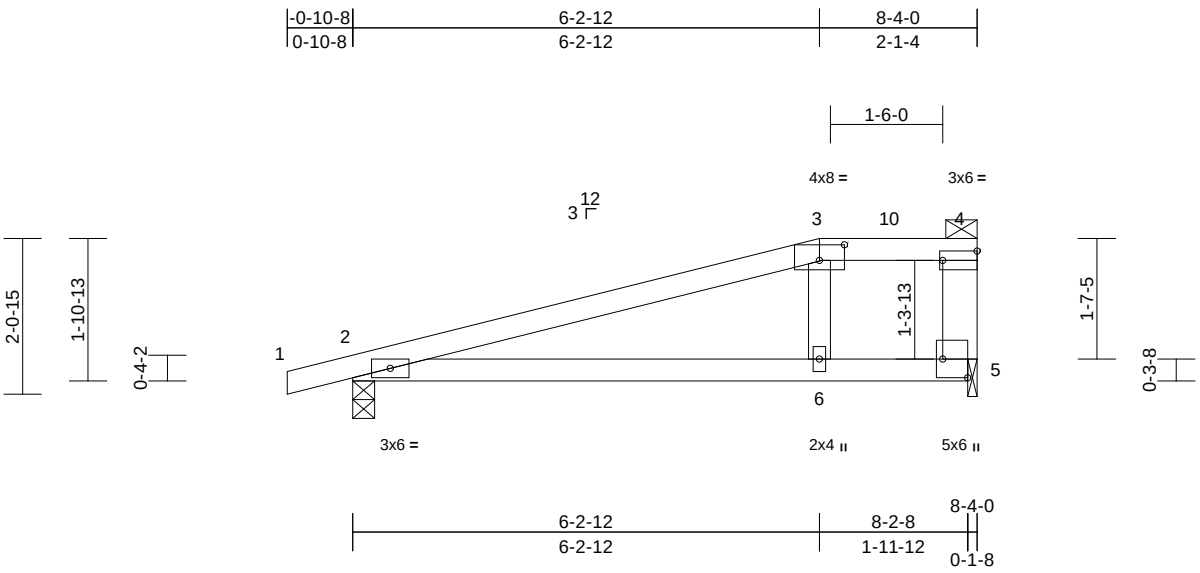
March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H5	Half Hip	2	1	T33208542
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:57 Page: 1
ID:4Itc5J_5OPUeDZKOoTu?WAzs8bv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	0.14	6-9	>686	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.23	6-9	>425	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except* 3-6:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 5=0-1-8
Max Horiz 2=54 (LC 15)
Max Uplift 2=-108 (LC 12), 5=-84 (LC 12)
Max Grav 2=507 (LC 36), 5=341 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-425/232, 3-4=-374/250, 4-5=-184/122
BOT CHORD 2-6=-249/374, 5-6=-249/374
WEBS 3-6=-69/73

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=18.7 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
11) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2 and 84 lb uplift at joint 5.
14) 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.
15) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
16) 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-57, 3-4=-60, 5-7=-20

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H6	Half Hip Girder	2	1	T33208543 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:58 Page: 1
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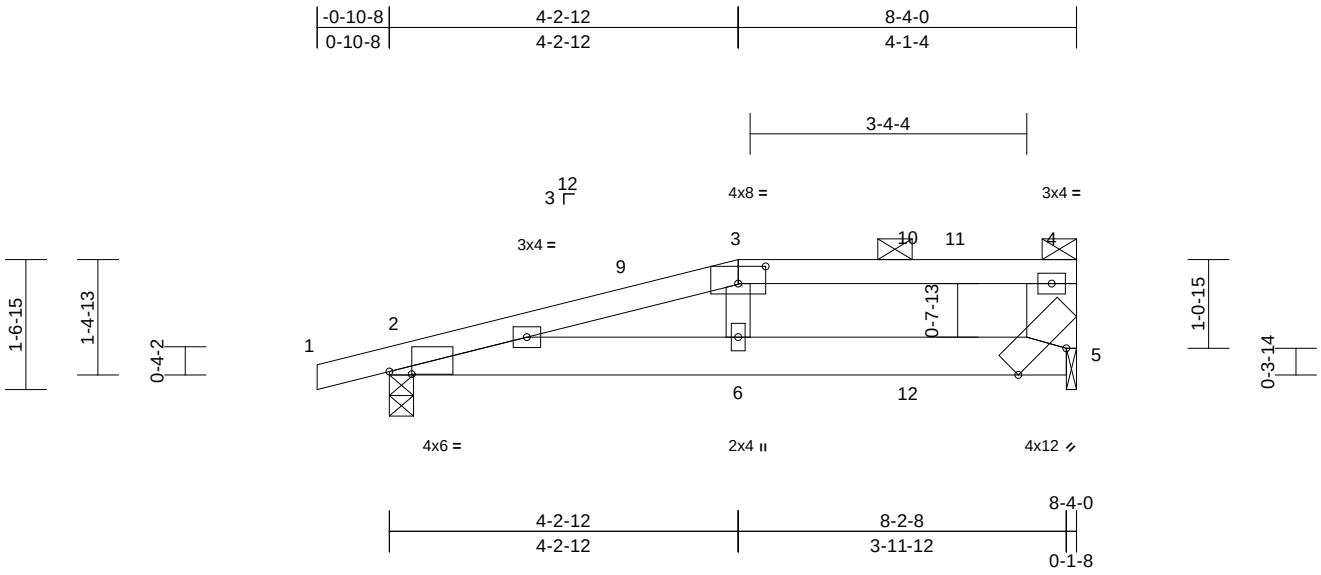


Scale = 1:27.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.07	6-8	>999	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.13	6-8	>735	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x8 SP 2400F 2.0E or 2x8 SP DSS *Except* 3-6:2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 5=0-1-8
Max Horiz 2=37 (LC 9)
Max Uplift 2=-143 (LC 8), 5=-168 (LC 8)
Max Grav 2=600 (LC 32), 5=636 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-757/171, 3-4=-651/174, 4-5=-304/85
BOT CHORD 2-6=-166/708, 5-6=-166/651
WEBS 3-6=-158/58

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
3) ** TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=18.7 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
4) Roof design snow load has been reduced to account for slope.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearings are assumed to be: , Joint 5 SP 2400F 2.0E or DSS crushing capacity of 660 psi.
11) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2 and 168 lb uplift at joint 5.
14) 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.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 76 lb up at 4-2-12, and 77 lb down and 29 lb up at 6-3-8, and 92 lb down and 35 lb up at 8-0-6 on top chord, and 86 lb down and 55 lb up at 4-2-12, and 36 lb down and 23 lb up at 6-3-8, and 53 lb down and 18 lb up at 8-0-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-57, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 4=-80 (F), 3=-133 (F), 6=-86 (F), 5=-44 (F), 10=-49 (F), 12=-35 (F)

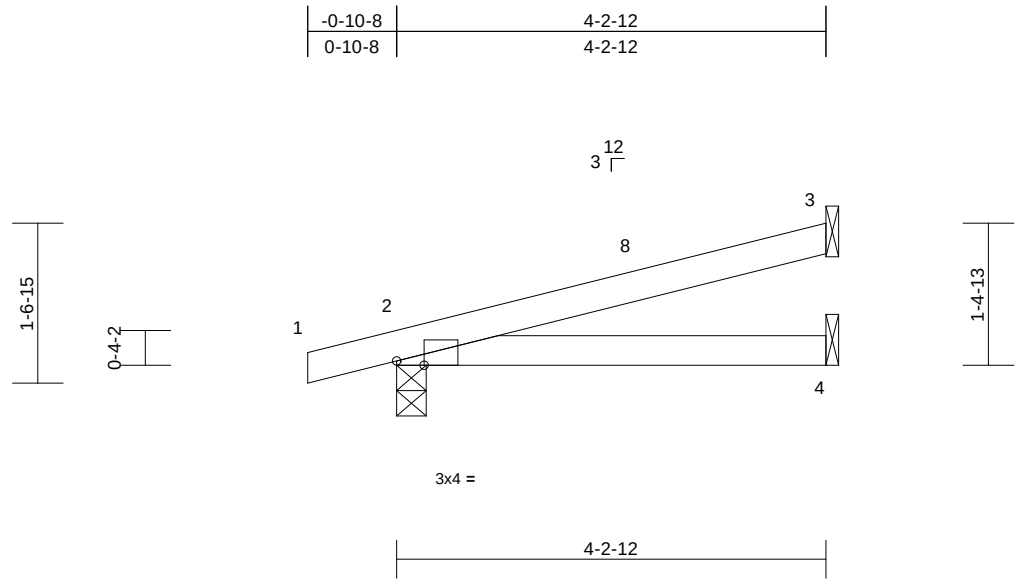
March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H7	Jack-Open	6	1	T33208544 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:58 ID:O6fOLa8dHiQm3h0HAhBQd6zs8gt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=40 (LC 12)
Max Uplift 2=-66 (LC 12), 3=-33 (LC 12), 4=-11 (LC 12)
Max Grav 2=225 (LC 2), 3=109 (LC 23), 4=73 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-96/69
BOT CHORD 2-4=-83/82

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3, 66 lb uplift at joint 2 and 11 lb uplift at joint 4.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H8	Monopitch Girder	2	1	T33208545 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:58 Page: 1
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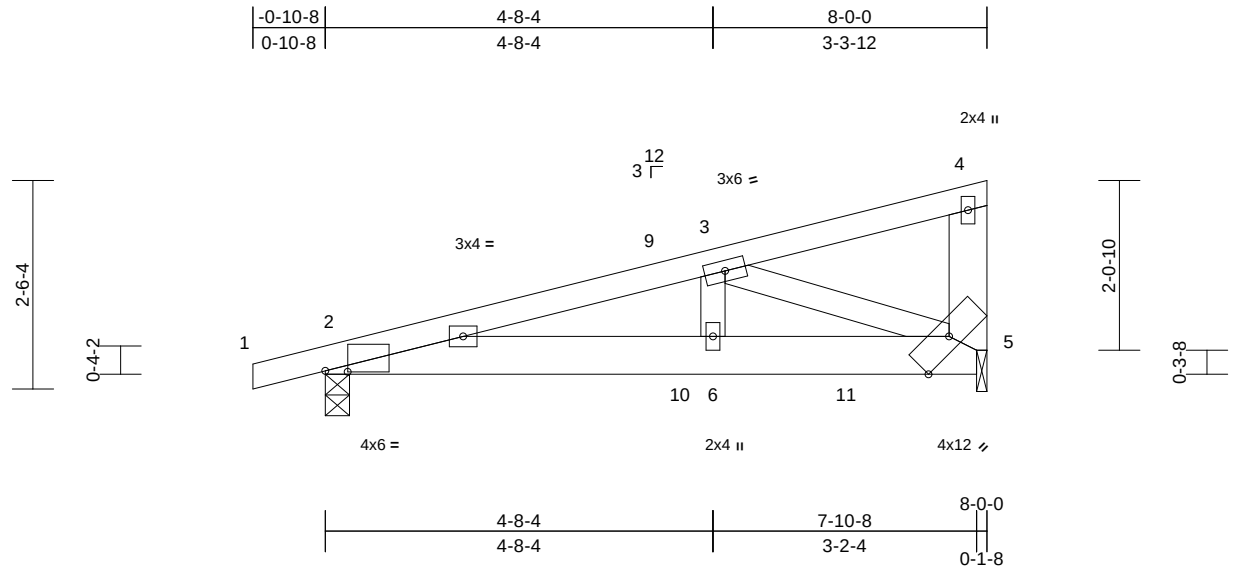

Scale = 1:27.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	0.04	6-8	>999	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.07	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 42 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 4-5:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 5=0-1-8
Max Horiz 2=65 (LC 9)
Max Uplift 2=-196 (LC 8), 5=-237 (LC 8)
Max Grav 2=704 (LC 19), 5=926 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-1772/451, 3-4=-112/29, 4-5=-91/23
BOT CHORD 2-6=-442/1706, 5-6=-444/1719
WEBS 3-6=-186/734, 3-5=-1705/455

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 2 and 237 lb uplift at joint 5.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 616 lb down and 180 lb up at 4-3-8, and 321 lb down and 96 lb up at 6-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-57, 2-5=-20
Concentrated Loads (lb)
Vert: 10=-616, 11=-321

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	H9	Monopitch	7	1	T33208546 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:59 Page: 1
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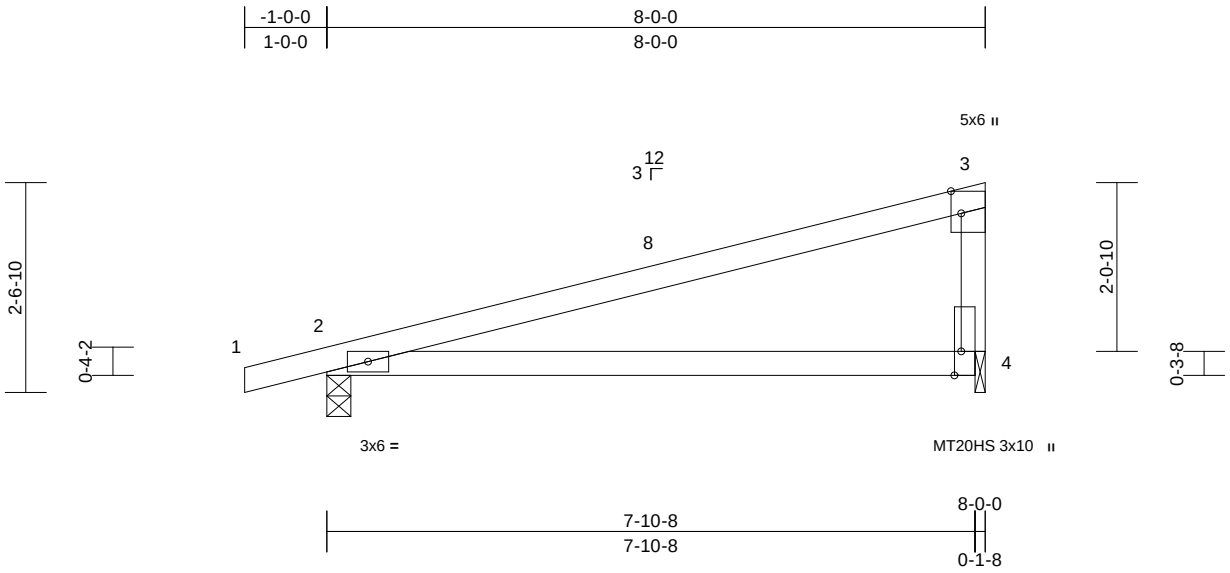

Scale = 1:28

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.09	4-7	>999	240	MT20	244/190
Snow (Ps/Pf)	18.7/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.21	4-7	>440	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 28 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=67 (LC 15)
Max Uplift 2=-51 (LC 12), 4=-28 (LC 16)
Max Grav 2=378 (LC 2), 4=337 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-237/49, 3-4=-221/105
BOT CHORD 2-4=-66/206

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=18.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: , Joint 4 SP No.2 crushing capacity of 565 psi.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 2 and 28 lb uplift at joint 4.
13) 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.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	J1	Jack-Open	2	1	T33208547 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:59 Page: 1
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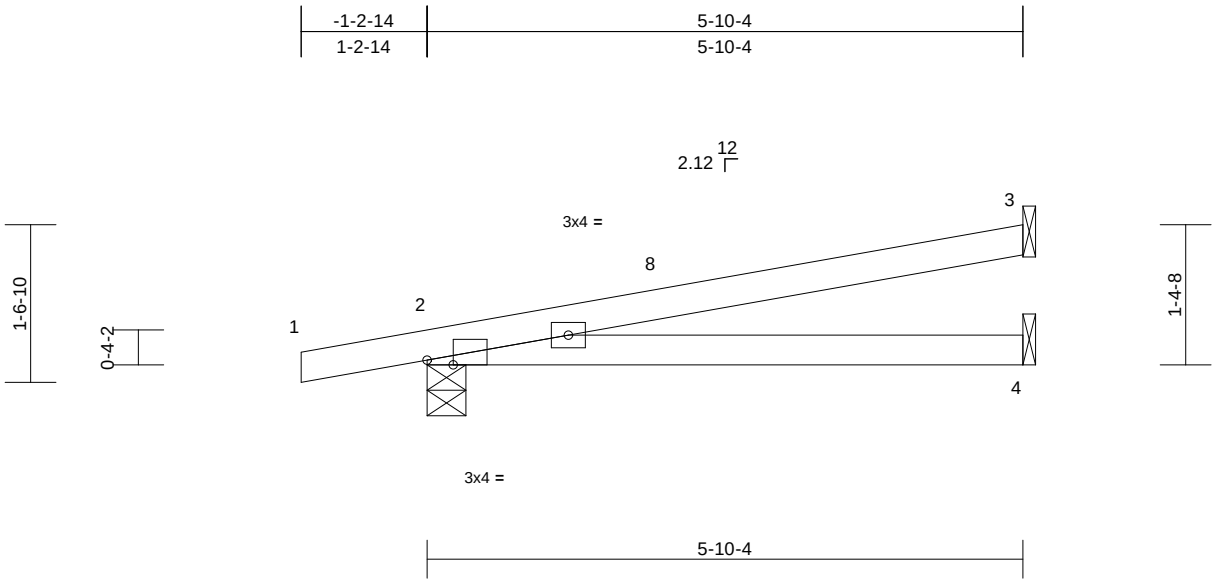

Scale = 1:22.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	0.09	4-7	>791	240	MT20	244/190
Snow (Ps/Pf)	20.0/20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.11	4-7	>618	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 19 lb	FT = 20%

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

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

REACTIONS (size) 2=0-4-9, 3= Mechanical, 4= Mechanical
Max Horiz 2=40 (LC 12)
Max Uplift 2=-96 (LC 12), 3=-44 (LC 12), 4=-15 (LC 12)
Max Grav 2=323 (LC 23), 3=165 (LC 23), 4=100 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-188/141
BOT CHORD 2-4=-154/174

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=20.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: , Joint 2 User Defined crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3, 96 lb uplift at joint 2 and 15 lb uplift at joint 4.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	P1	Piggyback	2	1	T33208548 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:32:59 Page: 1
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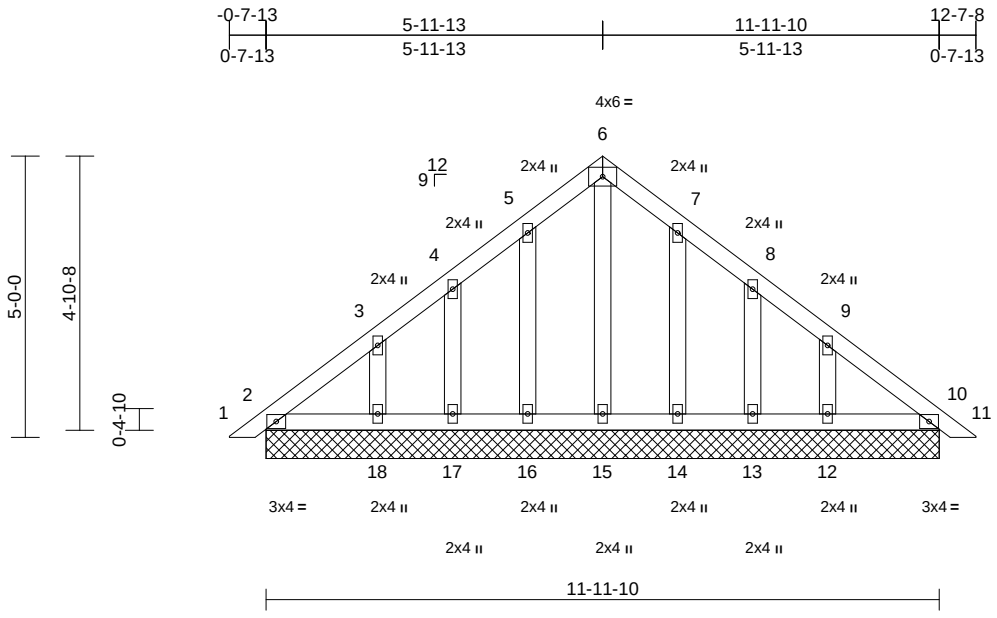

Scale = 1:41

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 70 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=11-11-10, 10=11-11-10, 12=11-11-10, 13=11-11-10, 14=11-11-10, 15=11-11-10, 16=11-11-10, 17=11-11-10, 18=11-11-10, 19=11-11-10, 23=11-11-10
Max Horiz 2=-93 (LC 12), 19=-93 (LC 12)
Max Uplift 2=-7 (LC 10), 12=-48 (LC 15), 13=-28 (LC 15), 14=-26 (LC 15), 16=-28 (LC 14), 17=-27 (LC 14), 18=-49 (LC 14), 19=-7 (LC 10)
Max Grav 2=109 (LC 27), 10=106 (LC 2), 12=164 (LC 27), 13=93 (LC 27), 14=115 (LC 27), 15=99 (LC 29), 16=117 (LC 26), 17=92 (LC 26), 18=165 (LC 26), 19=109 (LC 27), 23=106 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-77/69, 3-4=-72/47, 4-5=-62/61, 5-6=-81/84, 6-7=-81/84, 7-8=-54/51, 8-9=-50/18, 9-10=-58/41, 10-11=0/25
BOT CHORD 2-18=-43/74, 17-18=-43/74, 16-17=-43/74, 15-16=-43/74, 14-15=-43/74, 13-14=-43/74, 12-13=-43/74, 10-12=-43/74
WEBS 6-15=-74/24, 5-16=-88/43, 4-17=-75/47, 3-18=-111/58, 7-14=-86/41, 8-13=-76/47, 9-12=-110/58

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2, 28 lb uplift at joint 16, 27 lb uplift at joint 17, 49 lb uplift at joint 18, 26 lb uplift at joint 14, 28 lb uplift at joint 13, 48 lb uplift at joint 12 and 7 lb uplift at joint 2.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	P2	Piggyback	15	1	T33208549 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:00 Page: 1
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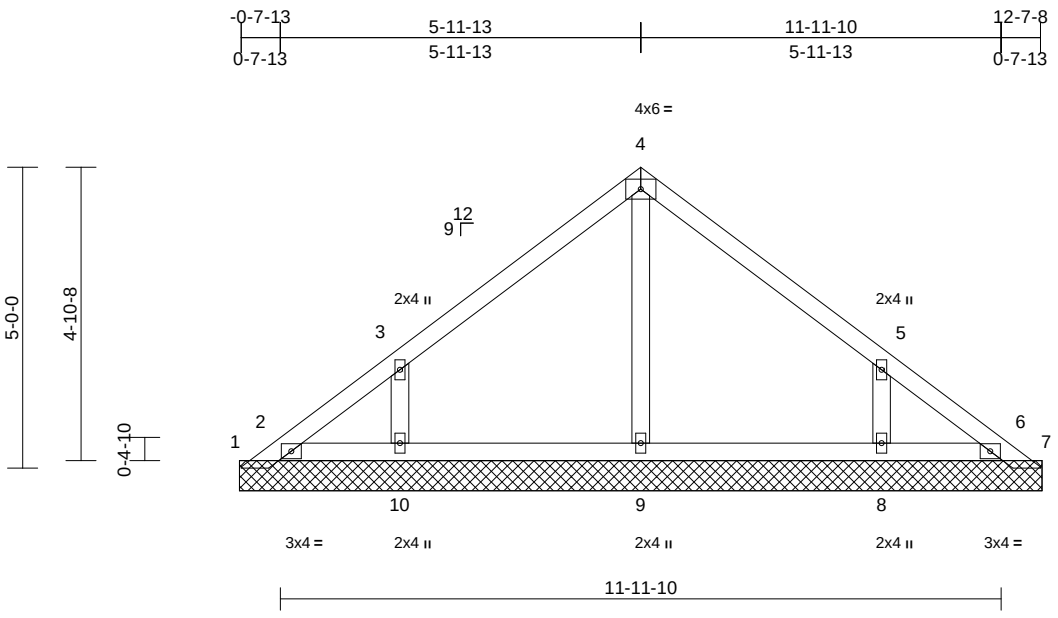

Scale = 1:38.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 53 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=13-4-0, 2=13-4-0, 6=13-4-0, 7=13-4-0, 8=13-4-0, 9=13-4-0, 10=13-4-0, 11=13-4-0, 14=13-4-0
Max Horiz 1=-93 (LC 10)
Max Uplift 1=-51 (LC 10), 6=-2 (LC 11), 7=-5 (LC 15), 8=-92 (LC 15), 10=-92 (LC 14), 14=-2 (LC 11)
Max Grav 1=66 (LC 13), 2=91 (LC 26), 6=84 (LC 26), 7=31 (LC 31), 8=299 (LC 27), 9=262 (LC 2), 10=299 (LC 26), 11=91 (LC 26), 14=84 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-113/112, 2-3=-91/72, 3-4=-128/80, 4-5=-124/75, 5-6=-71/42, 6-7=-16/9
BOT CHORD 2-10=-23/68, 9-10=-23/68, 8-9=-23/68, 6-8=-23/68
WEBS 4-9=-177/4, 3-10=-233/133, 5-8=-233/133

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 6, 51 lb uplift at joint 1, 5 lb uplift at joint 7, 92 lb uplift at joint 10, 92 lb uplift at joint 8 and 2 lb uplift at joint 6.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	P3	Piggyback	1	1	T33208550 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:00 Page: 1
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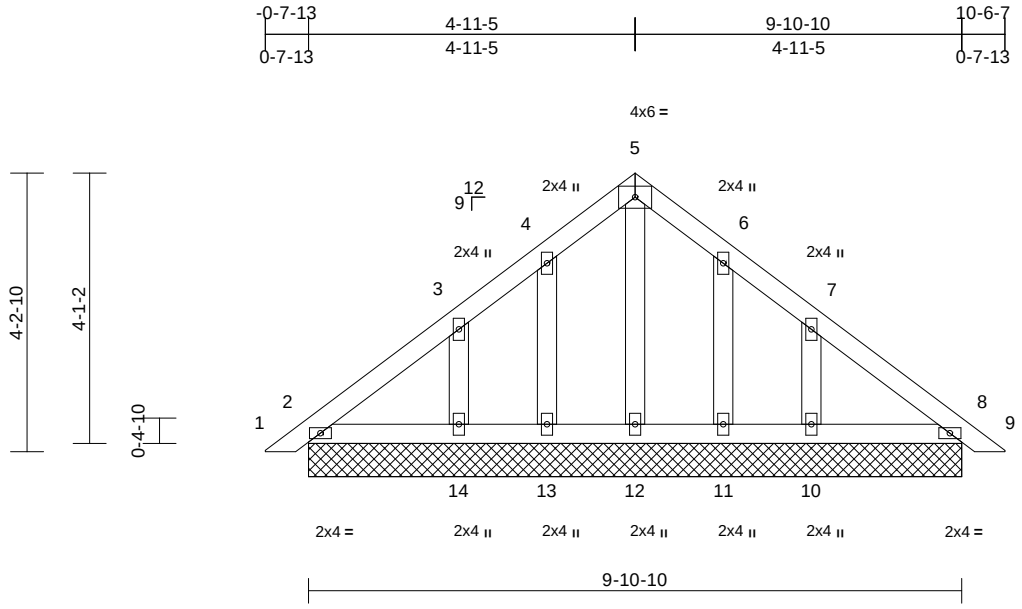

Scale = 1:34.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 53 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=9-10-10, 8=9-10-10, 10=9-10-10, 11=9-10-10, 12=9-10-10, 13=9-10-10, 14=9-10-10, 15=9-10-10, 19=9-10-10
Max Horiz 2=-78 (LC 12), 15=-78 (LC 12)
Max Uplift 10=-56 (LC 15), 11=-19 (LC 15), 13=-20 (LC 14), 14=-56 (LC 14)
Max Grav 2=117 (LC 2), 8=117 (LC 2), 10=187 (LC 27), 11=83 (LC 27), 12=98 (LC 29), 13=84 (LC 26), 14=187 (LC 26), 15=117 (LC 2), 19=117 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-71/54, 3-4=-68/48, 4-5=-73/72, 5-6=-73/72, 6-7=-53/40, 7-8=-53/32, 8-9=0/25
BOT CHORD 2-14=-32/61, 13-14=-32/61, 12-13=-32/61, 11-12=-32/61, 10-11=-32/61, 8-10=-32/61
WEBS 5-12=-66/12, 4-13=-73/39, 3-14=-125/69, 6-11=-71/37, 7-10=-125/69

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 13, 56 lb uplift at joint 14, 19 lb uplift at joint 11 and 56 lb uplift at joint 10.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	P4	Piggyback	5	1	T33208551 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:00 Page: 1
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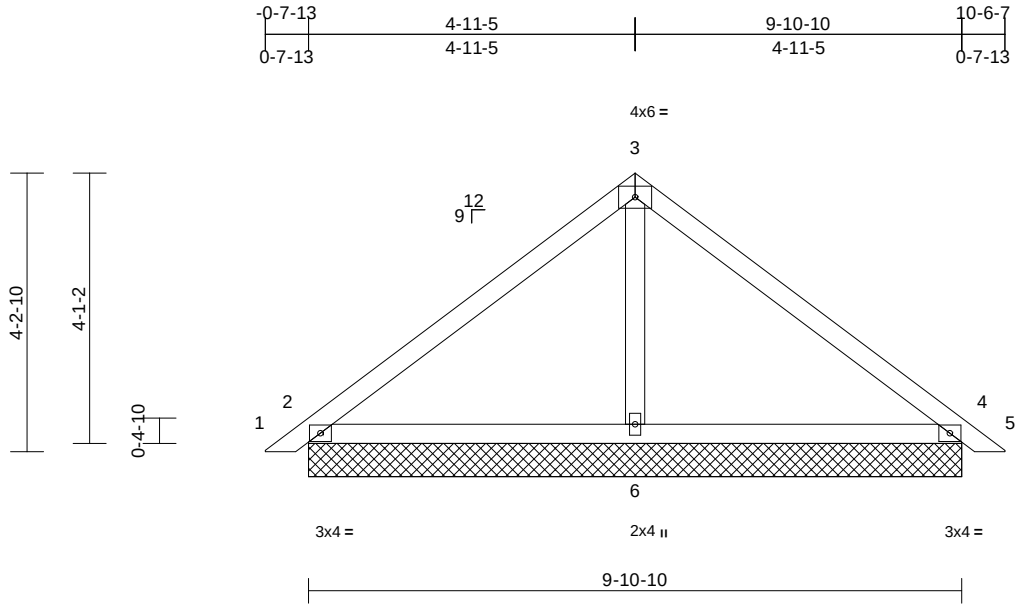

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 41 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=9-10-10, 4=9-10-10, 6=9-10-10, 7=9-10-10, 11=9-10-10
Max Horiz 2=78 (LC 13), 7=78 (LC 13)
Max Uplift 2=-24 (LC 14), 4=-34 (LC 15), 7=-24 (LC 14), 11=-34 (LC 15)
Max Grav 2=260 (LC 2), 4=260 (LC 2), 6=321 (LC 2), 7=260 (LC 2), 11=260 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-198/79, 3-4=-198/79, 4-5=0/25
BOT CHORD 2-6=-31/110, 4-6=-15/110
WEBS 3-6=-160/19

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 34 lb uplift at joint 4, 24 lb uplift at joint 2 and 34 lb uplift at joint 4.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V1	Valley	1	1	T33208552 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:00 Page: 1
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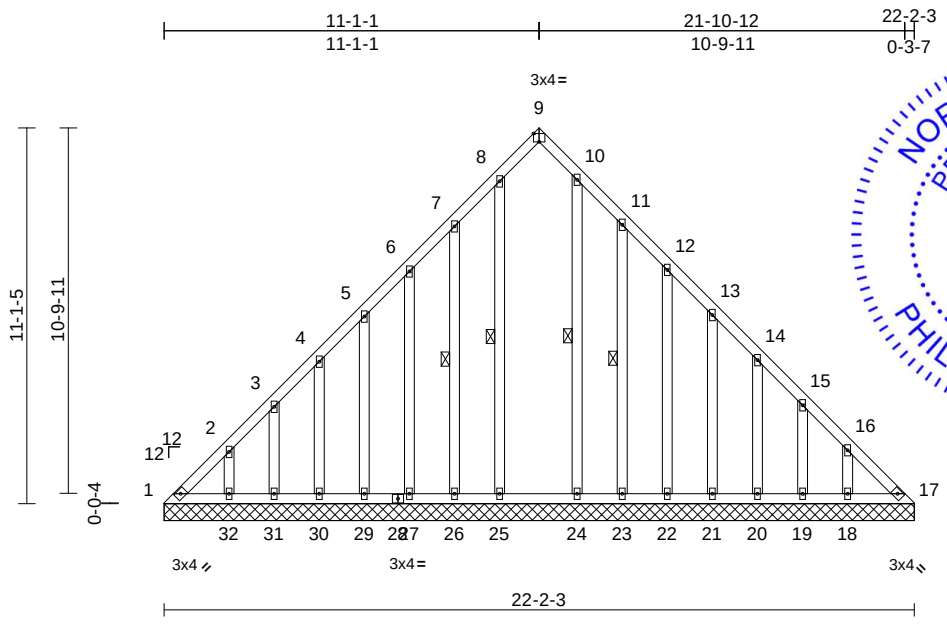

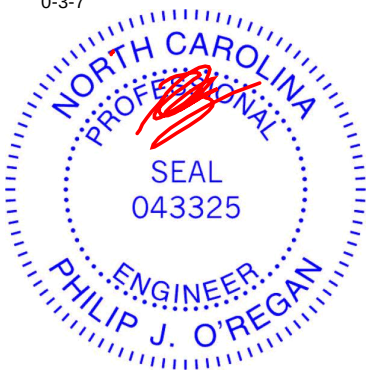

Scale = 1:68.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.01	17	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 191 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.
WEBS 1 Row at midpt 8-25, 10-24, 7-26, 11-23

REACTIONS (size) 1=22-2-3, 17=22-2-3, 18=22-2-3, 19=22-2-3, 20=22-2-3, 21=22-2-3, 22=22-2-3, 23=22-2-3, 24=22-2-3, 25=22-2-3, 26=22-2-3, 27=22-2-3, 29=22-2-3, 30=22-2-3, 31=22-2-3, 32=22-2-3
Max Horiz 1=211 (LC 11)
Max Uplift 1=-64 (LC 12), 17=-29 (LC 13), 19=-67 (LC 15), 20=-44 (LC 15), 21=-49 (LC 15), 22=-47 (LC 15), 23=-76 (LC 15), 26=-70 (LC 14), 27=-47 (LC 14), 29=-49 (LC 14), 30=-45 (LC 14), 31=-62 (LC 14), 32=-9 (LC 14)
Max Grav 1=199 (LC 14), 17=176 (LC 15), 18=168 (LC 2), 19=102 (LC 26), 20=119 (LC 26), 21=113 (LC 26), 22=120 (LC 26), 23=101 (LC 30), 24=165 (LC 27), 25=184 (LC 25), 26=101 (LC 29), 27=120 (LC 25), 29=113 (LC 25), 30=120 (LC 25), 31=98 (LC 25), 32=168 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-327/224, 2-3=-283/181, 3-4=-223/136, 4-5=-167/96, 5-6=-112/75, 6-7=-94/55, 7-8=-83/82, 8-9=-74/60, 9-10=-73/58, 10-11=-77/67, 11-12=-74/29, 12-13=-98/49, 13-14=-148/89, 14-15=-204/134, 15-16=-265/179, 16-17=-307/224
BOT CHORD 1-32=-178/255, 31-32=-178/255, 30-31=-178/255, 29-30=-178/255, 27-29=-178/255, 26-27=-178/255, 25-26=-178/255, 24-25=-178/255, 23-24=-178/255, 22-23=-178/255, 21-22=-178/255, 20-21=-178/255, 19-20=-178/255, 18-19=-178/255, 17-18=-178/255
WEBS 8-25=-100/18, 10-24=-86/0, 7-26=-109/84, 6-27=-90/64, 5-29=-89/64, 4-30=-90/64, 3-31=-91/70, 2-32=-107/46, 11-23=-109/89, 12-22=-90/64, 13-21=-89/64, 14-20=-90/63, 15-19=-90/72, 16-18=-103/42

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 1, 29 lb uplift at joint 17, 70 lb uplift at joint 26, 47 lb uplift at joint 27, 49 lb uplift at joint 29, 45 lb uplift at joint 30, 62 lb uplift at joint 31, 9 lb uplift at joint 32, 76 lb uplift at joint 23, 47 lb uplift at joint 22, 49 lb uplift at joint 21, 44 lb uplift at joint 20 and 67 lb uplift at joint 19.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V2	Valley	1	1	T33208553 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:01 Page: 1

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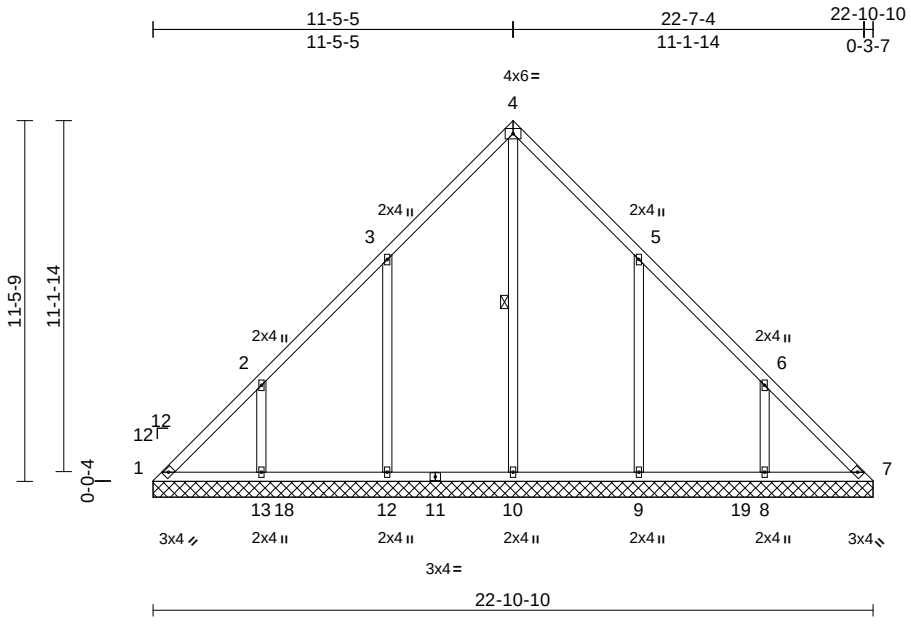

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 126 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 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-10

REACTIONS (size) 1=22-10-10, 7=22-10-10, 8=22-10-10, 9=22-10-10, 10=22-10-10, 12=22-10-10, 13=22-10-10

Max Horiz 1=218 (LC 11)

Max Uplift 1=-52 (LC 12), 7=-4 (LC 13), 8=-121 (LC 15), 9=-164 (LC 15), 12=-163 (LC 14), 13=-126 (LC 14)

Max Grav 1=177 (LC 27), 7=153 (LC 28), 8=383 (LC 26), 9=491 (LC 26), 10=422 (LC 28), 12=490 (LC 25), 13=388 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-250/198, 2-3=-169/144, 3-4=-159/179, 4-5=-159/171, 5-6=-125/99, 6-7=-209/164
BOT CHORD	1-13=-133/192, 12-13=-133/192, 10-12=-133/192, 9-10=-133/192, 8-9=-133/192, 7-8=-133/192
WEBS	4-10=-223/23, 3-12=-289/213, 2-13=-249/168, 5-9=-289/213, 6-8=-249/166

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 1, 4 lb uplift at joint 7, 163 lb uplift at joint 12, 126 lb uplift at joint 13, 164 lb uplift at joint 9 and 121 lb uplift at joint 8.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V3	Valley	1	1	T33208554
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:01 Page: 1
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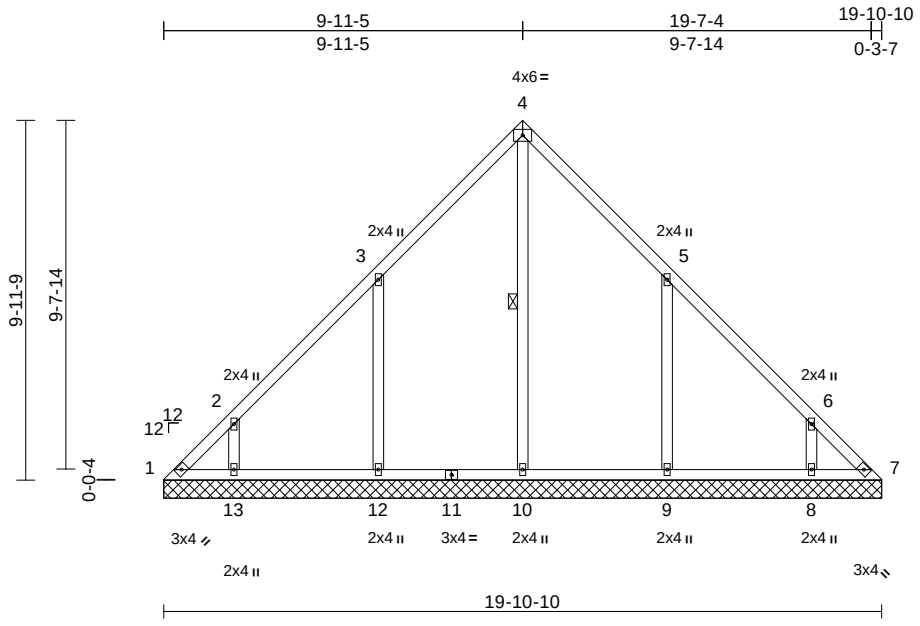

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 104 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.
WEBS 1 Row at midpt 4-10

REACTIONS (size) 1=19-10-10, 7=19-10-10, 8=19-10-10, 9=19-10-10, 10=19-10-10, 12=19-10-10, 13=19-10-10
Max Horiz 1=189 (LC 13)
Max Uplift 1=-72 (LC 12), 7=-28 (LC 13), 8=-85 (LC 15), 9=-168 (LC 15), 12=-167 (LC 14), 13=-92 (LC 14)
Max Grav 1=147 (LC 14), 7=119 (LC 28), 8=276 (LC 2), 9=435 (LC 26), 10=389 (LC 28), 12=435 (LC 25), 13=279 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-242/161, 2-3=-191/122, 3-4=-172/157, 4-5=-172/151, 5-6=-155/78, 6-7=-207/134
BOT CHORD 1-13=-89/162, 12-13=-89/162, 10-12=-89/162, 9-10=-89/162, 8-9=-89/162, 7-8=-89/162
WEBS 4-10=-174/43, 3-12=-294/215, 2-13=-224/152, 5-9=-294/215, 6-8=-221/150

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 1, 28 lb uplift at joint 7, 167 lb uplift at joint 12, 92 lb uplift at joint 13, 168 lb uplift at joint 9 and 85 lb uplift at joint 8.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V4	Valley	1	1	T33208555 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:02 Page: 1
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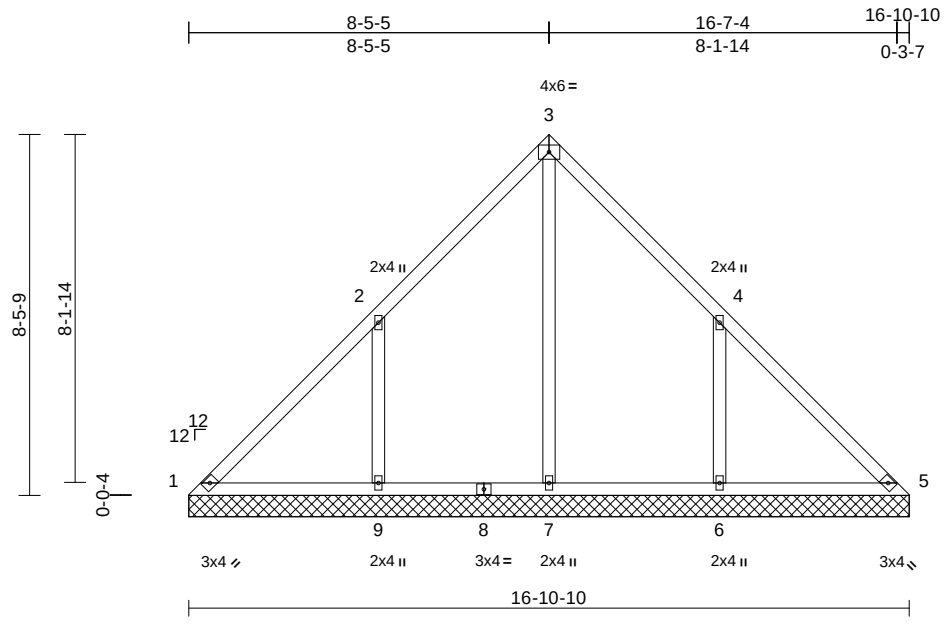

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 83 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 (size) 1=16-10-10, 5=16-10-10, 6=16-10-10, 7=16-10-10, 9=16-10-10
Max Horiz 1=-160 (LC 10)
Max Uplift 1=-27 (LC 10), 6=-172 (LC 15), 9=-176 (LC 14)
Max Grav 1=133 (LC 26), 5=114 (LC 28), 6=484 (LC 26), 7=462 (LC 25), 9=488 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-160/218, 2-3=-67/155, 3-4=-49/135, 4-5=-133/182
BOT CHORD 1-9=-148/145, 7-9=-148/145, 6-7=-148/145, 5-6=-148/145
WEBS 3-7=-294/0, 2-9=-309/212, 4-6=-307/211

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 176 lb uplift at joint 9 and 172 lb uplift at joint 6.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V5	Valley	1	1	T33208556 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:02 Page: 1
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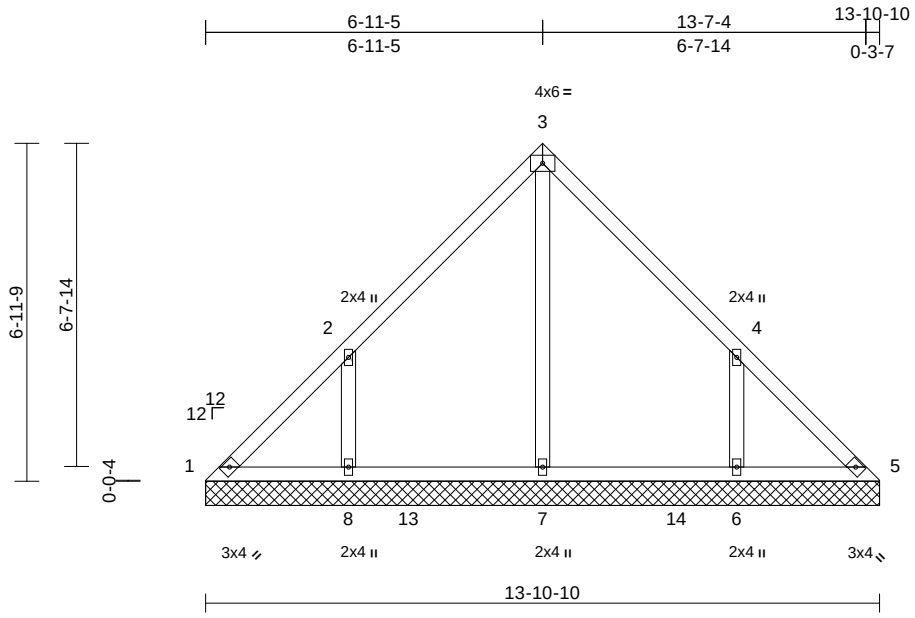

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 65 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 6-0-0 oc bracing.

REACTIONS (size) 1=13-10-10, 5=13-10-10, 6=13-10-10, 7=13-10-10, 8=13-10-10
Max Horiz 1=131 (LC 13)
Max Uplift 1=-29 (LC 10), 6=-139 (LC 15), 8=-143 (LC 14)
Max Grav 1=128 (LC 26), 5=105 (LC 25), 6=376 (LC 26), 7=367 (LC 25), 8=380 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-145/124, 2-3=-136/110, 3-4=-119/100, 4-5=-127/86
BOT CHORD 1-8=-64/112, 7-8=-64/103, 6-7=-64/103, 5-6=-64/103
WEBS 3-7=-183/0, 2-8=-265/186, 4-6=-265/184

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 143 lb uplift at joint 8 and 139 lb uplift at joint 6.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V6	Valley	1	1	T33208557 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:02 Page: 1
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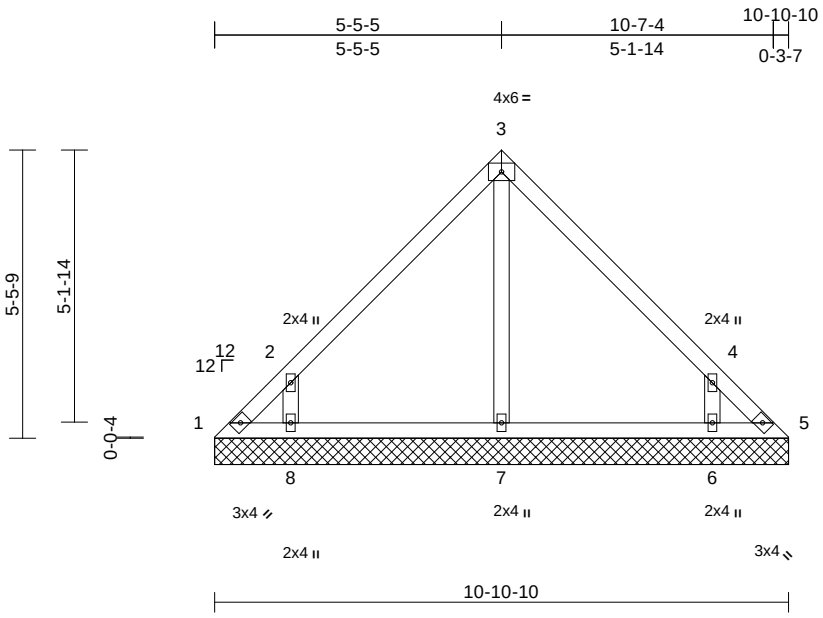

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 48 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 (size) 1=10-10-10, 5=10-10-10, 6=10-10-10, 7=10-10-10, 8=10-10-10, 13=10-10-10
Max Horiz 1=102 (LC 13)
Max Uplift 1=-88 (LC 12), 5=-1 (LC 15), 6=-108 (LC 15), 8=-132 (LC 14), 13=-1 (LC 15)
Max Grav 1=97 (LC 11), 5=0 (LC 13), 6=318 (LC 26), 7=300 (LC 28), 8=316 (LC 25), 13=0 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-155/166, 2-3=-170/175, 3-4=-155/148, 4-5=-42/65
BOT CHORD 1-8=-26/25, 7-8=-1/25, 6-7=-1/25, 5-6=-1/34
WEBS 3-7=-219/30, 2-8=-293/216, 4-6=-286/205

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 1, 1 lb uplift at joint 5, 132 lb uplift at joint 8, 108 lb uplift at joint 6 and 1 lb uplift at joint 5.
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

March 13,2024

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V7	Valley	1	1	T33208558 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:02 Page: 1
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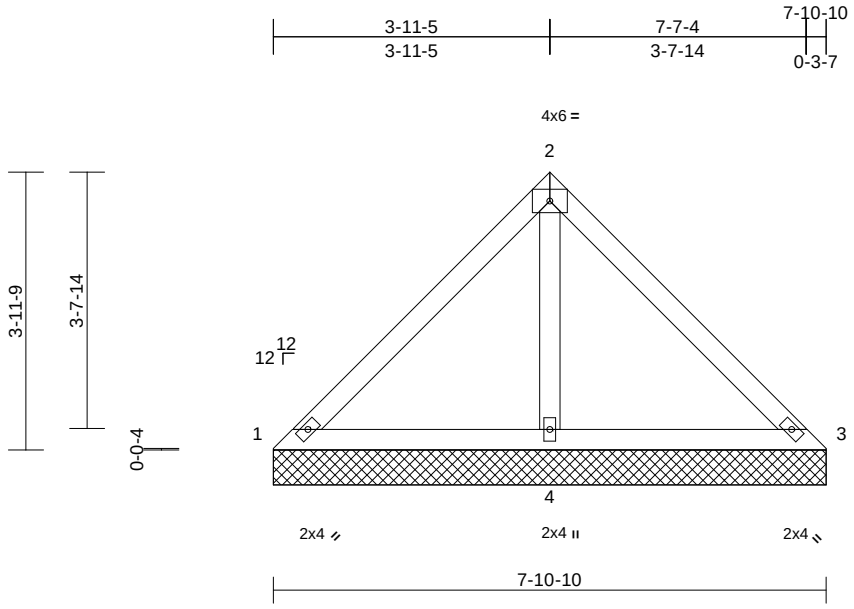

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										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 7-10-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=7-10-10, 3=7-10-10, 4=7-10-10
Max Horiz 1=-73 (LC 10)
Max Uplift 1=-1 (LC 30), 3=-1 (LC 29), 4=-51 (LC 14)
Max Grav 1=78 (LC 29), 3=78 (LC 30), 4=525 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-59/193, 2-3=-59/193
BOT CHORD 1-4=-138/92, 3-4=-138/92
WEBS 2-4=-379/113

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1, 1 lb uplift at joint 3 and 51 lb uplift at joint 4.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	V8	Valley	1	1	T33208559
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:03 Page: 1
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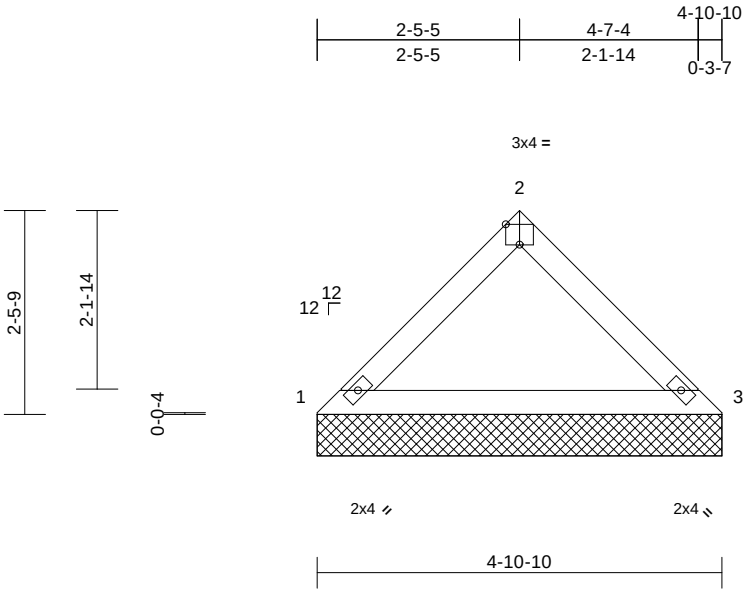

Scale = 1:27.8

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	1.00	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 16 lb	FT = 20%

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

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

REACTIONS (size) 1=4-10-10, 3=4-10-10
Max Horiz 1=-44 (LC 10)
Max Grav 1=195 (LC 2), 3=195 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-247/32, 2-3=-247/32
BOT CHORD 1-3=-19/178

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VF1	Valley	1	1	T33208560 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:03 Page: 1
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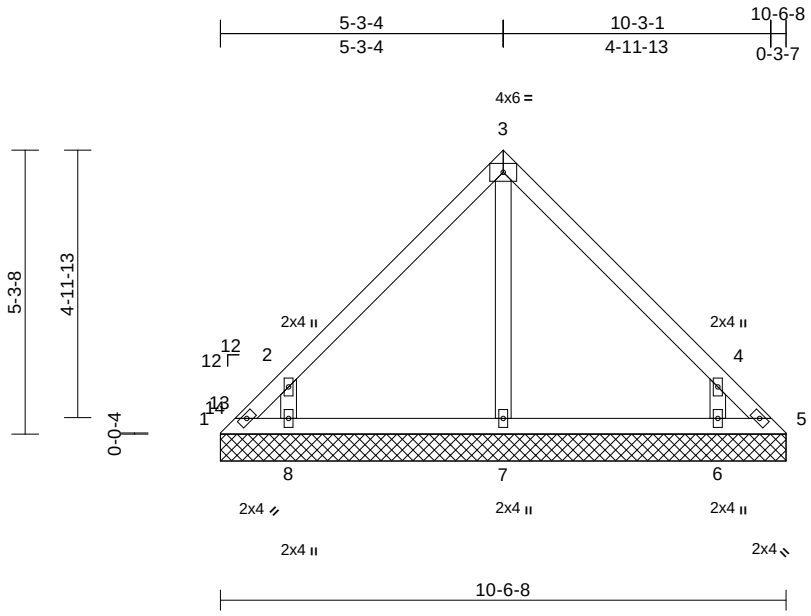

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 46 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=10-6-8, 5=10-6-8, 6=10-6-8, 7=10-6-8, 8=10-6-8
Max Horiz 1=-98 (LC 10)
Max Uplift 1=-71 (LC 12), 5=-38 (LC 13), 6=-117 (LC 15), 8=-121 (LC 14)
Max Grav 1=89 (LC 14), 5=67 (LC 15), 6=314 (LC 26), 7=218 (LC 2), 8=317 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-154/108, 2-3=-162/85, 3-4=-160/80, 4-5=-136/81
BOT CHORD 1-8=-54/79, 7-8=-23/79, 6-7=-23/79, 5-6=-50/79
WEBS 3-7=-131/0, 2-8=-291/218, 4-6=-290/217

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 1, 38 lb uplift at joint 5, 121 lb uplift at joint 8 and 117 lb uplift at joint 6.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VF2	Valley	1	1	T33208561 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:03 Page: 1
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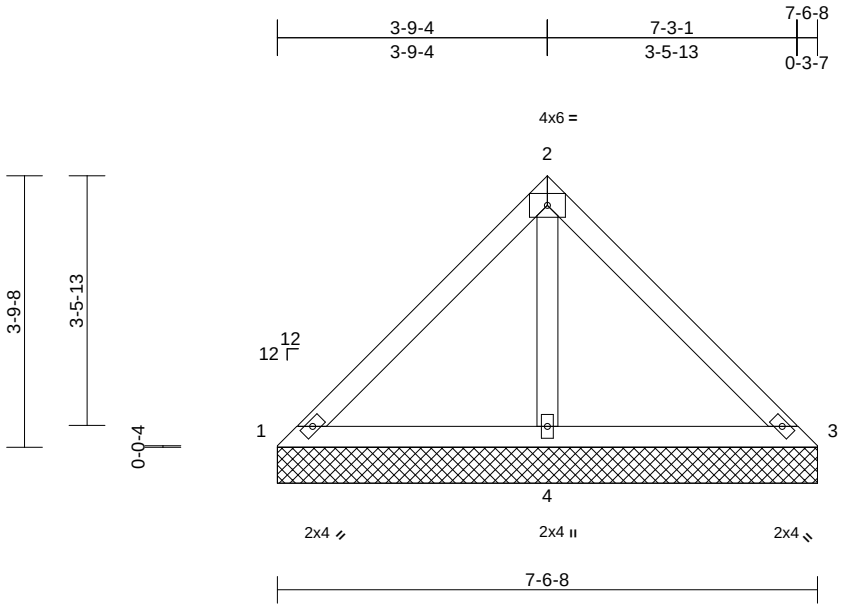

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 30 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 7-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=7-6-8, 3=7-6-8, 4=7-6-8
Max Horiz 1=-69 (LC 12)
Max Uplift 4=-46 (LC 14)
Max Grav 1=78 (LC 29), 3=78 (LC 30), 4=493 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-58/179, 2-3=-58/177
BOT CHORD 1-4=-127/86, 3-4=-127/86
WEBS 2-4=-352/104

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VF3	Valley	1	1	T33208562
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:03 Page: 1
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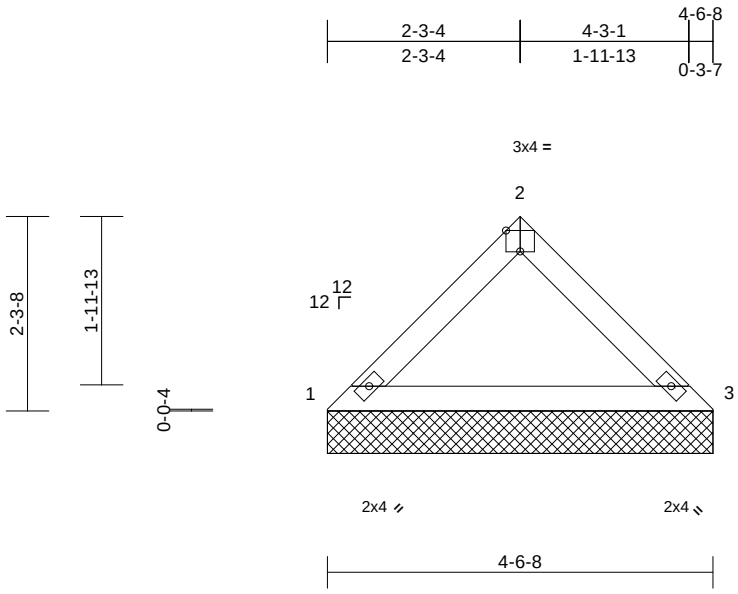

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	8.3/20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 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 4-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-6-8, 3=4-6-8
Max Horiz 1=-40 (LC 10)
Max Uplift 1=-1 (LC 14), 3=-1 (LC 15)
Max Grav 1=182 (LC 2), 3=182 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-228/30, 2-3=-228/30
BOT CHORD 1-3=-18/164

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=8.3 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1 and 1 lb uplift at joint 3.
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

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VG1	Valley	1	1	T33208563 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:04 Page: 1

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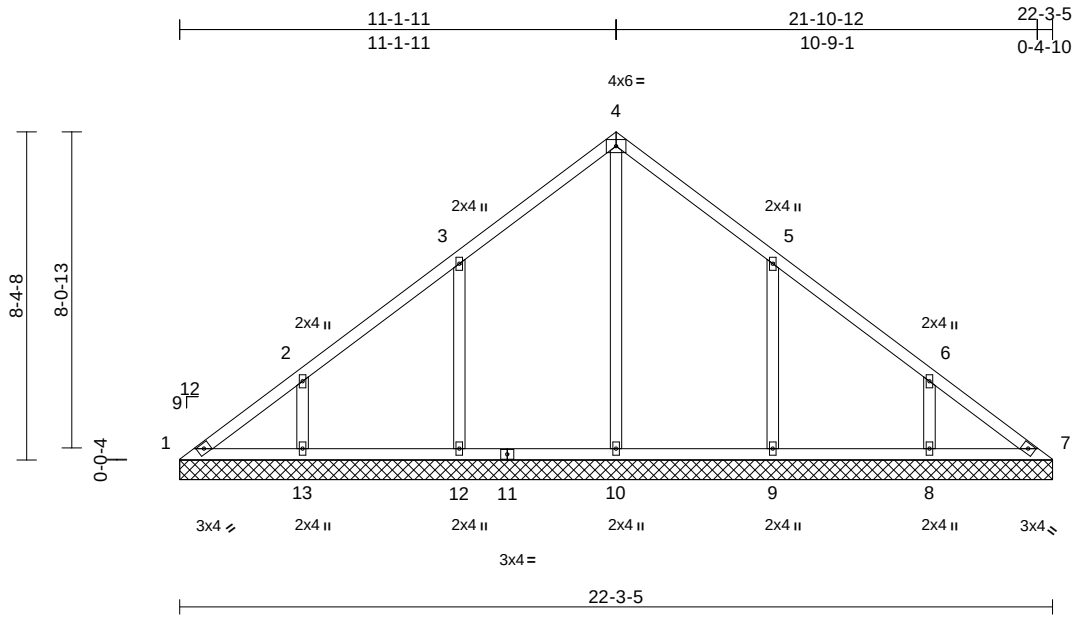

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 104 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=22-3-5, 7=22-3-5, 8=22-3-5, 9=22-3-5, 10=22-3-5, 12=22-3-5, 13=22-3-5
Max Horiz 1=-159 (LC 10)
Max Uplift 1=-25 (LC 10), 8=-74 (LC 15), 9=-104 (LC 15), 12=-104 (LC 14), 13=-76 (LC 14)
Max Grav 1=129 (LC 26), 7=102 (LC 25), 8=316 (LC 2), 9=405 (LC 26), 10=427 (LC 28), 12=405 (LC 25), 13=316 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-171/141, 2-3=-129/116, 3-4=-130/146, 4-5=-130/139, 5-6=-88/75, 6-7=-139/93
BOT CHORD 1-13=-77/139, 12-13=-77/116, 10-12=-77/116, 9-10=-77/116, 8-9=-77/116, 7-8=-77/116
WEBS 4-10=-211/0, 3-12=-269/153, 2-13=-231/118, 5-9=-269/153, 6-8=-229/117

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 104 lb uplift at joint 12, 76 lb uplift at joint 13, 104 lb uplift at joint 9 and 74 lb uplift at joint 8.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

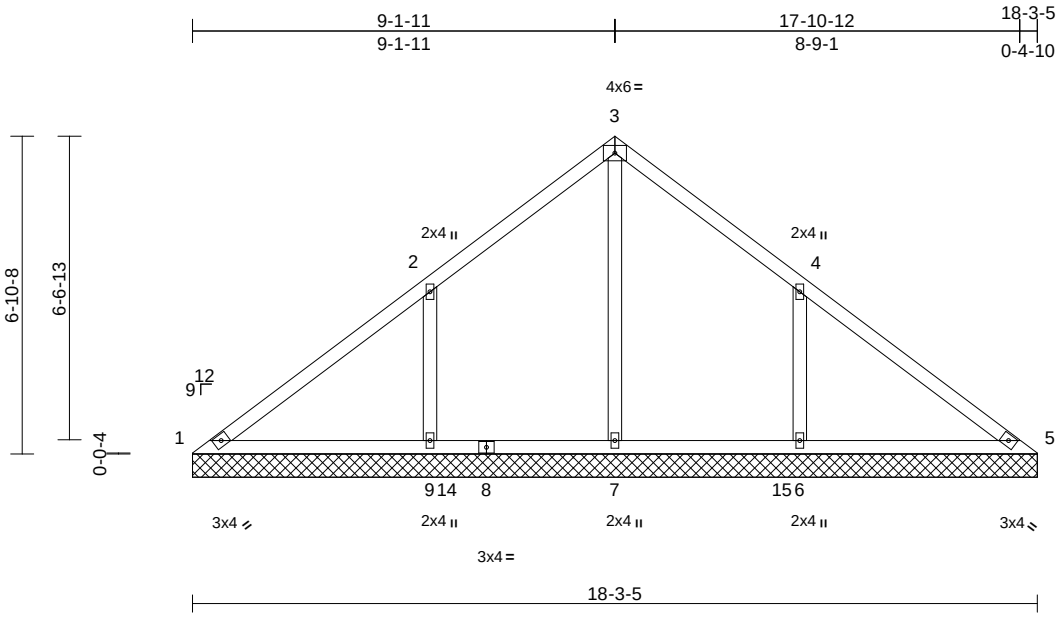
LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VG2	Valley	1	1	T33208564 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:04 Page: 1
ID:ruWpSyOQmzbwaENKk5NPglzs91o-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 79 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=18-3-5, 5=18-3-5, 6=18-3-5, 7=18-3-5, 9=18-3-5
Max Horiz 1=130 (LC 11)
Max Uplift 1=-7 (LC 10), 6=-121 (LC 15), 9=-123 (LC 14)
Max Grav 1=105 (LC 29), 5=105 (LC 30), 6=493 (LC 26), 7=517 (LC 25), 9=495 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-116/266, 2-3=-2/202, 3-4=0/202, 4-5=-111/240
BOT CHORD 1-9=-175/117, 7-9=-175/106, 6-7=-175/106, 5-6=-175/106
WEBS 3-7=-368/0, 2-9=-318/164, 4-6=-317/163

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 123 lb uplift at joint 9 and 121 lb uplift at joint 6.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

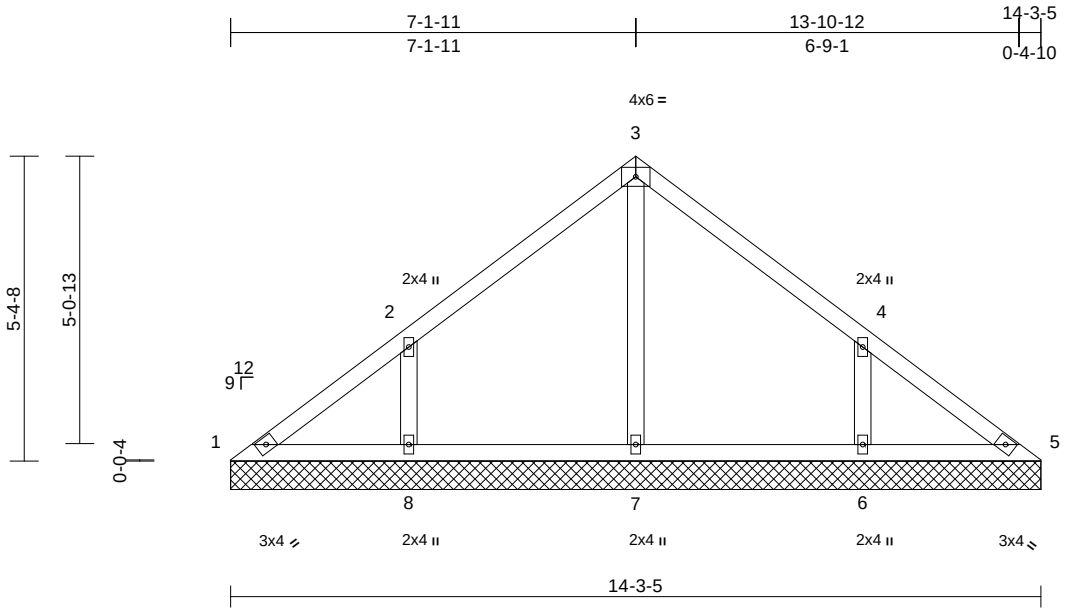
LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VG3	Valley	1	1	T33208565 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:04 Page: 1
ID:Yp7aZNWhP2sVmn8FJBYl4szs91e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 59 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=14-3-5, 5=14-3-5, 6=14-3-5, 7=14-3-5, 8=14-3-5
Max Horiz 1=-101 (LC 10)
Max Uplift 1=-9 (LC 10), 6=-91 (LC 15), 8=-93 (LC 14)
Max Grav 1=104 (LC 26), 5=93 (LC 2), 6=337 (LC 26), 7=306 (LC 2), 8=339 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-133/110, 2-3=-89/99, 3-4=-77/84, 4-5=-108/83
BOT CHORD 1-8=-52/110, 7-8=-52/67, 6-7=-52/67, 5-6=-52/84
WEBS 3-7=-229/0, 2-8=-250/132, 4-6=-249/131

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1, 93 lb uplift at joint 8 and 91 lb uplift at joint 6.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

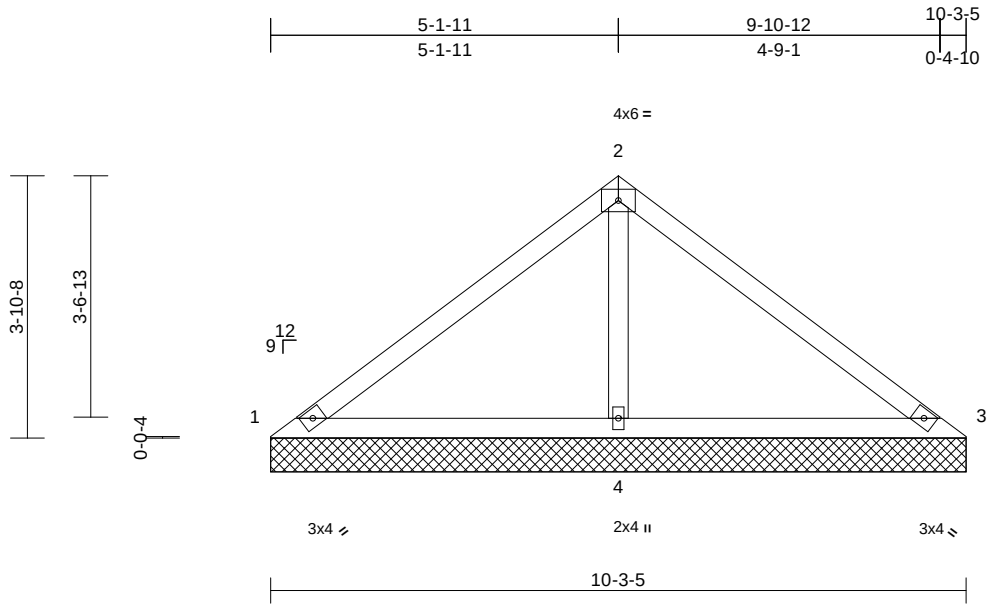
March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VG4	Valley	1	1	T33208566
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:05 ID:vmwTc5ZqEaUotY0D6k8wnvzs91Z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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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	1.00	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=10-3-5, 3=10-3-5, 4=10-3-5
Max Horiz 1=-71 (LC 10)
Max Uplift 1=-22 (LC 30), 3=-22 (LC 29), 4=-37 (LC 14)
Max Grav 1=80 (LC 29), 3=80 (LC 30), 4=742 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-67/318, 2-3=-67/318
BOT CHORD 1-4=-213/91, 3-4=-213/91
WEBS 2-4=-575/129

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 22 lb uplift at joint 3 and 37 lb uplift at joint 4.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

March 13,2024

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	WILLIAM ROBERT BAREFOOT - JAKE SMITH
3843084	VG5	Valley	1	1	T33208567 Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Mar 12 07:33:05
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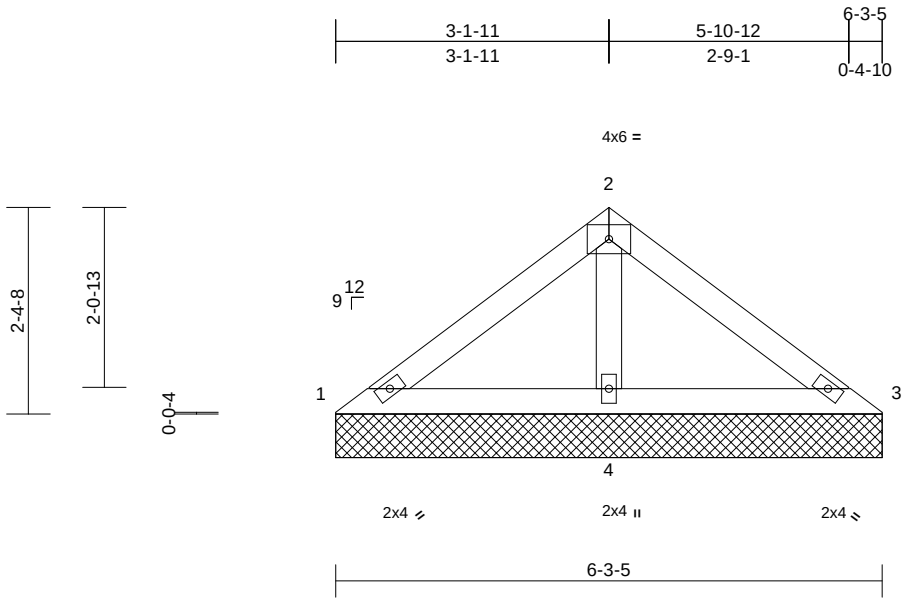

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	11.0/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 22 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=6-3-5, 3=6-3-5, 4=6-3-5
Max Horiz 1=-42 (LC 10)
Max Uplift 3=-3 (LC 15), 4=-17 (LC 14)
Max Grav 1=68 (LC 29), 3=68 (LC 30), 4=404 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/148, 2-3=-62/148
BOT CHORD 1-4=-114/60, 3-4=-114/60
WEBS 2-4=-273/61

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=11.0 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.00); Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
5) Roof design snow load has been reduced to account for slope.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 3 and 17 lb uplift at joint 4.
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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

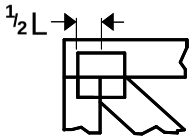
LOAD CASE(S) Standard

March 13,2024

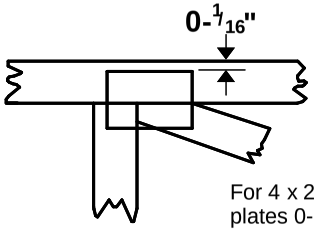
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

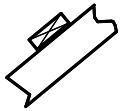
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

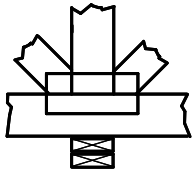
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

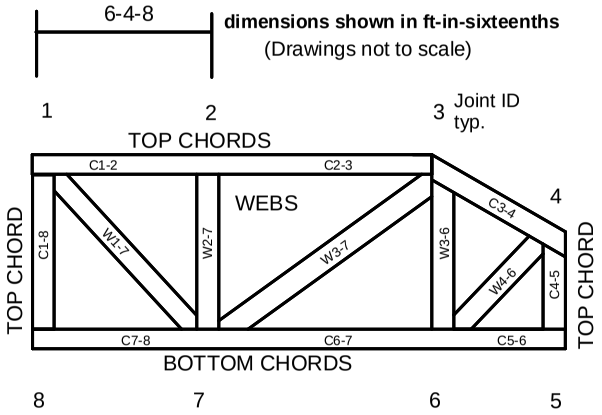


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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