ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 26 Providence Creek - Roof
Mattamy - Glades; Lot 26 Providence Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I58225352 thru I58225386

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

May 9,2023

Gilbert, Eric

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	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A01	Piggyback Base	6	1	I58225352 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:14 Page: 1
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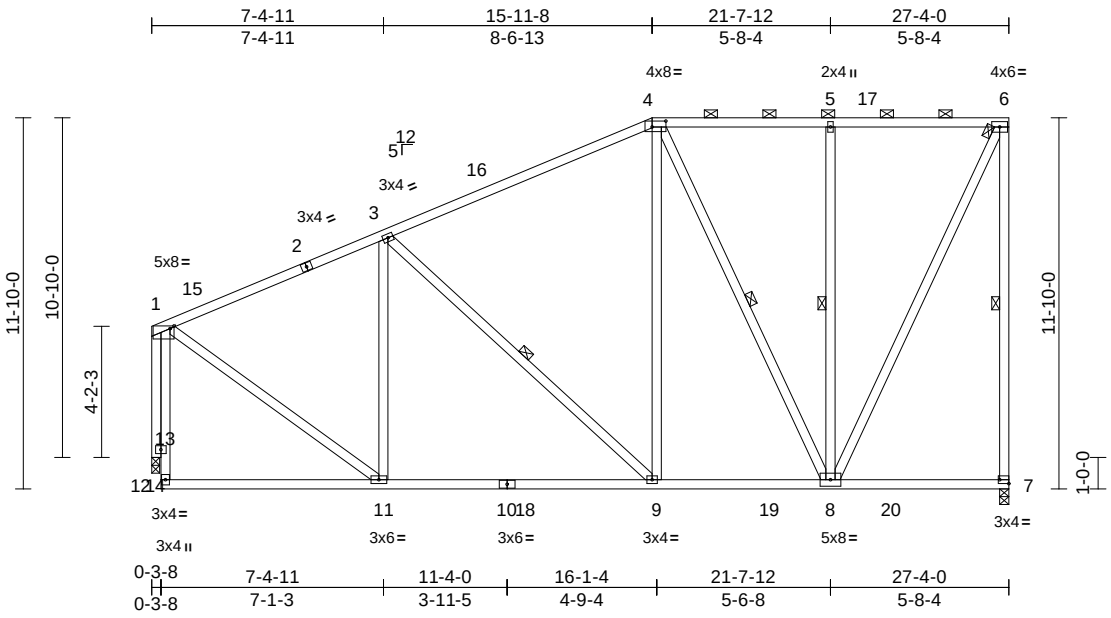

Scale = 1:73.5

Plate Offsets (X, Y): [1:0-1-8,0-1-0], [4:0-5-4,0-2-4], [7:Edge,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	0.94	Vert(LL)	-0.16	9-11	>999	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.29	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	-0.06	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 224 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 2-4:2x4 SP SS
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 6-7:2x4 SP No.1
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 9-10-14 oc bracing.
WEBS 1 Row at midpt 6-7, 4-8, 5-8, 3-9

REACTIONS (size) 7=0-3-8, 14=0-3-0
Max Horiz 14=323 (LC 15)
Max Uplift 7=-99 (LC 13), 14=-52 (LC 16)
Max Grav 7=1326 (LC 36), 14=1289 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1126/145, 3-4=-916/194, 4-5=-517/191, 5-6=-517/191, 6-7=-1242/205, 12-13=0/112, 1-13=0/112
BOT CHORD 11-12=-326/277, 9-11=-329/970, 8-9=-231/715, 7-8=-127/144
WEBS 4-9=-10/490, 4-8=-639/147, 5-8=-652/135, 6-8=-197/1139, 3-11=-460/143, 1-11=-69/1066, 3-9=-383/133, 1-14=-1293/112

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= varies (min. roof snow=15.8 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearings are assumed to be: Joint 14 SP No.3 crushing capacity of 565 psi, Joint 7 SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 7 and 52 lb uplift at joint 14.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-52, 4-6=-60, 7-12=-20

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Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A01G	Piggyback Base Supported Gable	1	1	I58225353 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:16 Page: 1
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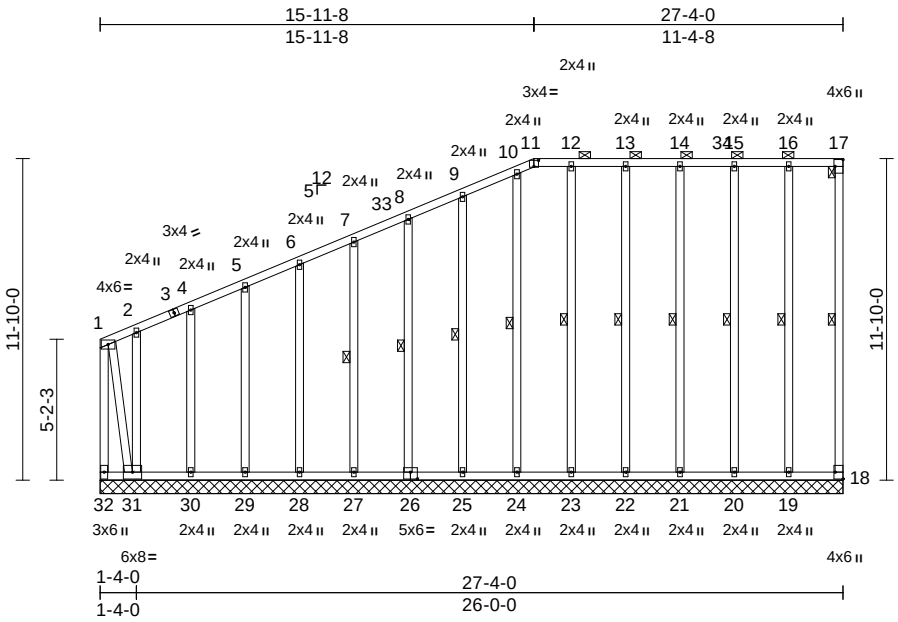

Scale = 1:84.8

Plate Offsets (X, Y): [11:0-2-0,0-2-11], [17:Edge,0-3-8], [18:Edge,0-3-8], [26:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horiz(TL)	-0.01	18	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 294 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 1-31:2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-17.
BOT CHORD Rigid ceiling directly applied or 9-1-8 oc bracing.
WEBS 1 Row at midpt 17-18, 16-19, 15-20, 14-21, 13-22, 12-23, 10-24, 9-25, 8-26, 7-27

REACTIONS (size) 18=27-4-0, 19=27-4-0, 20=27-4-0, 21=27-4-0, 22=27-4-0, 23=27-4-0, 24=27-4-0, 25=27-4-0, 26=27-4-0, 27=27-4-0, 28=27-4-0, 29=27-4-0, 30=27-4-0, 31=27-4-0, 32=27-4-0
Max Horiz 32=340 (LC 15)
Max Uplift 18=-19 (LC 13), 19=-25 (LC 12), 20=-25 (LC 13), 21=-17 (LC 12), 22=-14 (LC 12), 23=-23 (LC 13), 24=-27 (LC 13), 25=-28 (LC 16), 26=-25 (LC 16), 27=-21 (LC 16), 28=-24 (LC 16), 29=-19 (LC 16), 30=-37 (LC 16), 31=-1052 (LC 13)
Max Grav 18=92 (LC 34), 19=249 (LC 34), 20=240 (LC 34), 21=239 (LC 34), 22=241 (LC 34), 23=236 (LC 34), 24=195 (LC 35), 25=226 (LC 35), 26=222 (LC 35), 27=224 (LC 35), 28=223 (LC 35), 29=221 (LC 35), 30=234 (LC 35), 31=178 (LC 35), 32=1160 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-290/167, 2-4=-312/190, 4-5=-260/166, 5-6=-235/159, 6-7=-203/147, 7-8=-175/138, 8-9=-154/126, 9-10=-149/138, 10-11=-134/142, 11-12=-130/144, 12-13=-130/144, 13-14=-130/144, 14-15=-130/144, 15-16=-130/144, 16-17=-130/144, 17-18=-114/119, 1-32=-1691/1040
BOT CHORD 31-32=-400/295, 30-31=-130/144, 29-30=-130/144, 28-29=-130/144, 27-28=-130/144, 25-27=-131/144, 24-25=-131/144, 23-24=-131/144, 22-23=-131/144, 21-22=-131/144, 20-21=-131/144, 19-20=-131/144, 18-19=-131/144
WEBS 16-19=-207/98, 15-20=-201/54, 14-21=-199/39, 13-22=-201/43, 12-23=-196/51, 10-24=-154/78, 9-25=-188/61, 8-26=-182/62, 7-27=-183/54, 6-28=-183/59, 5-29=-181/52, 4-30=-191/111, 2-31=-130/52, 1-31=-1051/1674

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) interior 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) ** TCLL: ASCE 7-10; Pr=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=15.8 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) Provide adequate drainage to prevent water ponding.
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 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 18, 25 lb uplift at joint 19, 25 lb uplift at joint 20, 17 lb uplift at joint 21, 14 lb uplift at joint 22, 23 lb uplift at joint 23, 27 lb uplift at joint 24, 28 lb uplift at joint 25, 25 lb uplift at joint 26, 21 lb uplift at joint 27, 24 lb uplift at joint 28, 19 lb uplift at joint 29, 37 lb uplift at joint 30 and 1052 lb uplift at joint 31.
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.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
   Uniform Loads (lb/ft)
   Vert: 1-11=-52, 11-17=-60, 18-32=-20

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A02G	Piggyback Base Supported Gable	1	1	I58225354 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:17 Page: 1
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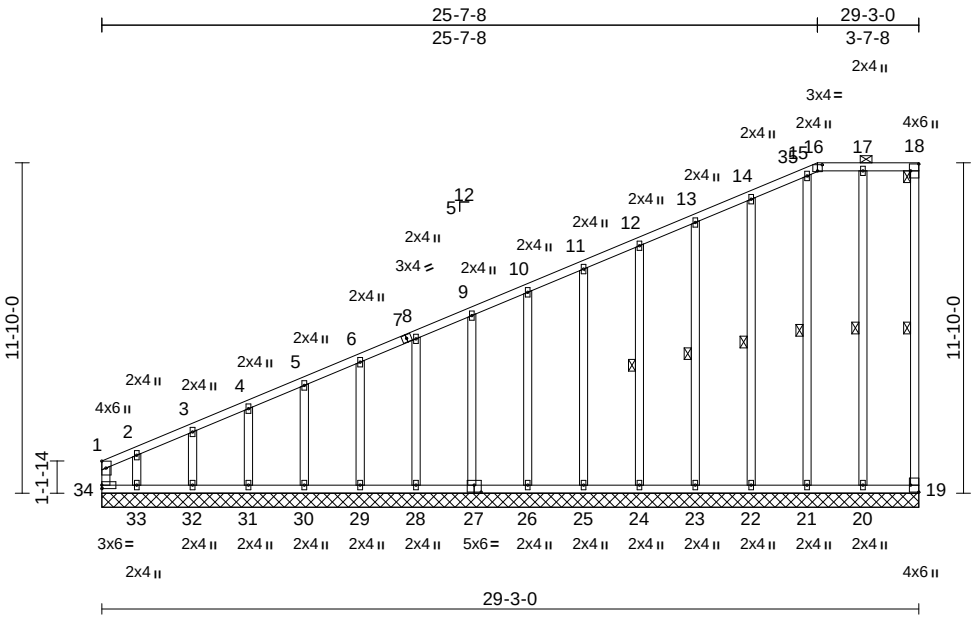

Plate Offsets (X, Y): [16:0-2-0,0-2-11], [18:Edge,0-3-8], [19:Edge,0-3-8], [27:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.33	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	-0.01	19	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 243 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 18-19:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 16-18.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 18-19, 17-20, 15-21, 14-22, 13-23, 12-24

REACTIONS (size) 19=29-3-0, 20=29-3-0, 21=29-3-0, 22=29-3-0, 23=29-3-0, 24=29-3-0, 25=29-3-0, 26=29-3-0, 27=29-3-0, 28=29-3-0, 29=29-3-0, 30=29-3-0, 31=29-3-0, 32=29-3-0, 33=29-3-0, 34=29-3-0
Max Horiz 34=370 (LC 13)
Max Uplift 19=-12 (LC 13), 20=-15 (LC 12), 21=-40 (LC 13), 22=-32 (LC 16), 23=-21 (LC 16), 24=-23 (LC 16), 25=-23 (LC 16), 26=-22 (LC 16), 27=-25 (LC 16), 28=-20 (LC 16), 29=-24 (LC 16), 30=-21 (LC 16), 31=-30 (LC 16), 33=-312 (LC 13)
Max Grav 19=93 (LC 34), 20=251 (LC 34), 21=181 (LC 35), 22=230 (LC 35), 23=222 (LC 35), 24=223 (LC 35), 25=223 (LC 35), 26=221 (LC 35), 27=226 (LC 35), 28=185 (LC 35), 29=160 (LC 2), 30=160 (LC 2), 31=159 (LC 2), 32=165 (LC 2), 33=137 (LC 2), 34=401 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-34=-376/182, 1-2=-543/277, 2-3=-434/226, 3-4=-412/219, 4-5=-380/208, 5-6=-351/198, 6-8=-320/187, 8-9=-291/177, 9-10=-260/167, 10-11=-231/157, 11-12=-200/146, 12-13=-170/136, 13-14=-156/125, 14-15=-147/140, 15-16=-137/146, 16-17=-129/143, 17-18=-129/143, 18-19=-118/121
BOT CHORD 33-34=-128/142, 32-33=-128/142, 31-32=-128/142, 30-31=-128/142, 29-30=-128/142, 28-29=-128/142, 26-28=-129/143, 25-26=-129/143, 24-25=-129/143, 23-24=-129/143, 22-23=-129/143, 21-22=-129/143, 20-21=-129/143, 19-20=-129/143
WEBS 17-20=-209/113, 15-21=-141/69, 14-22=-190/58, 13-23=-182/54, 12-24=-183/54, 11-25=-183/55, 10-26=-182/53, 9-27=-186/58, 8-28=-143/53, 6-29=-120/56, 5-30=-120/54, 4-31=-119/59, 3-32=-124/45, 2-33=-172/272

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= varies (min. roof snow=15.8 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) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 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.

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13) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 19, 15 lb uplift at joint 20, 40 lb uplift at joint 21, 32 lb uplift at joint 22, 21 lb uplift at joint 23, 23 lb uplift at joint 24, 23 lb uplift at joint 25, 22 lb uplift at joint 26, 25 lb uplift at joint 27, 20 lb uplift at joint 28, 24 lb uplift at joint 29, 21 lb uplift at joint 30, 30 lb uplift at joint 31 and 312 lb uplift at joint 33.
15) 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.
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: 1-16=-52, 16-18=-60, 19-34=-20

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A03	Piggyback Base	3	1	I58225355 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:18 Page: 1
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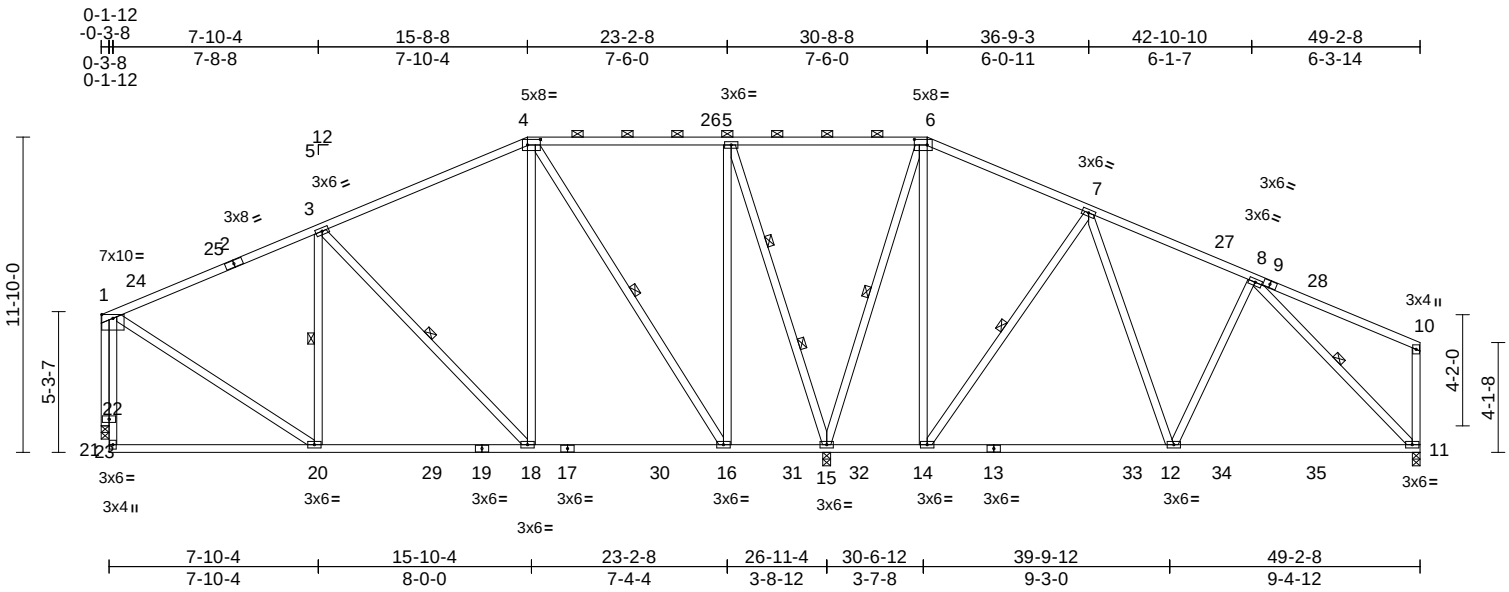


Scale = 1:86.5

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

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	0.95	Vert(LL)	-0.22	12-14	>999	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.35	12-14	>753	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 369 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 2-4:2x4 SP No.1, 4-6:2x4 SP SS
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 12-14,11-12.
WEBS 1 Row at midpt 3-20, 3-18, 4-16, 6-15, 8-11, 7-14
WEBS 2 Rows at 1/3 pts 5-15

REACTIONS (size) 11=0-3-8, 15=0-3-8, 23=0-3-8
Max Horiz 23=-85 (LC 12)
Max Uplift 11=-38 (LC 17), 15=-80 (LC 13), 23=-58 (LC 16)
Max Grav 11=920 (LC 45), 15=2395 (LC 45), 23=1164 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1022/155, 3-4=-747/199, 4-5=-274/182, 5-6=0/302, 6-7=-228/160, 7-8=-817/172, 8-10=-111/106, 21-22=0/135, 1-22=0/135, 10-11=-174/92
BOT CHORD 20-21=-25/116, 18-20=-48/857, 16-18=0/596, 15-16=0/300, 14-15=-25/173, 12-14=-1/539, 11-12=-65/684
WEBS 3-20=-324/129, 3-18=-495/120, 4-18=0/607, 4-16=-864/93, 5-16=0/941, 5-15=-1480/164, 6-15=-1236/142, 6-14=-46/917, 1-20=-55/904, 8-11=-940/60, 7-14=-818/170, 7-12=-8/422, 8-12=-112/145, 1-23=-1168/110

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=15.8 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) 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) Bearings are assumed to be: Joint 23 SP No.3 crushing capacity of 565 psi, Joint 15 SP No.2 crushing capacity of 565 psi, Joint 11 SP No.2 crushing capacity of 565 psi.
10) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 15, 38 lb uplift at joint 11 and 58 lb uplift at joint 23.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-52, 4-6=-60, 6-10=-52, 11-21=-20

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

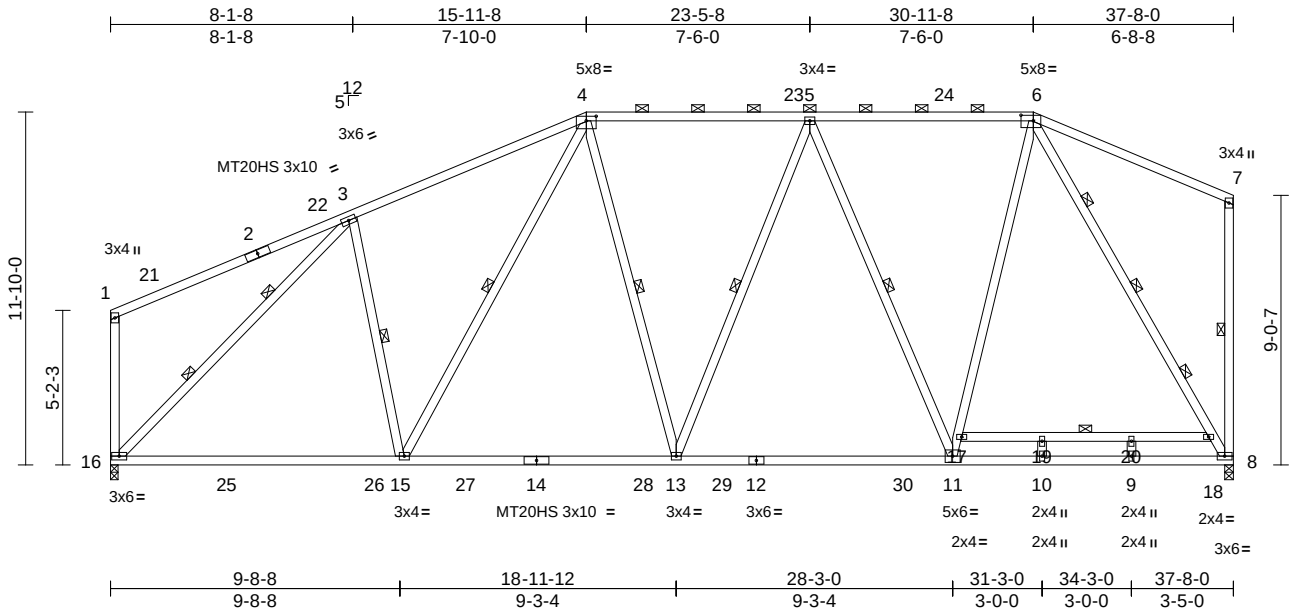
May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A04A	Piggyback Base	2	1	I58225356 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:19 Page: 1

ID:MvowjkNDjyp9d85TvOfzBpzrAd7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.3

Plate Offsets (X, Y): [4:0-4-0,0-1-13], [6:0-5-0,0-2-4]

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	0.81	Vert(LL)	-0.26	11-13	>999	240	MT20HS	187/143
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.44	15-16	>999	180	MT20	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 286 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP SS *Except* 6-7:2x4 SP No.1, 1-2:2x4 SP No.2

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3 *Except* 16-3,8-7,17-18:2x4 SP No.2, 8-6:2x4 SP SS

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-7 max.): 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 7-8, 3-15, 4-15, 4-13, 5-13, 5-11, 17-18

WEBS 2 Rows at 1/3 pts 3-16

WEBS 3 Rows at 1/4 pts 6-8

REACTIONS (size) 8=0-3-8, 16=0-3-0
Max Horiz 16=260 (LC 13)
Max Uplift 8=-86 (LC 13), 16=-26 (LC 16)
Max Grav 8=1882 (LC 37), 16=1793 (LC 44)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-152/138, 3-4=-1729/291, 4-5=-1508/270, 5-6=-1182/247, 6-7=-175/182, 1-16=-266/117, 7-8=-302/140

BOT CHORD 15-16=-356/1441, 13-15=-275/1424, 11-13=-247/1490, 10-11=-176/1012, 9-10=-176/1012, 8-9=-176/1012

WEBS 3-16=-2009/201, 6-18=-1784/229, 8-18=-1946/221, 3-15=-14/576, 4-15=-231/260, 4-13=-70/386, 5-13=-146/345, 5-11=-803/165, 11-17=-45/1147, 6-17=-50/1239, 17-19=-118/7, 19-20=-118/7, 18-20=-118/7, 10-19=-132/15, 9-20=-28/47

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=15.8 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 16 and 86 lb uplift at joint 8.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-52, 4-6=-60, 6-7=-52, 8-16=-20, 17-19=-40, 19-20=-40, 18-20=-40

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A04G	Monopitch Supported Gable	1	1	I58225357 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:20 Page: 1
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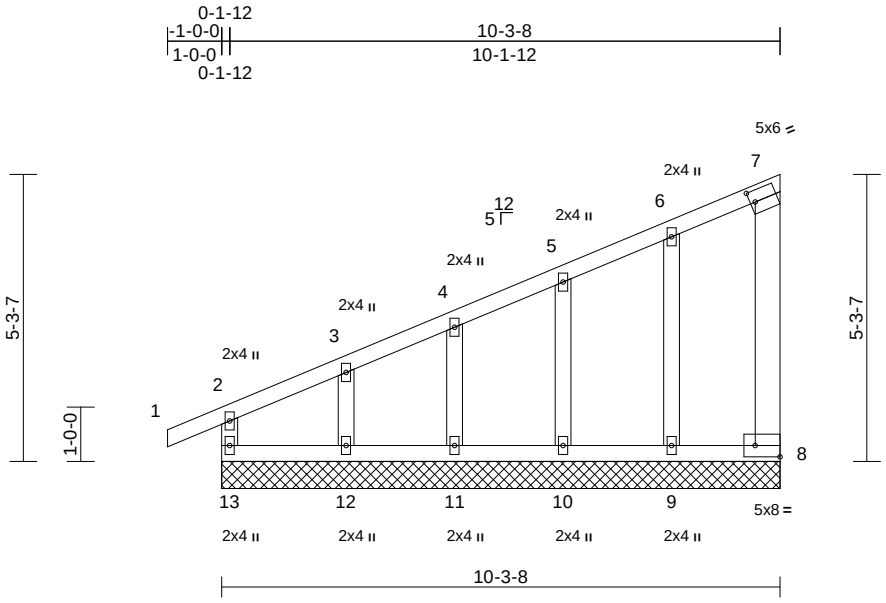

Scale = 1:42.5

Plate Offsets (X, Y): [7:0-1-1,0-2-8], [8:Edge,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	0.82	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except* 2-13:2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 8-9.

REACTIONS (size) 8=10-3-8, 9=10-3-8, 10=10-3-8, 11=10-3-8, 12=10-3-8, 13=10-3-8
Max Horiz 13=157 (LC 15)
Max Uplift 8=-374 (LC 13), 10=-113 (LC 16), 11=-3 (LC 16), 12=-23 (LC 16), 13=-40 (LC 12)
Max Grav 8=63 (LC 23), 9=499 (LC 13), 10=163 (LC 23), 11=160 (LC 2), 12=160 (LC 2), 13=187 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-29/56, 3-4=-33/87, 4-5=-42/119, 5-6=-70/174, 6-7=-63/114, 7-8=-172/303
BOT CHORD 12-13=-263/159, 11-12=-263/159, 10-11=-263/159, 9-10=-263/159, 8-9=-263/159
WEBS 6-9=-351/130, 5-10=-124/149, 4-11=-122/61, 3-12=-112/69, 2-13=-170/106

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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=15.8 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) 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) 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 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 13, 374 lb uplift at joint 8, 113 lb uplift at joint 10, 3 lb uplift at joint 11 and 23 lb uplift at joint 12.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A05A	Piggyback Base	3	1	I58225358 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:20
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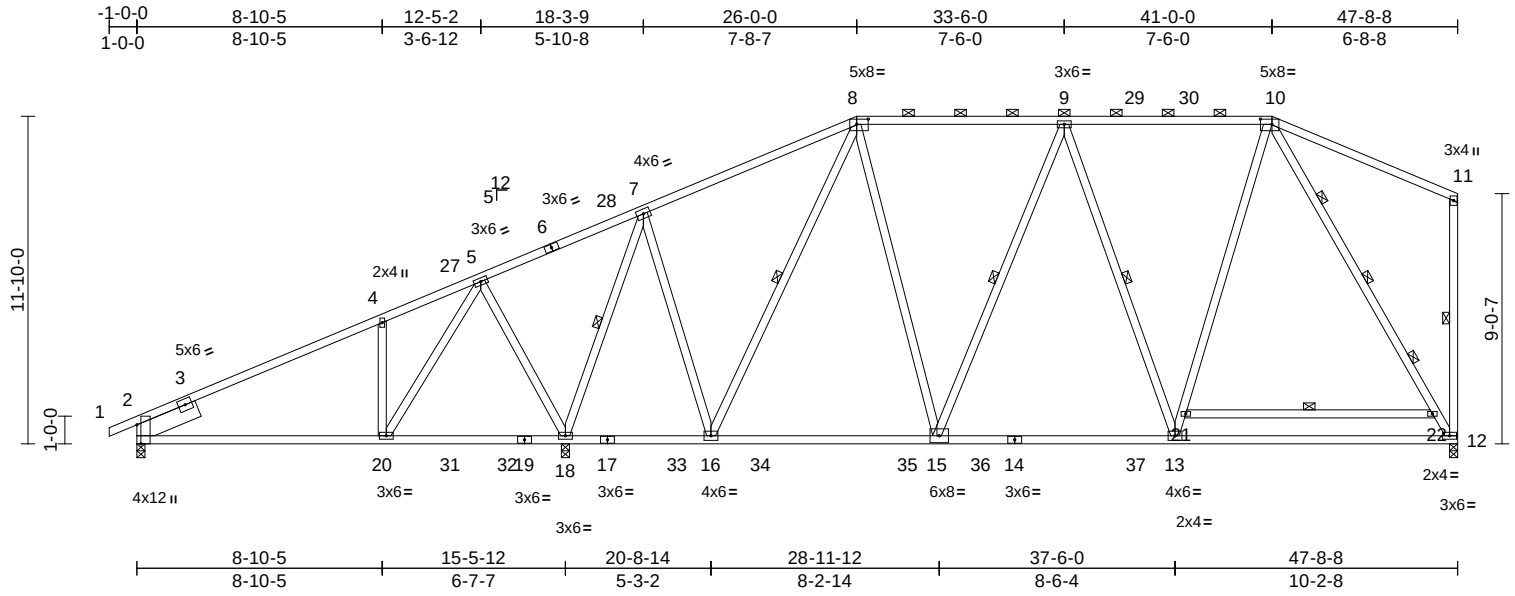

Scale = 1:83.2

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

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	0.93	Vert(LL)	-0.26	12-13	>999	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.52	12-13	>743	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.06	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 340 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1 *Except* 8-10:2x4 SP SS, 1-6:2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 14-12:2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 12-10:2x4 SP No.1, 21-22:2x4 SP SS
SLIDER	Left 2x8 SP DSS -- 2-5-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-10 max.): 8-10.	
BOT CHORD	Rigid ceiling directly applied or 8-8-13 oc bracing.	
WEBS	1 Row at midpt	11-12, 21-22, 9-13, 8-16, 9-15, 7-18
WEBS	3 Rows at 1/4 pts	10-12

REACTIONS (size) 2=0-3-8, 12=0-3-8, 18=0-3-8
Max Horiz 2=279 (LC 15)
Max Uplift 2=-90 (LC 16), 12=-89 (LC 13)
Max Grav 2=748 (LC 54), 12=1706 (LC 38), 18=2125 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/38, 2-4=-820/214, 4-5=-883/300, 5-7=-203/221, 7-8=-916/326, 8-9=-1136/294, 9-10=-1065/262, 10-11=-171/181, 11-12=-298/139
BOT CHORD	2-20=-517/757, 18-20=-350/405, 16-18=-311/576, 15-16=-256/997, 13-15=-232/1251, 12-13=-181/921
WEBS	13-21=-19/804, 10-21=-44/995, 10-22=-1553/225, 12-22=-1785/251, 21-22=-146/16, 9-13=-568/161, 8-16=-705/1, 9-15=-363/83, 8-15=0/615, 4-20=-399/191, 5-20=-134/680, 5-18=-619/150, 7-18=-1555/95, 7-16=0/925

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=15.8 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, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 18 SP No.2 crushing capacity of 565 psi, Joint 12 SP No.1 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2 and 89 lb uplift at joint 12.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) 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: 1-8=-52, 8-10=-60, 10-11=-52, 12-23=-20, 21-22=-40 (F)

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A06	Piggyback Base	5	1	I58225359 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:21 Page: 1
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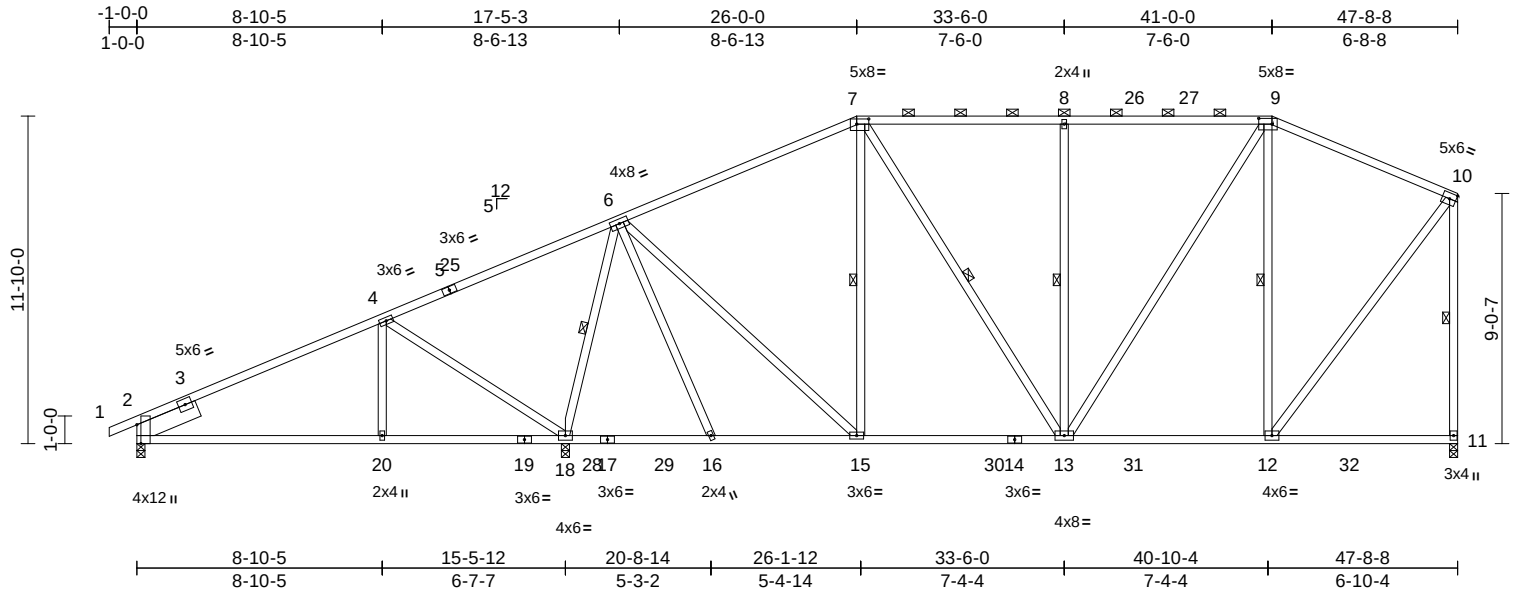

Scale = 1:83.2

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

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	0.99	Vert(LL)	0.07	20-23	>999	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.21	20-23	>894	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.04	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 332 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 5-7:2x4 SP SS, 1-5:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 11-10:2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 2-5-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-10-12 oc bracing: 2-20
9-2-7 oc bracing: 18-20.
WEBS 1 Row at midpt 6-18, 7-15, 7-13, 8-13, 9-12, 10-11

REACTIONS (size) 2=0-3-8, 11=0-3-8, 18=0-3-8
Max Horiz 2=279 (LC 15)
Max Uplift 2=-84 (LC 16), 11=-64 (LC 13), 18=-46 (LC 16)
Max Grav 2=711 (LC 54), 11=1470 (LC 44), 18=2094 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-4=-759/203, 4-6=-183/192, 6-7=-1057/278, 7-8=-1150/282, 8-9=-1150/282, 9-10=-831/222, 10-11=-1344/208
BOT CHORD 2-20=-502/701, 18-20=-407/701, 16-18=-300/388, 15-16=-276/430, 13-15=-234/929, 12-13=-143/732, 11-12=-89/102
WEBS 4-20=0/323, 4-18=-750/169, 6-18=-1623/148, 6-16=0/210, 6-15=0/794, 7-15=-400/67, 7-13=-18/417, 8-13=-869/155, 9-13=-121/795, 9-12=-792/216, 10-12=-145/1208

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=15.8 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, with BCDL = 10.0psf.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2, 46 lb uplift at joint 18 and 64 lb uplift at joint 11.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-7=-52, 7-9=-60, 9-10=-52, 11-21=-20

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A06G	Piggyback Base Supported Gable	1	1	I58225360 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:22 Page: 1
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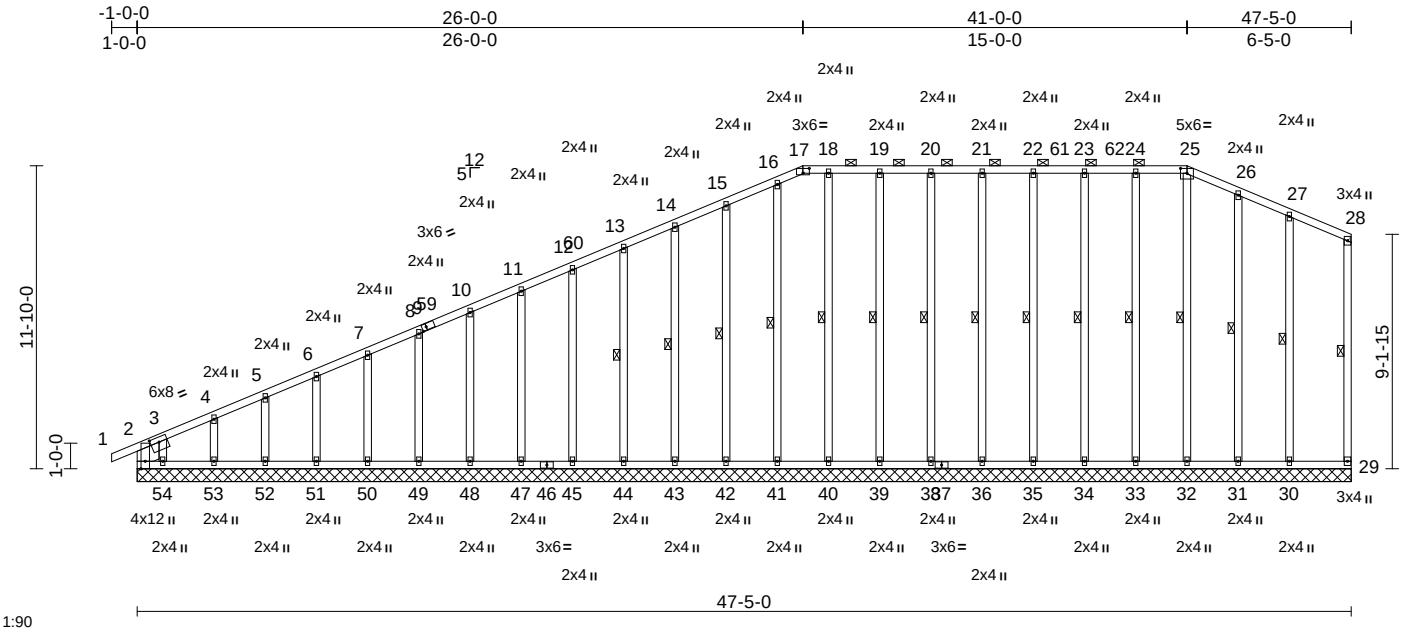

Scale = 1:90

Plate Offsets (X, Y): [3:0-4-0,0-2-4], [9:0-2-1,0-1-8], [17:0-3-0,0-2-4], [25:0-3-0,0-2-4]

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	0.62	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	-0.01	29	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 440 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
SLIDER Left 2x8 SP DSS -- 1-0-15

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.): 17-25.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 28-29, 25-32, 24-33, 23-34, 22-35, 21-36, 20-38, 19-39, 18-40, 16-41, 15-42, 14-43, 13-44, 26-31, 27-30

REACTIONS (size) 2=47-5-0, 29=47-5-0, 30=47-5-0, 31=47-5-0, 32=47-5-0, 33=47-5-0, 34=47-5-0, 35=47-5-0, 36=47-5-0, 38=47-5-0, 39=47-5-0, 40=47-5-0, 41=47-5-0, 42=47-5-0, 43=47-5-0, 44=47-5-0, 45=47-5-0, 47=47-5-0, 48=47-5-0, 49=47-5-0, 50=47-5-0, 51=47-5-0, 52=47-5-0, 53=47-5-0, 54=47-5-0, 55=47-5-0
Max Horiz 2=283 (LC 15), 55=283 (LC 15)
Max Uplift 29=-26 (LC 12), 30=-22 (LC 17), 31=-29 (LC 17), 32=-2 (LC 13), 33=-15 (LC 13), 34=-14 (LC 12), 35=-13 (LC 13), 36=-13 (LC 12), 38=-12 (LC 13), 39=-18 (LC 12), 40=-11 (LC 13), 42=-29 (LC 16), 43=-22 (LC 16), 44=-23 (LC 16), 45=-23 (LC 16), 47=-23 (LC 16), 48=-23 (LC 16), 49=-23 (LC 16), 50=-23 (LC 16), 51=-23 (LC 16), 52=-22 (LC 16), 53=-25 (LC 16), 54=-167 (LC 16)
Max Grav 2=235 (LC 13), 29=108 (LC 39), 30=263 (LC 39), 31=225 (LC 39), 32=159 (LC 38), 33=252 (LC 38), 34=239 (LC 38), 35=240 (LC 38), 36=240 (LC 38), 38=239 (LC 38), 39=243 (LC 38), 40=224 (LC 38), 41=209 (LC 39), 42=226 (LC 39), 43=222 (LC 39), 44=223 (LC 39), 45=223 (LC 39), 47=223 (LC 39), 48=222 (LC 39), 49=160 (LC 39), 50=160 (LC 2), 51=160 (LC 54), 52=159 (LC 2), 53=163 (LC 54), 54=109 (LC 54), 55=235 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-3=-176/101, 3-4=-334/174, 4-5=-301/162, 5-6=-272/151, 6-7=-242/141, 7-8=-212/130, 8-10=-181/120, 10-11=-151/109, 11-12=-123/99, 12-13=-113/93, 13-14=-112/123, 14-15=-122/153, 15-16=-135/186, 16-17=-133/193, 17-18=-125/193, 18-19=-125/193, 19-20=-125/193, 20-21=-125/193, 21-22=-125/193, 22-23=-125/193, 23-24=-125/193, 24-25=-125/193, 25-26=-139/199, 26-27=-124/165, 27-28=-131/153, 28-29=-120/117

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Continued on page 2

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BOT CHORD 2-54=-95/106, 53-54=-95/106, 52-53=-95/106, 51-52=-95/106, 50-51=-95/106, 49-50=-95/106, 48-49=-95/106, 47-48=-95/106, 45-47=-95/106, 44-45=-95/106, 43-44=-95/106, 42-43=-95/106, 41-42=-95/106, 40-41=-95/106, 39-40=-95/106, 38-39=-95/106, 36-38=-95/106, 35-36=-95/106, 34-35=-95/106, 33-34=-95/106, 32-33=-95/106, 31-32=-95/106, 30-31=-95/106, 29-30=-95/106

WEBS 25-32=-118/31, 24-33=-212/39, 23-34=-199/40, 22-35=-200/38, 21-36=-200/38, 20-38=-199/38, 19-39=-203/46, 18-40=-184/35, 16-41=-169/45, 15-42=-186/64, 14-43=-182/54, 13-44=-183/54, 12-45=-183/54, 11-47=-183/54, 10-48=-182/54, 8-49=-120/54, 7-50=-120/54, 6-51=-120/55, 5-52=-119/53, 4-53=-123/60, 3-54=-138/243, 26-31=-187/63, 27-30=-215/95

NOTES

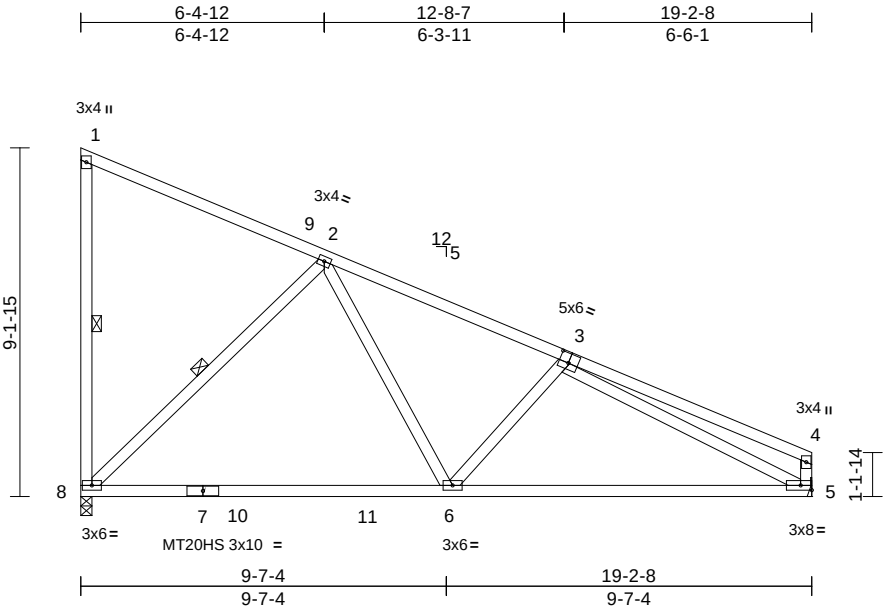
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and 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=15.8 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Provide adequate drainage to prevent water ponding.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 29, 2 lb uplift at joint 32, 15 lb uplift at joint 33, 14 lb uplift at joint 34, 13 lb uplift at joint 35, 13 lb uplift at joint 36, 12 lb uplift at joint 38, 18 lb uplift at joint 39, 11 lb uplift at joint 40, 29 lb uplift at joint 42, 22 lb uplift at joint 43, 23 lb uplift at joint 44, 23 lb uplift at joint 45, 23 lb uplift at joint 47, 23 lb uplift at joint 48, 23 lb uplift at joint 49, 23 lb uplift at joint 50, 23 lb uplift at joint 51, 22 lb uplift at joint 52, 25 lb uplift at joint 53, 167 lb uplift at joint 54, 29 lb uplift at joint 31 and 22 lb uplift at joint 30.
15) 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.
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: 1-17=-52, 17-25=-60, 25-28=-52, 29-55=-20

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A07	Roof Special	10	1	I58225361 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:24 Page: 1
ID:6xt2FPT38iCwxRVi6F6G1gzqBAT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:60.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.30	6-8	>749	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.51	6-8	>448	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 113 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 1-8, 2-8

REACTIONS (size) 5= Mechanical, 8=0-3-8
Max Horiz 8=-281 (LC 12)
Max Uplift 5=-28 (LC 17), 8=-90 (LC 17)
Max Grav 5=757 (LC 2), 8=826 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-220/89, 1-2=-166/101, 2-4=-898/131, 4-5=-252/80
BOT CHORD 6-8=0/571, 5-6=-102/947
WEBS 3-5=-870/110, 2-8=-747/199, 2-6=-1/544, 3-6=-275/186

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=15.8 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) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearings are assumed to be: Joint 8 SP No.2 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 90 lb uplift at joint 8 and 28 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

May 9,2023

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	A07G	Roof Special Supported Gable	1	1	I58225362 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:24 Page: 1
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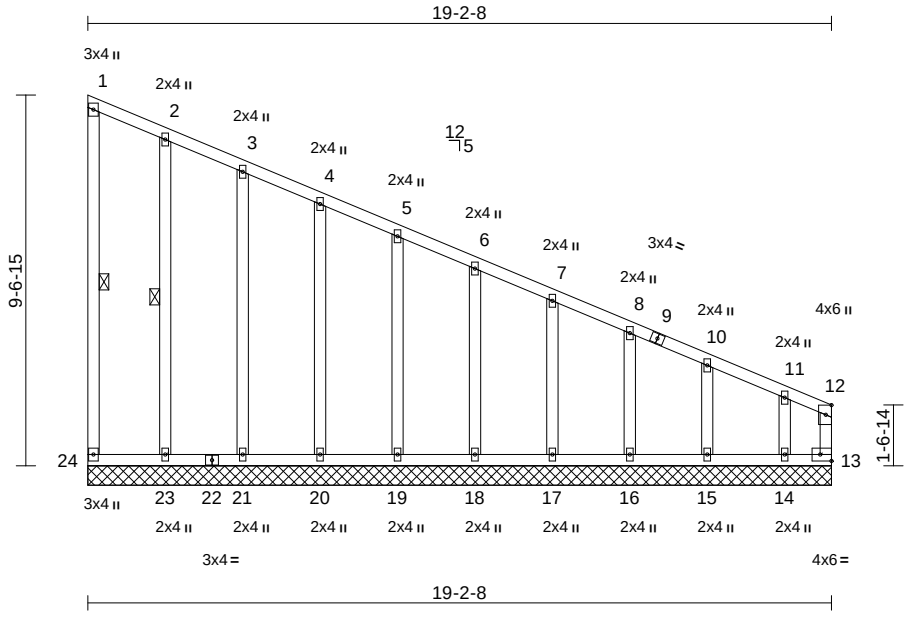

Scale = 1:59.5

Plate Offsets (X, Y): [13:Edge,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	0.70	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.43	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 140 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-24, 2-23

REACTIONS (size) 13=19-2-8, 14=19-2-8, 15=19-2-8, 16=19-2-8, 17=19-2-8, 18=19-2-8, 19=19-2-8, 20=19-2-8, 21=19-2-8, 23=19-2-8, 24=19-2-8
Max Horiz 24=-264 (LC 12)
Max Uplift 14=-335 (LC 12), 16=-30 (LC 17), 17=-21 (LC 17), 18=-24 (LC 17), 19=-22 (LC 17), 20=-24 (LC 17), 21=-21 (LC 17), 23=-20 (LC 17), 24=-27 (LC 12)
Max Grav 13=389 (LC 12), 14=137 (LC 2), 15=165 (LC 2), 16=159 (LC 2), 17=160 (LC 2), 18=160 (LC 2), 19=160 (LC 2), 20=175 (LC 23), 21=208 (LC 23), 23=215 (LC 23), 24=79 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-63/42, 1-2=-99/96, 2-3=-123/112, 3-4=-151/119, 4-5=-181/130, 5-6=-211/140, 6-7=-241/151, 7-8=-271/161, 8-10=-303/172, 10-11=-325/179, 11-12=-448/239, 12-13=-371/190
BOT CHORD 23-24=-203/366, 21-23=-203/366, 20-21=-203/366, 19-20=-203/366, 18-19=-203/366, 17-18=-203/366, 16-17=-203/366, 15-16=-203/366, 14-15=-203/366, 13-14=-203/366
WEBS 2-23=-172/97, 3-21=-169/69, 4-20=-134/55, 5-19=-120/55, 6-18=-120/55, 7-17=-120/54, 8-16=-119/59, 10-15=-124/47, 11-14=-197/307

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) interior 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=15.8 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) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 24, 20 lb uplift at joint 23, 21 lb uplift at joint 21, 24 lb uplift at joint 20, 22 lb uplift at joint 19, 24 lb uplift at joint 18, 21 lb uplift at joint 17, 30 lb uplift at joint 16 and 335 lb uplift at joint 14.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	B01G	Common Supported Gable	1	1	I58225363 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:25 Page: 1
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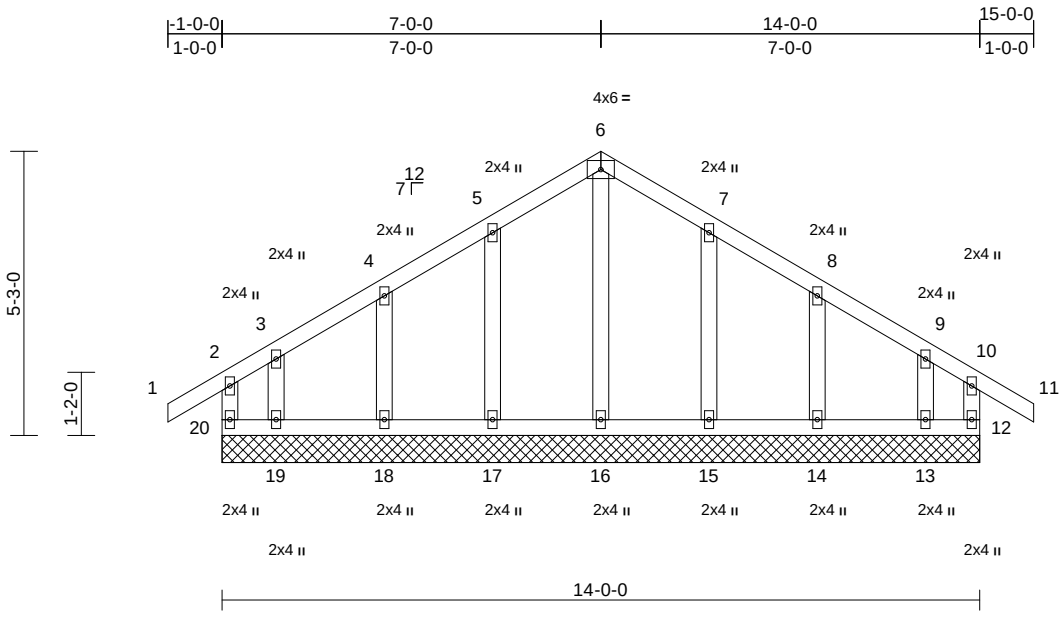


Scale = 1:42.6

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 79 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 (size) 12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 16=14-0-0, 17=14-0-0, 18=14-0-0, 19=14-0-0, 20=14-0-0
Max Horiz 20=117 (LC 15)
Max Uplift 12=-57 (LC 13), 13=-57 (LC 17), 14=-32 (LC 17), 15=-34 (LC 17), 17=-35 (LC 16), 18=-32 (LC 16), 19=-70 (LC 13), 20=-75 (LC 12)
Max Grav 12=164 (LC 22), 13=140 (LC 31), 14=166 (LC 35), 15=169 (LC 31), 16=161 (LC 33), 17=170 (LC 30), 18=166 (LC 34), 19=151 (LC 30), 20=164 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-20=-162/64, 1-2=0/58, 2-3=-69/71, 3-4=-46/64, 4-5=-65/86, 5-6=-98/125, 6-7=-98/125, 7-8=-65/86, 8-9=-36/61, 9-10=-52/57, 10-11=0/58, 10-12=-162/61
BOT CHORD 19-20=-59/55, 18-19=-59/55, 17-18=-59/55, 16-17=-59/55, 15-16=-59/55, 14-15=-59/55, 13-14=-59/55, 12-13=-59/55
WEBS 6-16=-121/5, 5-17=-129/58, 4-18=-124/59, 3-19=-92/58, 7-15=-129/58, 8-14=-125/59, 9-13=-87/56

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=13.2 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 20, 57 lb uplift at joint 12, 35 lb uplift at joint 17, 32 lb uplift at joint 18, 70 lb uplift at joint 19, 34 lb uplift at joint 15, 32 lb uplift at joint 14 and 57 lb uplift at joint 13.
15) 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.

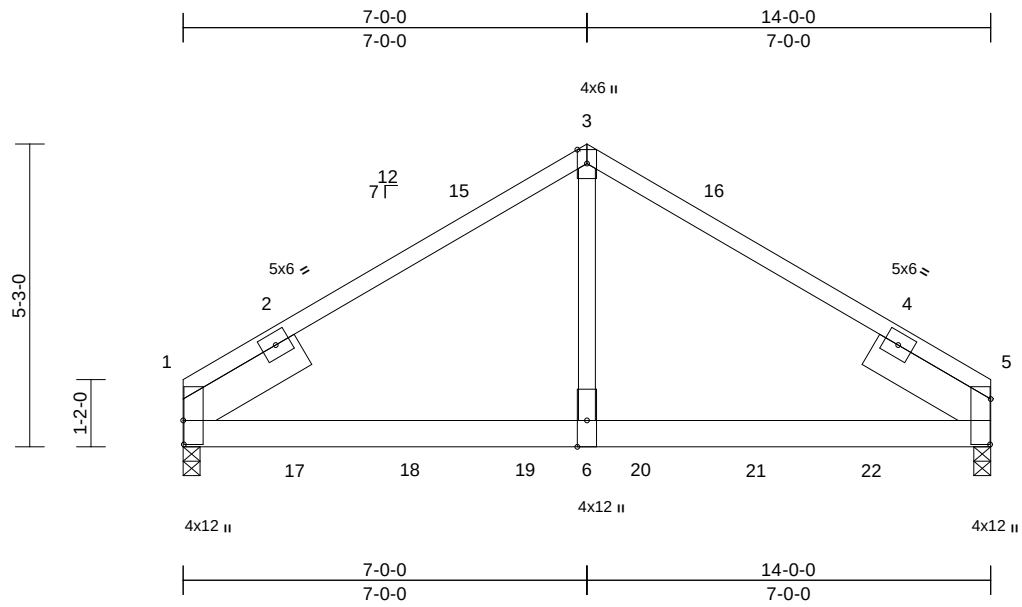
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	B01GR	Common Girder	1	3	I58225364 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:25 Page: 1
ID:74kiTg68zguFMOimBNNwGmzIbG?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.9

Plate Offsets (X, Y): [1:0-5-0,0-0-2], [5:0-9-7,0-0-2]

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	0.39	Vert(LL)	-0.06	6-9	>999	240	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.10	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 236 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP DSS -- 2-5-0, Right 2x8 SP DSS -- 2-5-0

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=79 (LC 11)
Max Uplift 1=-215 (LC 12), 5=-212 (LC 13)
Max Grav 1=4205 (LC 1), 5=4140 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-4584/283, 3-5=-4585/283
BOT CHORD 1-6=-188/3895, 5-6=-188/3895
WEBS 3-6=-192/4352

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-8-0 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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP DSS crushing capacity of 660 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 1 and 212 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) 1236 lb down and 68 lb up at 1-11-4, 1236 lb down and 68 lb up at 3-11-4, 1236 lb down and 68 lb up at 5-11-4, 1236 lb down and 68 lb up at 7-11-4, and 1236 lb down and 68 lb up at 9-11-4, and 1236 lb down and 68 lb up at 11-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

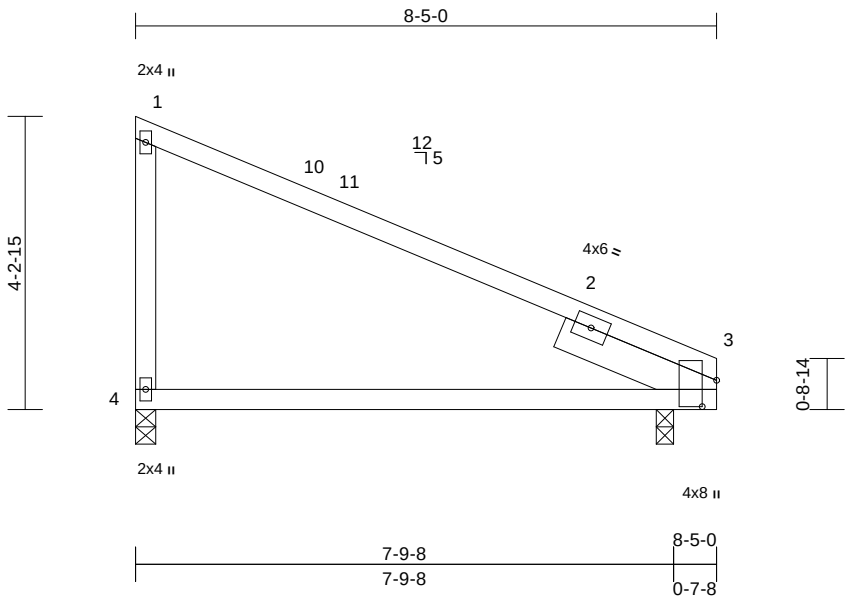
LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-46, 3-5=-46, 7-11=-20
Concentrated Loads (lb)
Vert: 17=-1236 (B), 18=-1236 (B), 19=-1236 (B), 20=-1236 (B), 21=-1236 (B), 22=-1236 (B)

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	C01	Roof Special	2	1	I58225365 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:25 Page: 1
ID:6xt2FPT38iCwxRVi6F6G1gzqBAT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:33.4

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

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	0.98	Vert(LL)	-0.13	4-9	>747	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.32	4-9	>308	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.08	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x6 SP No.2 -- 2-5-0

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

REACTIONS (size) 3=0-3-0, 4=0-3-8
Max Horiz 4=-109 (LC 14)
Max Uplift 3=-11 (LC 17), 4=-20 (LC 17)
Max Grav 3=364 (LC 2), 4=301 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-210/137, 1-3=-414/365
BOT CHORD 3-4=-91/177

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) interior 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=15.8 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 4 and 11 lb uplift at joint 3.
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.

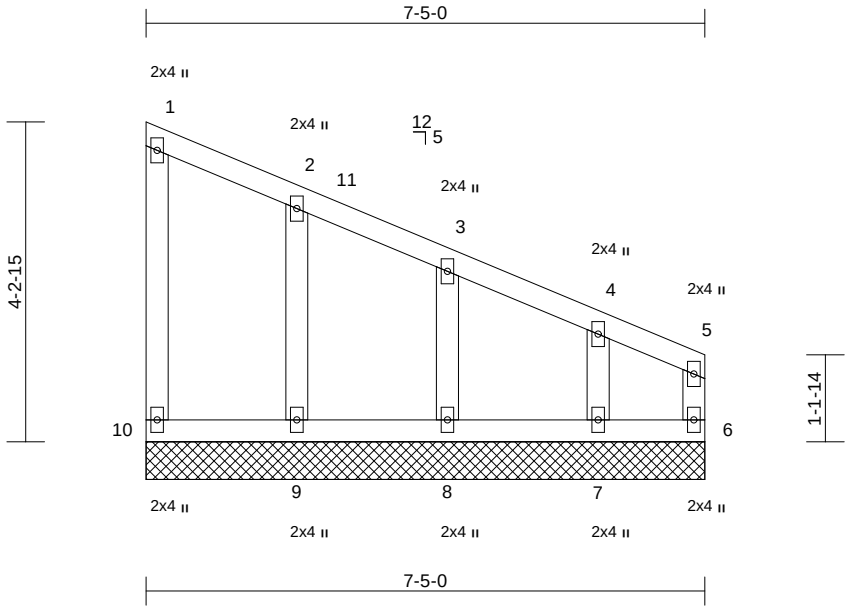
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	C01G	Roof Special Supported Gable	1	1	I58225366 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:26 Page: 1
ID:JIMJNw4xWmIQDUR1CvTgF0zqB76-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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 39 lb	FT = 20%

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

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

REACTIONS (size) 6=7-5-0, 7=7-5-0, 8=7-5-0, 9=7-5-0, 10=7-5-0
Max Horiz 10=-110 (LC 12)
Max Uplift 7=-80 (LC 17), 8=-16 (LC 17), 9=-21 (LC 17), 10=-12 (LC 12)
Max Grav 6=102 (LC 12), 7=144 (LC 2), 8=163 (LC 2), 9=169 (LC 23), 10=66 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-50/40, 1-2=-57/48, 2-3=-94/69, 3-4=-128/80, 4-5=-190/108, 5-6=-119/57
BOT CHORD 9-10=-107/184, 8-9=-107/184, 7-8=-107/184, 6-7=-107/184
WEBS 2-9=-128/83, 3-8=-122/77, 4-7=-112/146

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) interior 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=15.8 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) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 10, 21 lb uplift at joint 9, 16 lb uplift at joint 8 and 80 lb uplift at joint 7.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	D01	Common	1	1	I58225367 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:26 Page: 1

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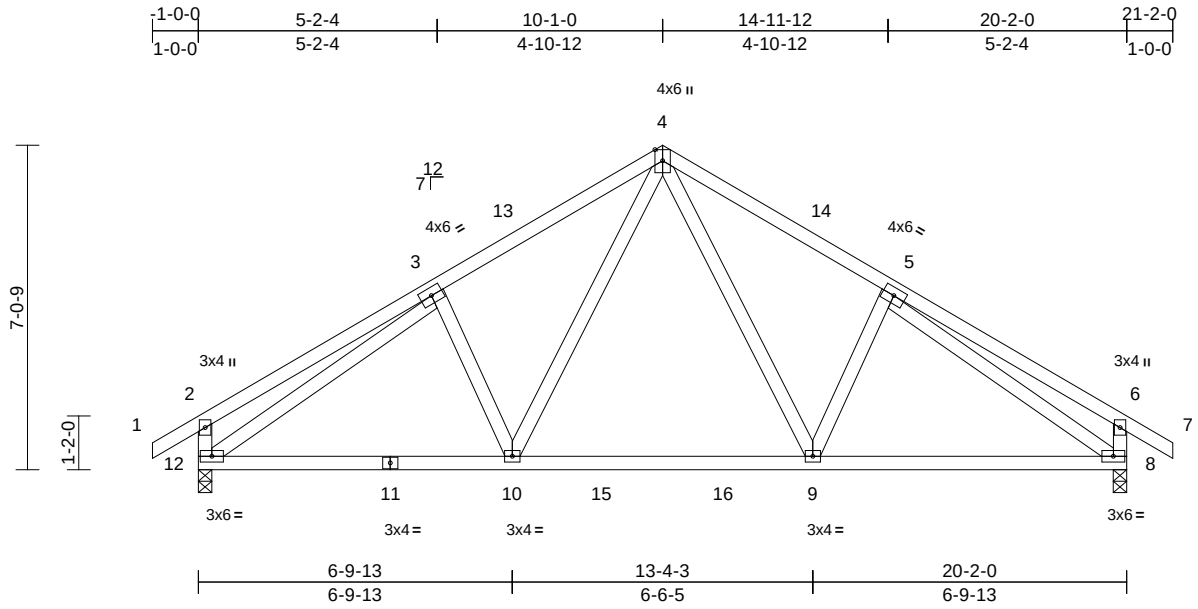

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.08	9-10	>999	240	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.11	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 121 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 12=0-3-8
Max Horiz 12=-152 (LC 14)
Max Uplift 8=-32 (LC 17), 12=-32 (LC 16)
Max Grav 8=864 (LC 2), 12=864 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/58, 2-3=-232/94, 3-4=-919/142, 4-5=-919/142, 5-6=-232/94, 6-7=0/58, 2-12=-294/103, 6-8=-294/103
BOT CHORD 10-12=-42/855, 9-10=0/616, 8-9=-16/791
WEBS 4-9=-51/379, 5-9=-189/142, 4-10=-50/379, 3-10=-189/142, 3-12=-827/26, 5-8=-827/26

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=13.2 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) 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) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 12 and 32 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

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	D01G	Common Supported Gable	1	1	I58225368 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:27 Page: 1
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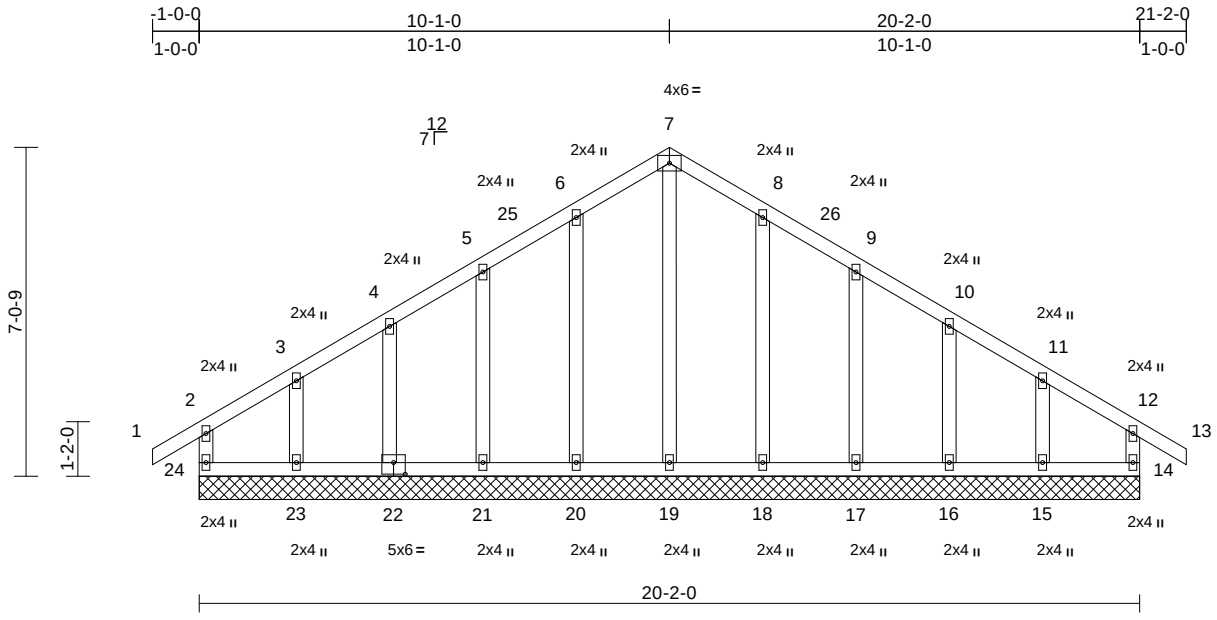

Scale = 1:49.4

Plate Offsets (X, Y): [22:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 123 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 (size) 14=20-2-0, 15=20-2-0, 16=20-2-0, 17=20-2-0, 18=20-2-0, 19=20-2-0, 20=20-2-0, 21=20-2-0, 22=20-2-0, 23=20-2-0, 24=20-2-0
Max Horiz 24=-152 (LC 14)
Max Uplift 14=-33 (LC 13), 15=-65 (LC 17), 16=-25 (LC 17), 17=-37 (LC 17), 18=-31 (LC 17), 20=-31 (LC 16), 21=-37 (LC 16), 22=-24 (LC 16), 23=-66 (LC 16), 24=-47 (LC 12)
Max Grav 14=157 (LC 22), 15=188 (LC 31), 16=163 (LC 35), 17=162 (LC 31), 18=189 (LC 24), 19=177 (LC 33), 20=189 (LC 23), 21=160 (LC 30), 22=162 (LC 34), 23=193 (LC 30), 24=170 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-141/64, 1-2=0/58, 2-3=-92/87, 3-4=-64/81, 4-5=-82/104, 5-6=-115/137, 6-7=-147/173, 7-8=-147/173, 8-9=-115/137, 9-10=-82/97, 10-11=-51/73, 11-12=-73/70, 12-13=0/58, 12-14=-140/60
BOT CHORD 23-24=-71/74, 21-23=-72/74, 20-21=-72/74, 19-20=-72/74, 18-19=-72/74, 17-18=-72/74, 16-17=-72/74, 15-16=-72/74, 14-15=-72/74
WEBS 7-19=-137/52, 6-20=-149/55, 5-21=-120/59, 4-22=-122/53, 3-23=-132/75, 8-18=-149/55, 9-17=-121/60, 10-16=-123/53, 11-15=-130/74

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=13.2 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 24, 33 lb uplift at joint 14, 31 lb uplift at joint 20, 37 lb uplift at joint 21, 24 lb uplift at joint 22, 66 lb uplift at joint 23, 31 lb uplift at joint 18, 37 lb uplift at joint 17, 25 lb uplift at joint 16 and 65 lb uplift at joint 15.
15) 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

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	D01GR	Common Girder	1	3	I58225369 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:27 Page: 1
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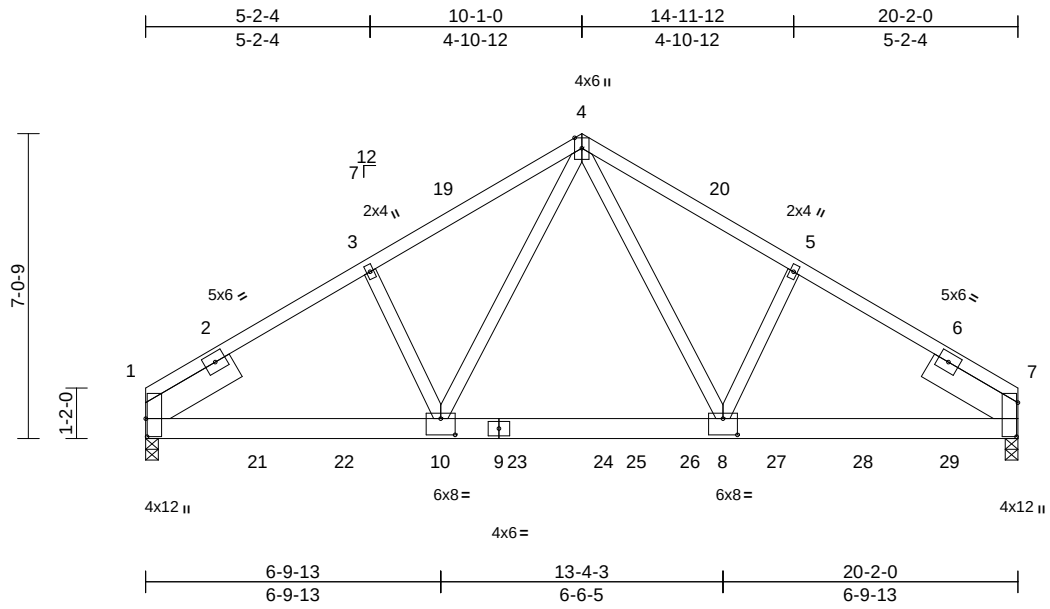

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Plate Offsets (X, Y): [1:0-5-0,0-0-6], [7:0-9-7,0-0-6], [8:0-4-0,0-4-8], [10:0-4-0,0-4-8]

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	0.61	Vert(LL)	-0.10	8-10	>999	240	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.19	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.04	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 388 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP DSS -- 2-5-0, Right 2x8 SP DSS -- 2-5-0

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

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-114 (LC 33)
Max Uplift 1=-224 (LC 12), 7=-208 (LC 13)
Max Grav 1=4665 (LC 2), 7=4319 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-5348/285, 3-4=-5231/328, 4-5=-5241/329, 5-7=-5358/286
BOT CHORD 1-10=-260/4494, 8-10=-129/3312, 7-8=-184/4503
WEBS 4-8=-185/2729, 5-8=-73/232, 4-10=-184/2709, 3-10=-73/232

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 1 and 208 lb uplift at joint 7.
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) 741 lb down and 38 lb up at 0-7-3, 737 lb down and 40 lb up at 2-7-2, 737 lb down and 40 lb up at 4-7-3, 737 lb down and 40 lb up at 6-10-3, 737 lb down and 40 lb up at 8-7-2, 737 lb down and 40 lb up at 10-7-3, 737 lb down and 40 lb up at 12-7-3, 737 lb down and 40 lb up at 14-7-2, and 737 lb down and 40 lb up at 16-7-2, and 737 lb down and 40 lb up at 18-7-3 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=-46, 4-7=-46, 11-15=-20
Concentrated Loads (lb)
Vert: 10=-683 (B), 13=-687 (B), 21=-683 (B), 22=-683 (B), 23=-683 (B), 24=-683 (B), 26=-683 (B), 27=-683 (B), 28=-683 (B), 29=-683 (B)

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	PB01	Piggyback	6	1	I58225370 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:28 Page: 1
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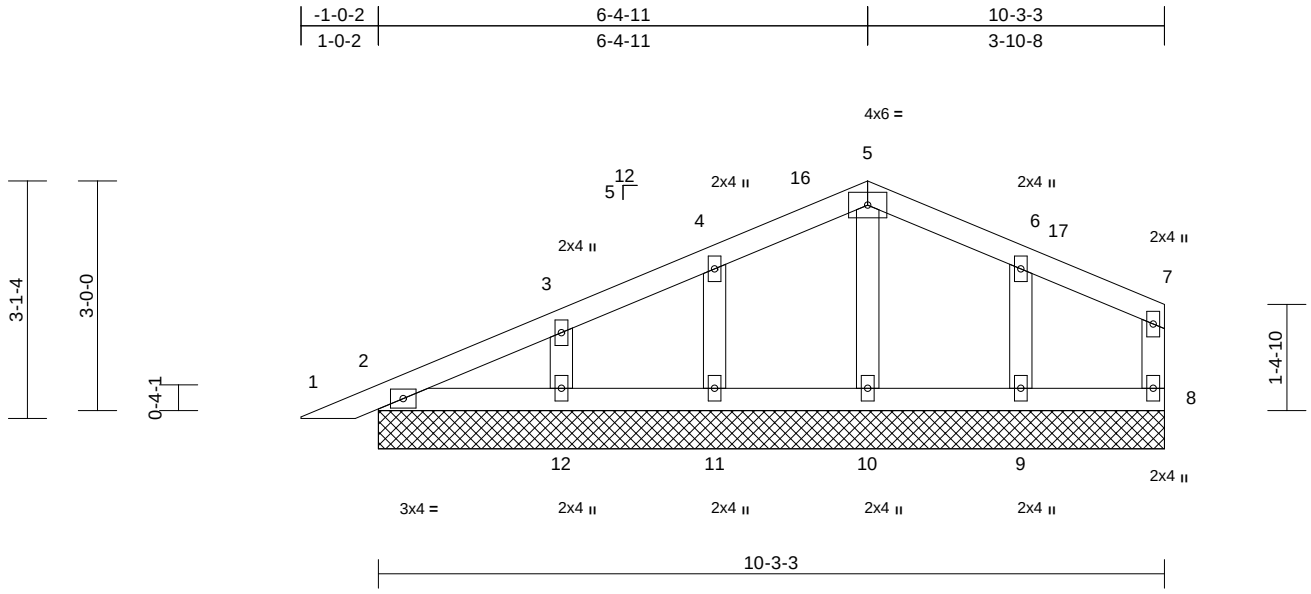

Scale = 1:30.1

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 44 lb	FT = 20%

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

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

REACTIONS (size) 2=10-3-3, 8=10-3-3, 9=10-3-3, 10=10-3-3, 11=10-3-3, 12=10-3-3, 13=10-3-3
Max Horiz 2=52 (LC 20), 13=52 (LC 20)
Max Uplift 2=-9 (LC 12), 8=-3 (LC 17), 9=-28 (LC 17), 11=-24 (LC 16), 12=-28 (LC 16), 13=-9 (LC 12)
Max Grav 2=127 (LC 2), 8=60 (LC 2), 9=170 (LC 24), 10=146 (LC 2), 11=159 (LC 34), 12=194 (LC 2), 13=127 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-42/27, 3-4=-38/35, 4-5=-45/71, 5-6=-45/71, 6-7=-30/34, 7-8=-45/30
BOT CHORD 2-12=-13/22, 11-12=-12/17, 10-11=-12/17, 9-10=-12/17, 8-9=-12/17
WEBS 5-10=-104/19, 4-11=-126/70, 3-12=-132/68, 6-9=-130/72

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=15.8 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 8, 9 lb uplift at joint 2, 24 lb uplift at joint 11, 28 lb uplift at joint 12, 28 lb uplift at joint 9 and 9 lb uplift at joint 2.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	PB01G	Piggyback	1	1	I58225371 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:28 Page: 1
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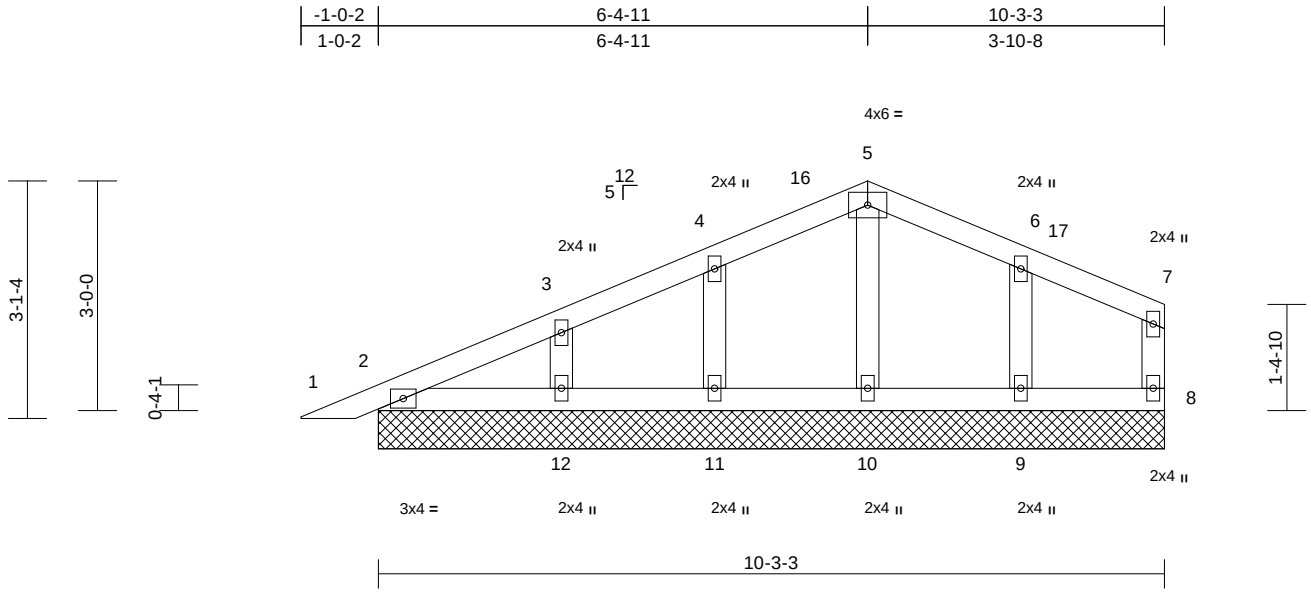

Scale = 1:30.1

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 44 lb	FT = 20%

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

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

REACTIONS (size) 2=10-3-3, 8=10-3-3, 9=10-3-3, 10=10-3-3, 11=10-3-3, 12=10-3-3, 13=10-3-3
Max Horiz 2=52 (LC 20), 13=52 (LC 20)
Max Uplift 2=-9 (LC 12), 8=-3 (LC 17), 9=-28 (LC 17), 11=-24 (LC 16), 12=-28 (LC 16), 13=-9 (LC 12)
Max Grav 2=127 (LC 2), 8=60 (LC 2), 9=170 (LC 24), 10=146 (LC 2), 11=159 (LC 34), 12=194 (LC 2), 13=127 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-42/27, 3-4=-38/35, 4-5=-45/71, 5-6=-45/71, 6-7=-30/34, 7-8=-45/30
BOT CHORD 2-12=-13/22, 11-12=-12/17, 10-11=-12/17, 9-10=-12/17, 8-9=-12/17
WEBS 5-10=-104/19, 4-11=-126/70, 3-12=-132/68, 6-9=-130/72

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=15.8 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 8, 9 lb uplift at joint 2, 24 lb uplift at joint 11, 28 lb uplift at joint 12, 28 lb uplift at joint 9 and 9 lb uplift at joint 2.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	PB02G	Piggyback	1	1	I58225372 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:28 Page: 1
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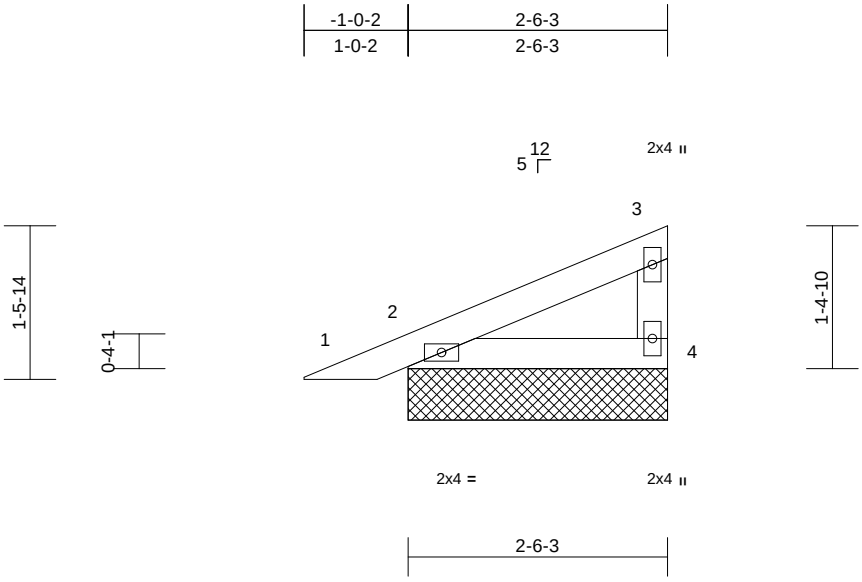

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 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 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=2-6-3, 4=2-6-3, 5=2-6-3
Max Horiz 2=37 (LC 15), 5=37 (LC 15)
Max Uplift 2=-15 (LC 16), 4=-7 (LC 16), 5=-15 (LC 16)
Max Grav 2=139 (LC 2), 4=92 (LC 2), 5=139 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-36/26, 3-4=-57/38
BOT CHORD 2-4=-17/27

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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=15.8 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) 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) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 4, 15 lb uplift at joint 2 and 15 lb uplift at joint 2.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	PB03	Piggyback	13	1	I58225373 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:29 Page: 1
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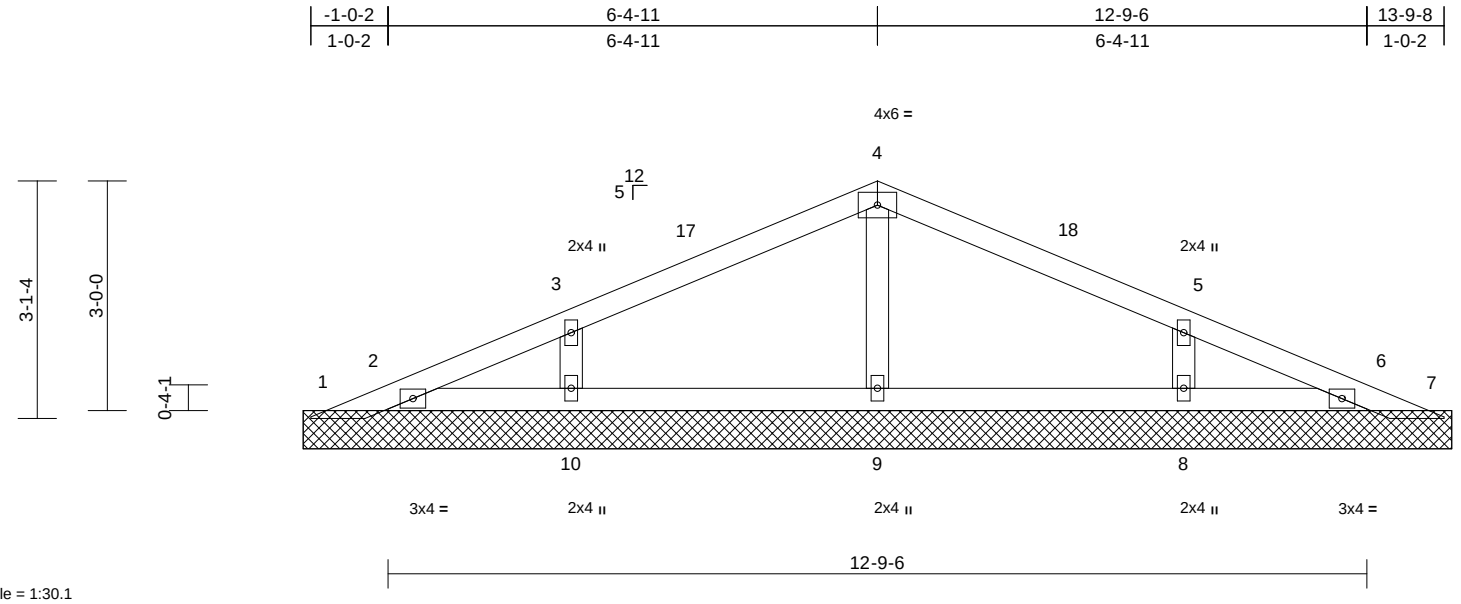


Scale = 1:30.1

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 49 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=15-0-0, 2=15-0-0, 6=15-0-0, 7=15-0-0, 8=15-0-0, 9=15-0-0, 10=15-0-0, 11=15-0-0, 14=15-0-0
Max Horiz 1=38 (LC 16)
Max Uplift 1=-15 (LC 17), 7=-5 (LC 17), 8=-52 (LC 17), 10=-51 (LC 16)
Max Grav 1=19 (LC 23), 2=117 (LC 2), 6=101 (LC 2), 7=22 (LC 24), 8=306 (LC 35), 9=294 (LC 2), 10=308 (LC 34), 11=117 (LC 2), 14=101 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-40/50, 2-3=-38/33, 3-4=-70/62, 4-5=-70/62, 5-6=-29/27, 6-7=-7/14
BOT CHORD 2-10=-3/33, 9-10=-3/33, 8-9=-3/33, 6-8=-3/33
WEBS 4-9=-209/52, 3-10=-240/117, 5-8=-239/118

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=15.8 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) Unbalanced snow loads have been considered for this design.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1, 5 lb uplift at joint 7, 51 lb uplift at joint 10 and 52 lb uplift at joint 8.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

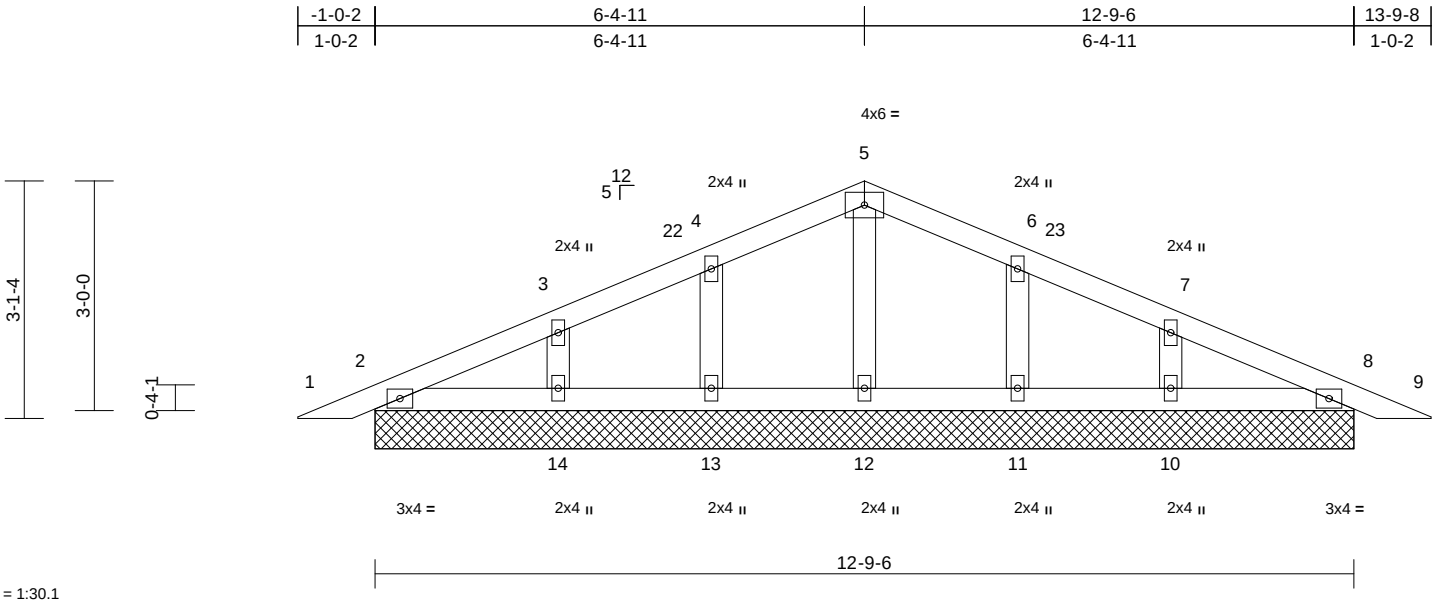
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	PB03G	Piggyback	1	1	I58225374 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:29 Page: 1
ID:EBlkLL3hYdAJEVFO1cGnxBzIae1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.1

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 54 lb	FT = 20%

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

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

REACTIONS (size) 2=12-9-6, 8=12-9-6, 10=12-9-6, 11=12-9-6, 12=12-9-6, 13=12-9-6, 14=12-9-6, 15=12-9-6, 19=12-9-6
Max Horiz 2=38 (LC 16), 15=38 (LC 16)
Max Uplift 2=-9 (LC 12), 8=-11 (LC 17), 10=-27 (LC 17), 11=-25 (LC 17), 13=-25 (LC 16), 14=-27 (LC 16), 15=-9 (LC 12), 19=-11 (LC 17)
Max Grav 2=128 (LC 2), 8=128 (LC 2), 10=194 (LC 2), 11=160 (LC 24), 12=145 (LC 2), 13=160 (LC 23), 14=194 (LC 2), 15=128 (LC 2), 19=128 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-35/30, 3-4=-35/40, 4-5=-37/70, 5-6=-37/70, 6-7=-35/36, 7-8=-30/19, 8-9=0/25
BOT CHORD 2-14=-8/37, 13-14=-7/37, 12-13=-7/37, 11-12=-7/37, 10-11=-7/37, 8-10=-8/37
WEBS 5-12=-101/0, 4-13=-126/64, 3-14=-132/63, 6-11=-126/64, 7-10=-132/63

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=15.8 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) Unbalanced snow loads have been considered for this design.
7) 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.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 2, 11 lb uplift at joint 8, 25 lb uplift at joint 13, 27 lb uplift at joint 14, 25 lb uplift at joint 11, 27 lb uplift at joint 10, 9 lb uplift at joint 2 and 11 lb uplift at joint 8.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

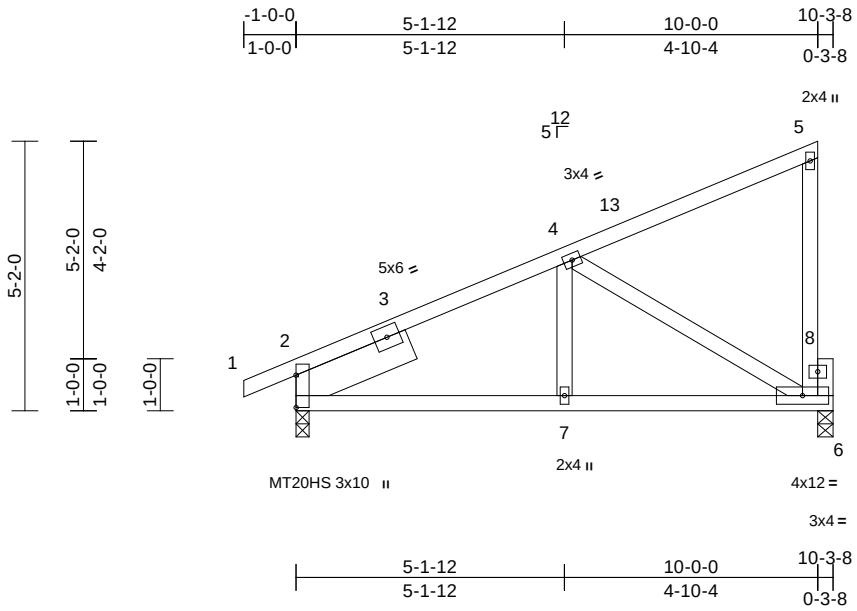
May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	SP01	Monopitch	11	1	I58225375 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:29 Page: 1

ID:ml0wMegVP_?fai03hUb9g0zIYEu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.2

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

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	0.30	Vert(LL)	-0.02	6-7	>999	240	MT20	244/190
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.03	6-7	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 60 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
SLIDER	Left 2x8 SP DSS -- 2-5-0

BRACING

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

REACTIONS (size) 2=0-3-0, 6=0-3-8
Max Horiz 2=154 (LC 15)
Max Uplift 2=-28 (LC 16), 6=-48 (LC 16)
Max Grav 2=463 (LC 2), 6=406 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/38, 2-4=-393/95, 4-5=-109/63, 5-6=-145/80
BOT CHORD	2-7=-235/399, 6-7=-186/399
WEBS	4-7=0/203, 4-6=-444/162

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=15.8 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 2 and 48 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.

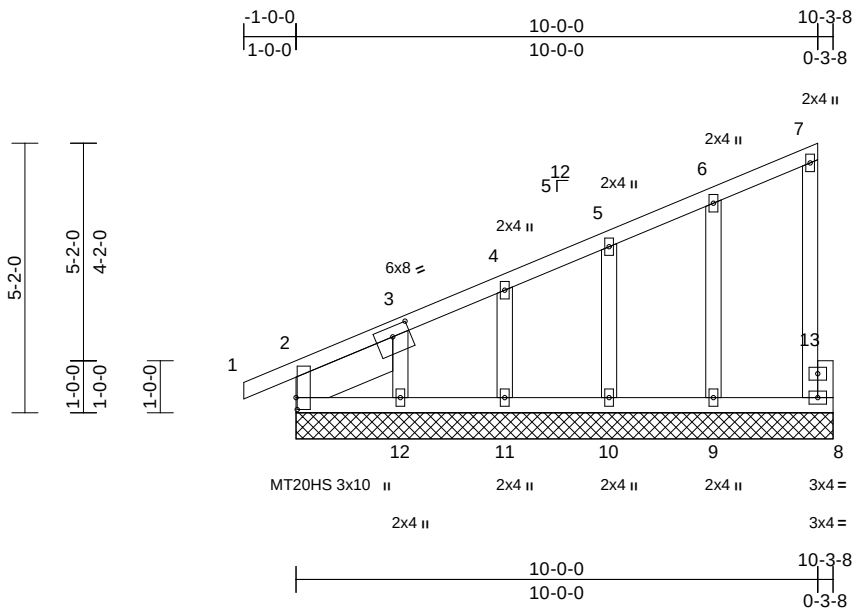
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	SP01G	Monopitch Supported Gable	1	1	I58225376 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:30 Page: 1
ID:7GvXYLE6vwEiUcTqxWixyxzIYYq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.2

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

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20HS	187/143
Snow (Ps/Pf)	15.8/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 63 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
SLIDER Left 2x8 SP DSS -- 2-1-15

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) 2=10-3-8, 8=10-3-8, 9=10-3-8, 10=10-3-8, 11=10-3-8, 12=10-3-8, 14=10-3-8
Max Horiz 2=154 (LC 15), 14=154 (LC 15)
Max Uplift 8=-14 (LC 13), 9=-31 (LC 16), 10=-20 (LC 16), 11=-23 (LC 16), 12=-57 (LC 16)
Max Grav 2=160 (LC 22), 8=70 (LC 23), 9=197 (LC 23), 10=161 (LC 23), 11=162 (LC 2), 12=155 (LC 2), 14=160 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-33/44, 3-4=-167/98, 4-5=-131/85, 5-6=-97/73, 6-7=-64/56, 7-8=-54/38
BOT CHORD 2-12=-65/72, 11-12=-65/72, 10-11=-65/72, 9-10=-65/72, 8-9=-65/72
WEBS 6-9=-152/79, 5-10=-122/68, 4-11=-122/68, 3-12=-114/130

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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps=15.8 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) 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) All plates are MT20 plates unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 8, 31 lb uplift at joint 9, 20 lb uplift at joint 10, 23 lb uplift at joint 11 and 57 lb uplift at joint 12.
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.

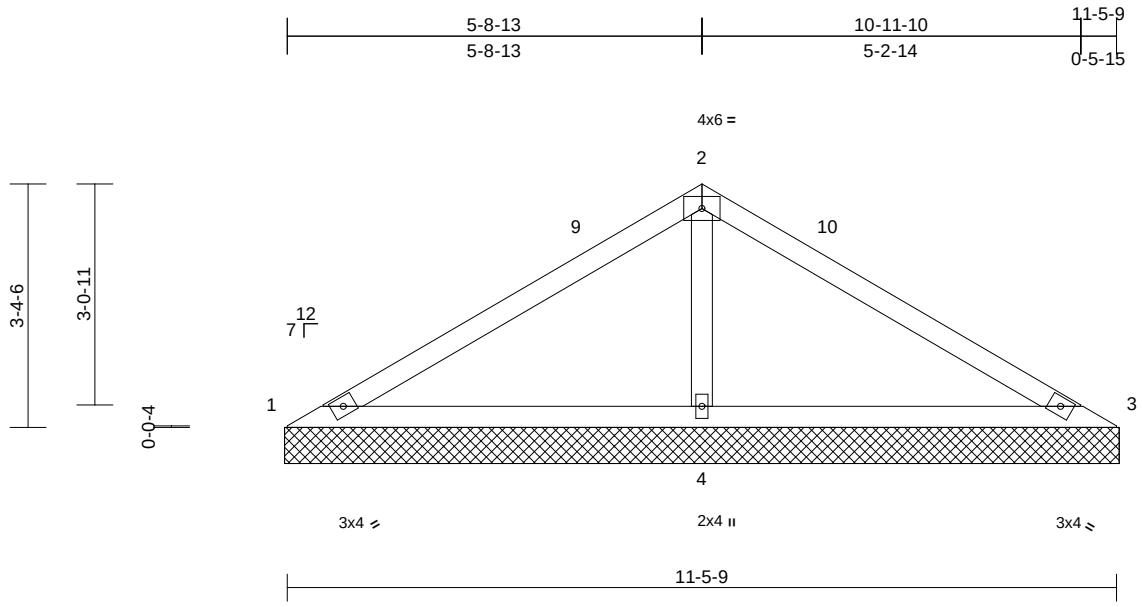
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V01	Valley	1	1	I58225377 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:30 Page: 1
ID:FNZ0uCo8CNdbIJdoTVcJfZzIawS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.9

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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.34	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 39 lb	FT = 20%

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

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

REACTIONS (size) 1=11-6-7, 3=11-6-7, 4=11-6-7
Max Horiz 1=-62 (LC 12)
Max Uplift 1=-48 (LC 34), 3=-48 (LC 33), 4=-30 (LC 16)
Max Grav 1=67 (LC 33), 3=67 (LC 34), 4=899 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-67/473, 2-3=-67/473
BOT CHORD 1-4=-341/102, 3-4=-341/102
WEBS 2-4=-707/137

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1, 48 lb uplift at joint 3 and 30 lb uplift at joint 4.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V02	Valley	1	1	I58225378 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:30 Page: 1
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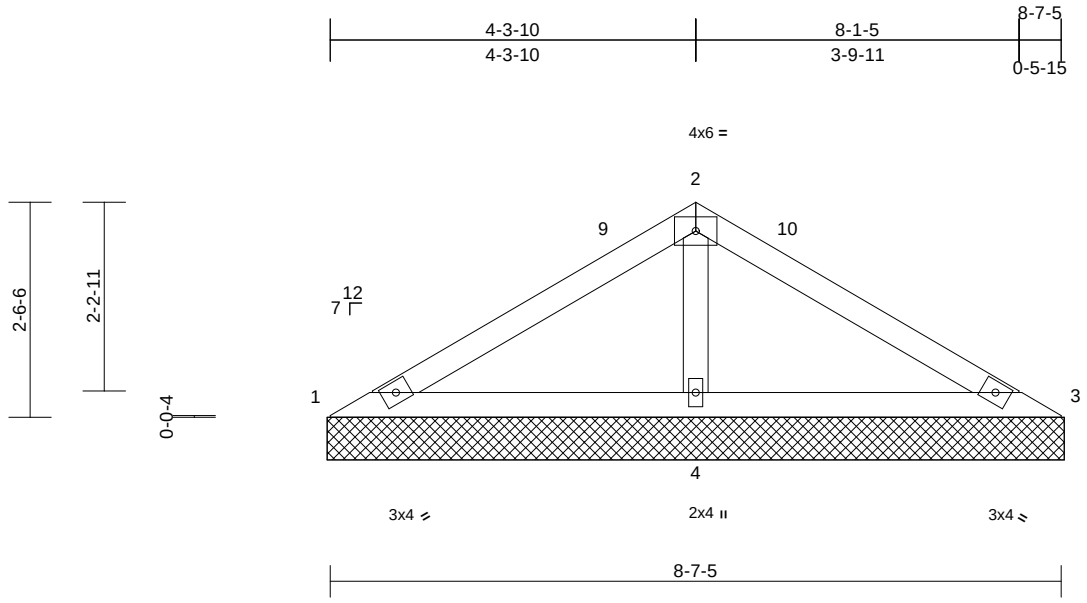


Scale = 1:27.1

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 8-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-8-2, 3=8-8-2, 4=8-8-2
Max Horiz 1=-46 (LC 12)
Max Uplift 1=-17 (LC 34), 3=-17 (LC 33), 4=-19 (LC 16)
Max Grav 1=70 (LC 33), 3=70 (LC 34), 4=624 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/306, 2-3=-62/306
BOT CHORD 1-4=-232/81, 3-4=-232/81
WEBS 2-4=-456/92

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 17 lb uplift at joint 3 and 19 lb uplift at joint 4.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

LOAD CASE(S) Standard

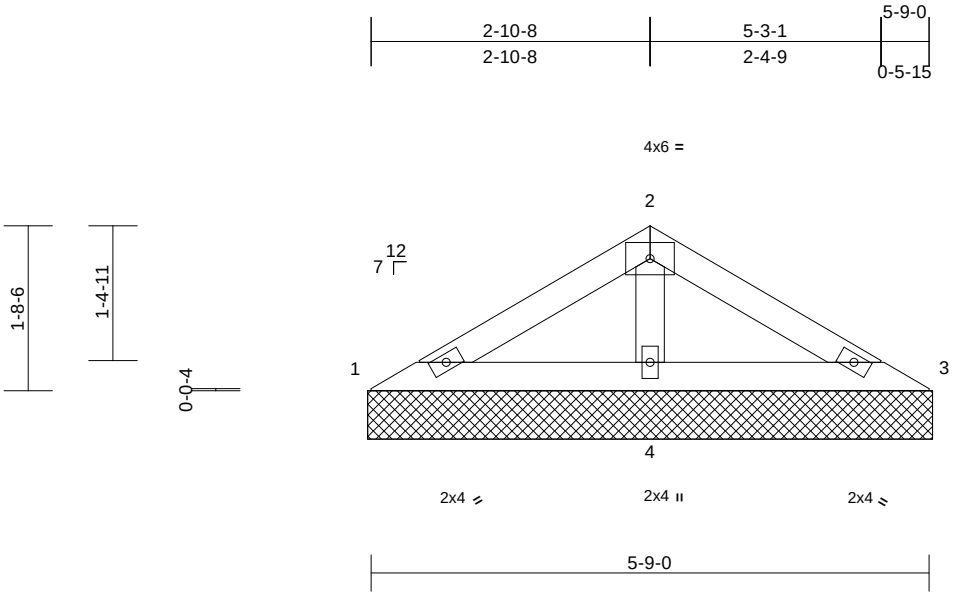
May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V03	Valley	1	1	I58225379 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:30 Page: 1
ID:?Gqc9iZ1fXTLHySTVQ0ee2zIadN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.7

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 18 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 5-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-9-14, 3=5-9-14, 4=5-9-14
Max Horiz 1=-30 (LC 12)
Max Uplift 1=-3 (LC 16), 3=-8 (LC 17), 4=-5 (LC 16)
Max Grav 1=69 (LC 33), 3=69 (LC 34), 4=358 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-70/140, 2-3=-70/140
BOT CHORD 1-4=-106/57, 3-4=-106/57
WEBS 2-4=-231/43

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1, 8 lb uplift at joint 3 and 5 lb uplift at joint 4.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

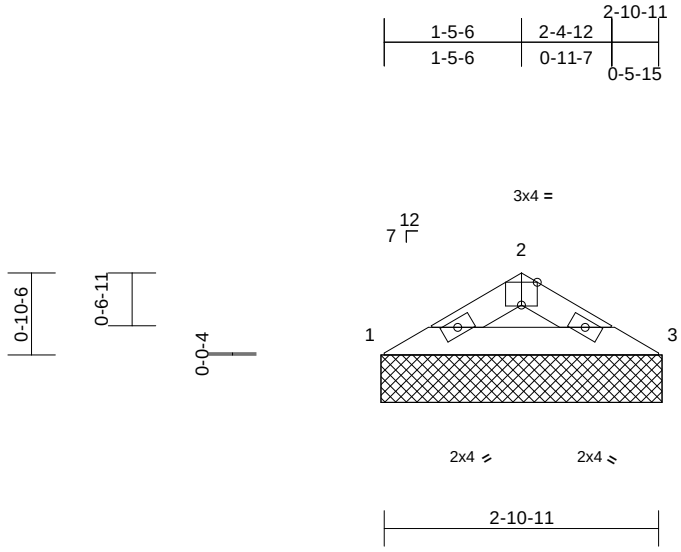
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V04	Valley	1	1	I58225380 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:31 Page: 1
ID:?Gqc9iZ1fXTLHySTVQ0ee2zIadN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.3

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.07	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: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-11-9, 3=2-11-9
Max Horiz 1=13 (LC 15)
Max Uplift 1=-3 (LC 16), 3=-3 (LC 17)
Max Grav 1=119 (LC 2), 3=119 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-180/23, 2-3=-180/23
BOT CHORD 1-3=-12/152

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1 and 3 lb uplift at joint 3.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V05	Valley	1	1	I58225381 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:31 Page: 1
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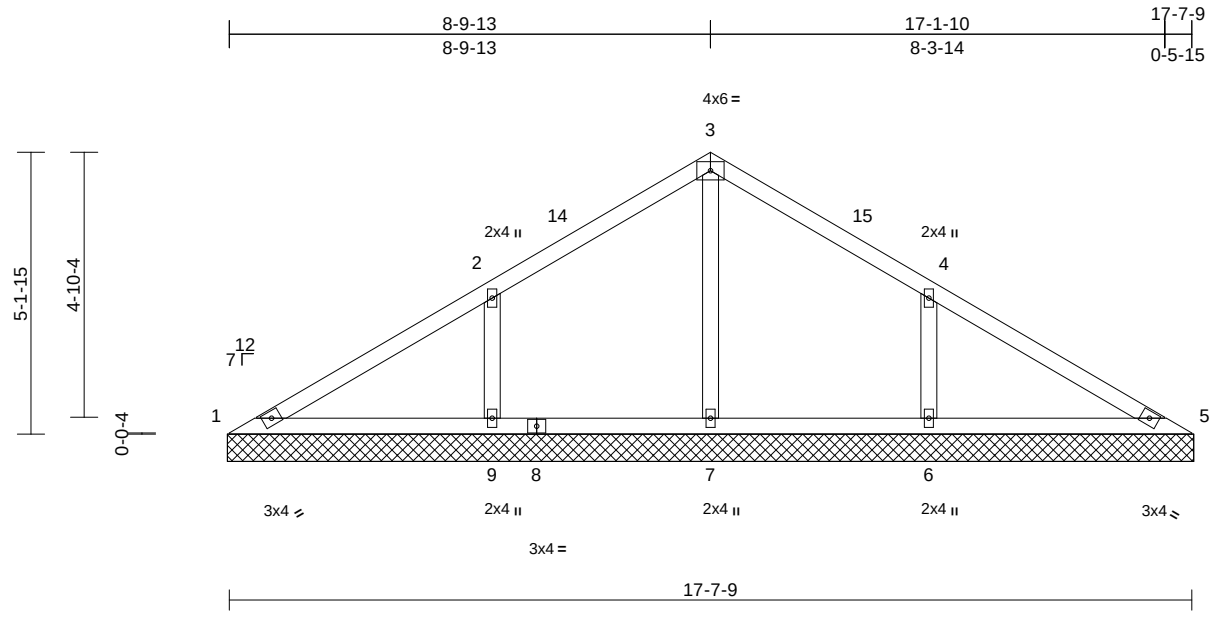

Scale = 1:42.2

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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	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)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 68 lb	FT = 20%

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

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

REACTIONS (size) 1=17-8-7, 5=17-8-7, 6=17-8-7, 7=17-8-7, 9=17-8-7
Max Horiz 1=-97 (LC 14)
Max Uplift 6=-86 (LC 17), 9=-87 (LC 16)
Max Grav 1=103 (LC 33), 5=103 (LC 34), 6=422 (LC 34), 7=409 (LC 2), 9=422 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-130/250, 2-3=0/206, 3-4=0/206, 4-5=-130/231
BOT CHORD 1-9=-160/118, 7-9=-160/66, 6-7=-160/66, 5-6=-160/109
WEBS 3-7=-356/1, 2-9=-297/127, 4-6=-296/127

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 9 and 86 lb uplift at joint 6.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V06	Valley	1	1	I58225382 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:31 Page: 1
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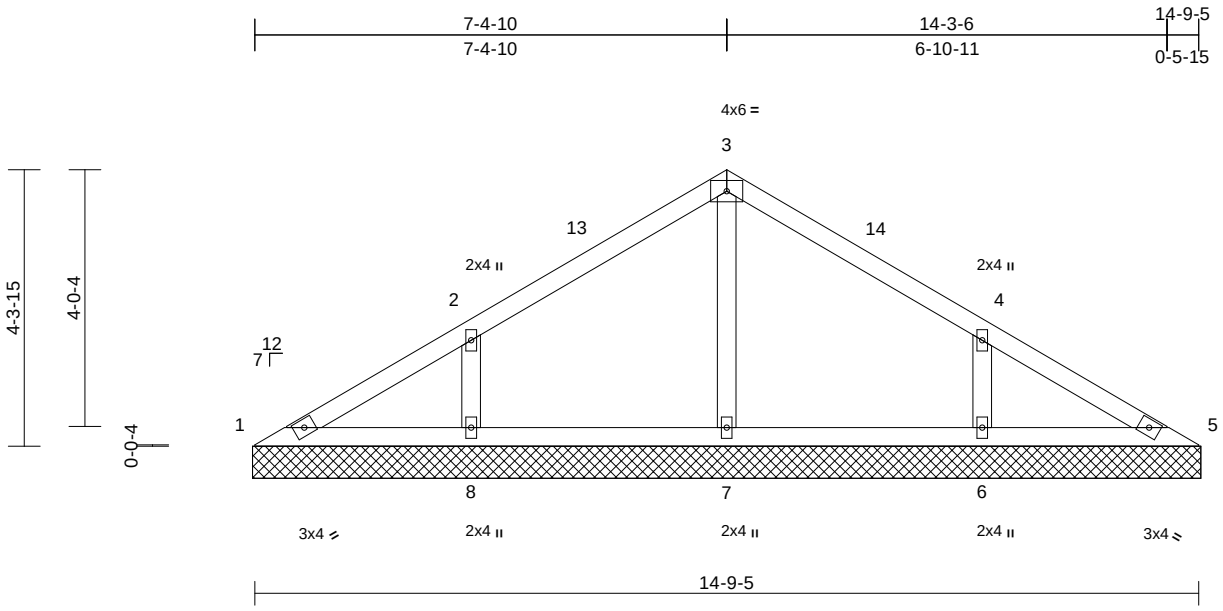

Scale = 1:36.1

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 56 lb	FT = 20%

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

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

REACTIONS (size) 1=14-10-2, 5=14-10-2, 6=14-10-2, 7=14-10-2, 8=14-10-2
Max Horiz 1=-81 (LC 12)
Max Uplift 1=-3 (LC 17), 6=-71 (LC 17), 8=-72 (LC 16)
Max Grav 1=90 (LC 33), 5=90 (LC 34), 6=348 (LC 34), 7=326 (LC 2), 8=348 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-125/121, 2-3=-48/106, 3-4=-42/96, 4-5=-115/96
BOT CHORD 1-8=-60/114, 7-8=-60/47, 6-7=-60/47, 5-6=-60/94
WEBS 3-7=-251/6, 2-8=-255/112, 4-6=-255/112

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1, 72 lb uplift at joint 8 and 71 lb uplift at joint 6.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V07	Valley	1	1	I58225383 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:31 Page: 1
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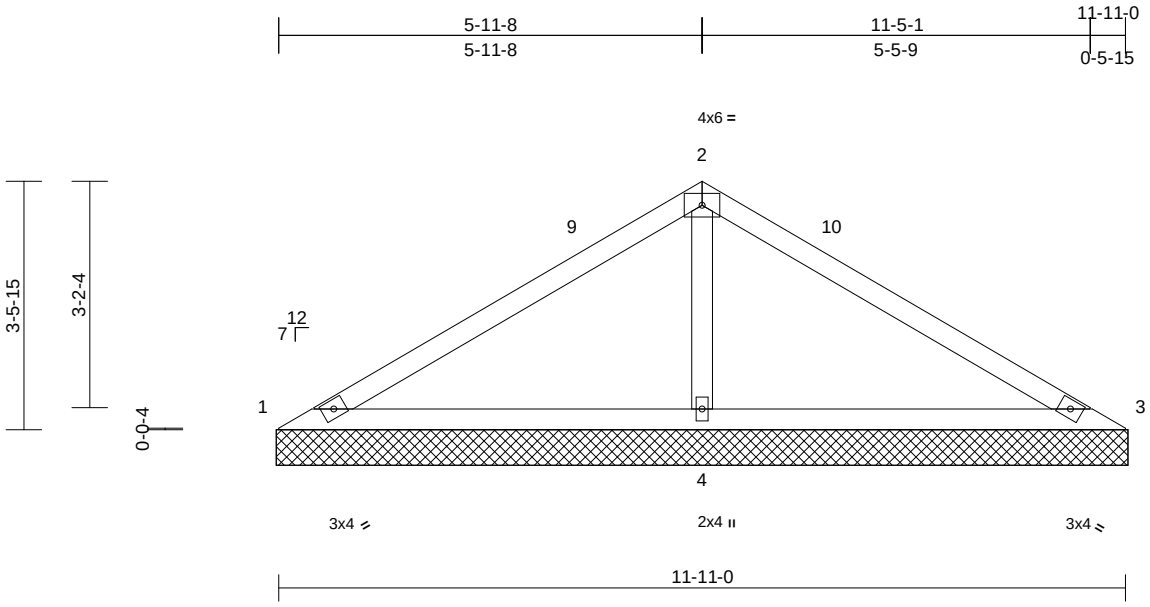

Scale = 1:32.4

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	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	4	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
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=11-11-14, 3=11-11-14, 4=11-11-14
Max Horiz 1=64 (LC 13)
Max Uplift 1=-56 (LC 34), 3=-56 (LC 33), 4=-33 (LC 16)
Max Grav 1=63 (LC 33), 3=63 (LC 34), 4=950 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-73/508, 2-3=-73/508
BOT CHORD 1-4=-369/108, 3-4=-369/108
WEBS 2-4=-752/146

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 1, 56 lb uplift at joint 3 and 33 lb uplift at joint 4.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V08	Valley	1	1	I58225384 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:32 Page: 1
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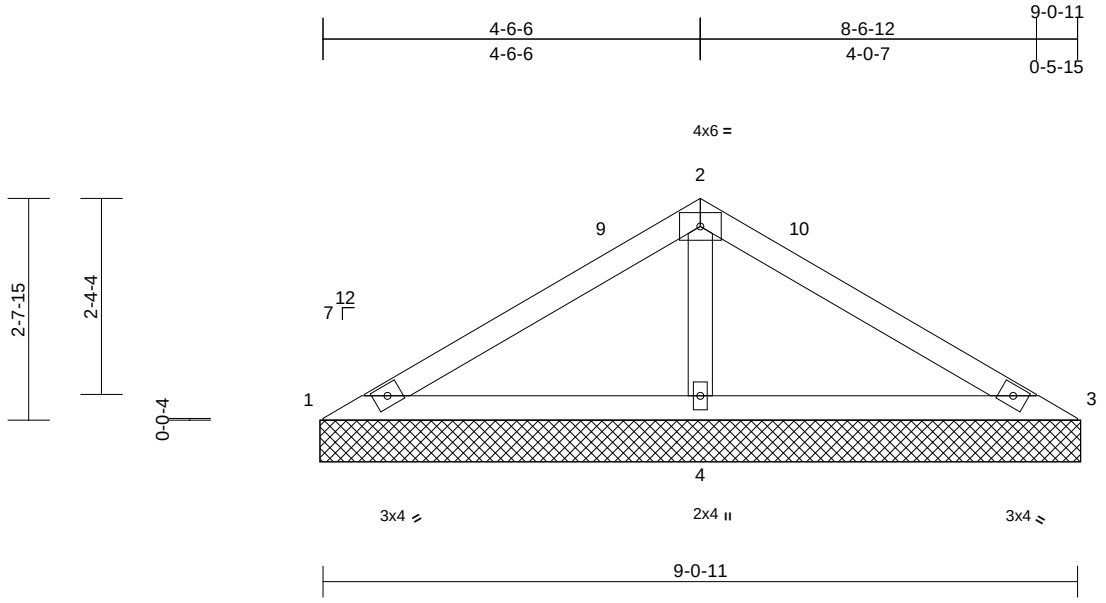


Scale = 1:27.7

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	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	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 9-0-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=9-1-9, 3=9-1-9, 4=9-1-9
Max Horiz 1=-48 (LC 14)
Max Uplift 1=-13 (LC 34), 3=-13 (LC 33), 4=-16 (LC 16)
Max Grav 1=78 (LC 33), 3=78 (LC 34), 4=644 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-77/305, 2-3=-77/305
BOT CHORD 1-4=-212/70, 3-4=-212/70
WEBS 2-4=-485/96

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1, 13 lb uplift at joint 3 and 16 lb uplift at joint 4.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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.

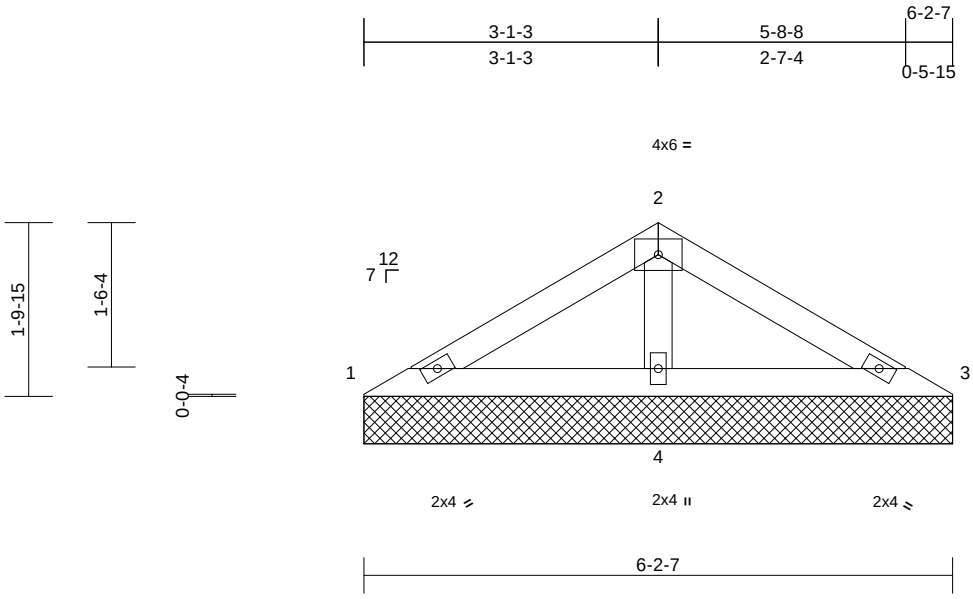
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V09	Valley	1	1	I58225385 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:32 Page: 1
ID:BfXC1Hvb37?NeFbr8JWCnyzIacx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.3

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 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 6-2-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=6-2-7, 3=6-2-7, 4=6-2-7
Max Horiz 1=32 (LC 15)
Max Uplift 1=-3 (LC 16), 3=-8 (LC 17), 4=-7 (LC 16)
Max Grav 1=71 (LC 33), 3=71 (LC 34), 4=389 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-72/155, 2-3=-72/155
BOT CHORD 1-4=-118/58, 3-4=-118/58
WEBS 2-4=-255/50

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1, 8 lb uplift at joint 3 and 7 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.

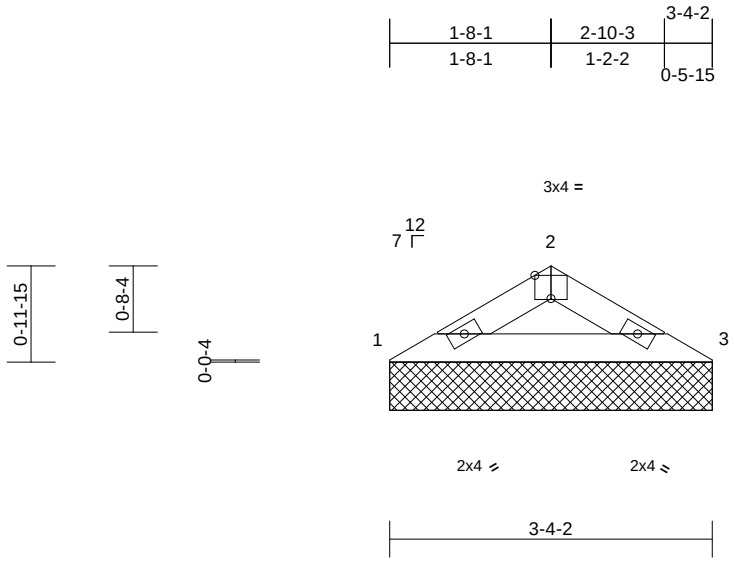
LOAD CASE(S) Standard

May 9,2023

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

Job	Truss	Truss Type	Qty	Ply	Mattamy - Glades; Lot 26 Providence Creek
26 Providence Creek -	V10	Valley	1	1	I58225386 Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Mon May 08 14:43:32 Page: 1
ID:BfXC1Hvb37?NeFbr8JWCnyzIacx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	13.2/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 9 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-4-2, 3=3-4-2
Max Horiz 1=16 (LC 15)
Max Uplift 1=-4 (LC 16), 3=-4 (LC 17)
Max Grav 1=134 (LC 2), 3=134 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-206/25, 2-3=-206/25
BOT CHORD 1-3=-14/172

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=13.2 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) Unbalanced snow loads have been considered for this design.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 4 lb uplift at joint 3.
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.

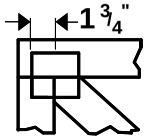
LOAD CASE(S) Standard

May 9,2023

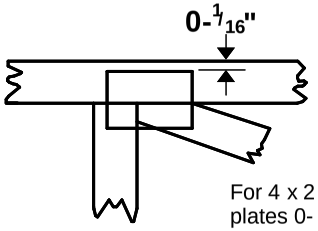
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

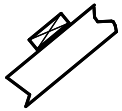
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

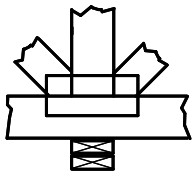
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

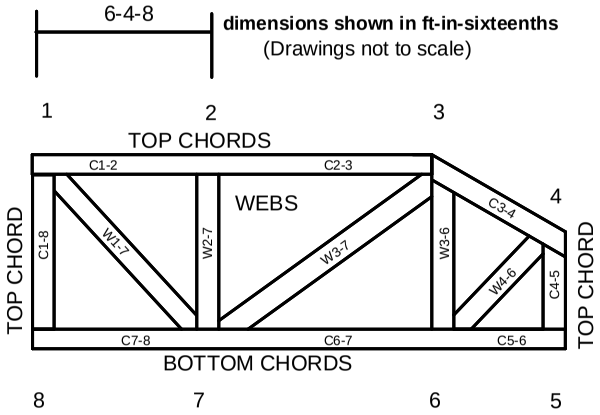


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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 Reference Sheet: MII-7473 rev. 5/19/2020

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.