ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20050049
Stockton XL Plan

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: E14524165 thru E14524194

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844

June 18,2020

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	Stockton XL Plan E14524165
20050049	A1	Attic	11	1	Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:08:59 Page: 1

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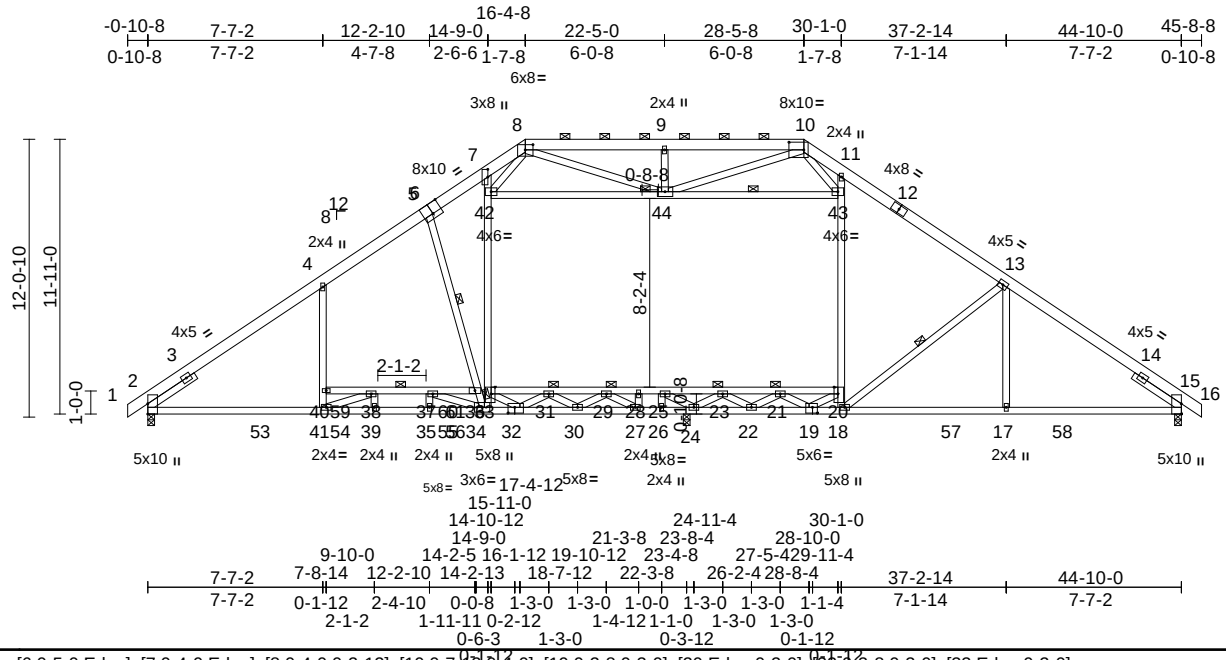

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Plate Offsets (X, Y): [6:0-5-0,Edge], [7:0-4-0,Edge], [8:0-4-0,0-2-12], [10:0-7-12,0-4-0], [19:0-2-8,0-3-0], [20:Edge,0-2-0], [32:0-3-8,0-3-0], [33:Edge,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.48	37-38	>587	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.87	37-38	>328	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.15	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.37	20-33	>501	360		
BCDL	10.0										Weight: 387 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E *Except* 8-10:2x6 SP No.2

BOT CHORD 2x4 SP No.1 *Except* 40-36,32-19:2x4 SP No.2

WEBS 2x4 SP No.3 *Except* 4-41,18-13,13-17,42-43,34-5,8-44,44-10:2x4 SP No.2, 7-34,11-18:2x4 SP 2400F 2.0E

SLIDER Left 2x4 SP No.3 -- 2-6-0, Right 2x4 SP No.3 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-6 oc purlins, except 2-0-0 oc purlins (5-1-6 max.): 8-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 26-27,24-26,22-24. 10-0-0 oc bracing: 36-40

WEBS 1 Row at midpt 13-18, 43-44, 5-36

JOINTS 1 Brace at Jt(s): 21, 31, 23, 29, 36, 44

REACTIONS (size) 2=0-3-8, 15=0-3-8, 24=0-3-8
Max Horiz 2=-228 (LC 11)
Max Grav 2=2362 (LC 26), 15=1916 (LC 27), 24=1495 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-1115/0, 3-4=-3086/0, 4-5=-2781/70, 5-6=-3122/87, 6-7=-3120/104, 7-8=-2474/183, 8-9=-1928/367, 9-10=-1925/365, 10-11=-2195/385, 11-12=-2146/196, 12-13=-2305/184, 13-14=-2689/195, 14-15=-890/41, 15-16=0/37

BOT CHORD 2-53=-31/2649, 41-53=0/2649, 41-54=0/3225, 39-54=0/3225, 35-39=0/3225, 35-55=0/3225, 55-56=0/3225, 34-56=0/3225, 32-34=0/1878, 30-32=0/2079, 27-30=0/1381, 26-27=-544/503, 24-26=-544/503, 22-24=-689/266, 19-22=0/839, 18-19=0/1531, 18-57=-38/2119, 17-57=-38/2119, 17-58=-38/2119, 15-58=-38/2119, 31-33=-284/451, 29-31=-287/931, 28-29=-52/1966, 25-28=-52/1966, 23-25=0/3313, 21-23=0/1782, 20-21=0/1071, 40-59=-331/59, 38-59=-331/59, 37-38=-728/0, 37-60=-20/499, 60-61=-20/499, 36-61=-20/499

WEBS 40-41=0/466, 4-40=0/559, 33-34=-2/1857, 33-42=0/2208, 7-42=0/1643, 18-20=-10/507, 20-43=-21/376, 11-43=-639/131, 13-18=-403/262, 13-17=0/261, 42-44=-293/206, 43-44=-1279/0, 19-20=-604/0, 32-33=-250/351, 19-21=-121/612, 31-32=-181/278, 21-22=-776/44, 30-31=-393/0, 22-23=0/844, 29-30=0/569, 23-24=-1105/0, 27-29=-1166/0, 24-25=-1682/0, 27-28=0/388, 25-26=0/297, 38-39=0/109, 35-37=0/305, 38-41=-524/0, 5-36=-1557/55, 34-36=-1504/26, 34-37=-1215/0, 8-44=-468/588, 10-44=-55/1287, 10-43=-63/1261, 8-42=-37/875, 9-44=-366/183

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) 200.0lb AC unit load placed on the bottom chord, 11-0-0 from left end, supported at two points, 5-0-0 apart.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.

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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) Ceiling dead load (5.0 psf) on member(s). 42-44, 43-44; Wall dead load (5.0psf) on member(s).33-42, 20-43
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 31-33, 29-31, 28-29, 25-28, 23-25, 21-23, 20-21
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan E14524166
20050049	A1GE	Attic	1	1	Job Reference (optional)

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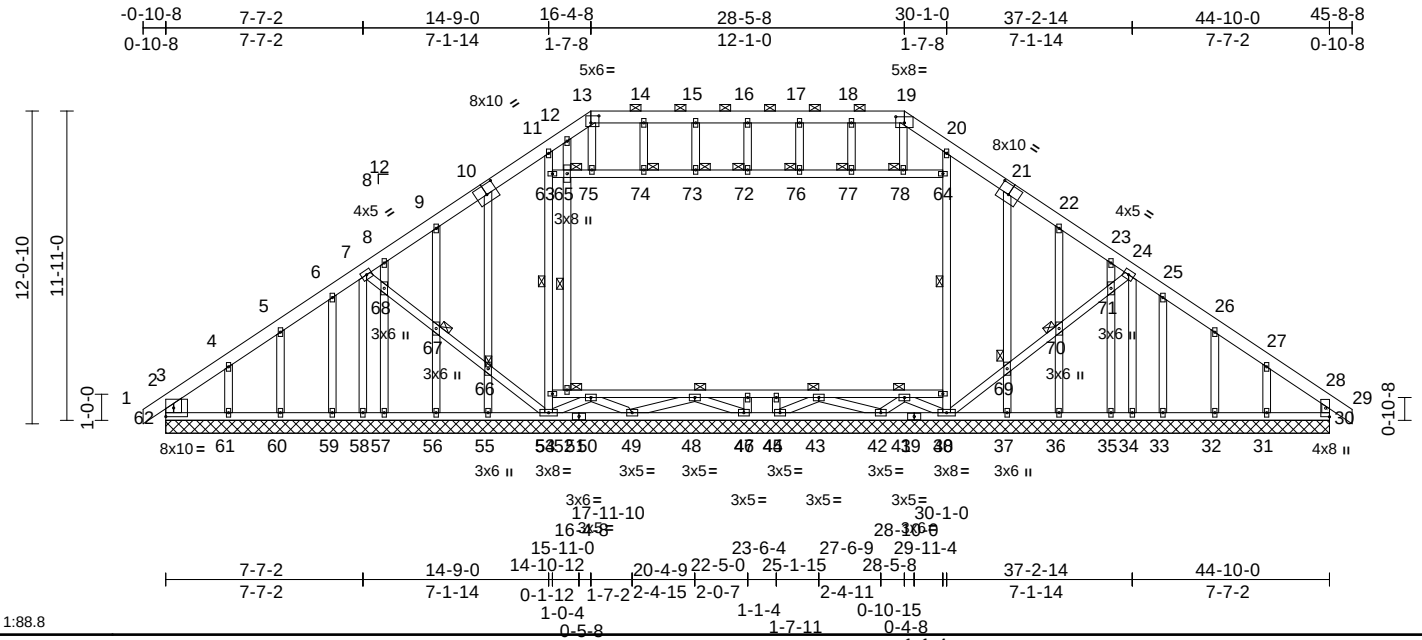

Scale = 1:88.8

Plate Offsets (X, Y): [10:0-5-0,0-4-8], [13:0-3-12,0-3-4], [19:0-4-0,0-2-13], [21:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	30	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 459 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 7-58,53-7,11-53,20-38,38-24,24-34,63-64:2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 52-65,66-10,69-21:2x4 SP No.2

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.): 13-19.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-53, 40-64, 52-65
JOINTS 1 Brace at Jt(s): 65, 52, 66, 67, 69, 70, 72, 73, 74, 76, 77, 78, 48, 41, 43

REACTIONS (size) 30=44-10-0, 31=44-10-0, 32=44-10-0, 33=44-10-0, 34=44-10-0, 35=44-10-0, 36=44-10-0, 37=44-10-0, 38=44-10-0, 42=44-10-0, 44=44-10-0, 47=44-10-0, 49=44-10-0, 53=44-10-0, 55=44-10-0, 56=44-10-0, 57=44-10-0, 58=44-10-0, 59=44-10-0, 60=44-10-0, 61=44-10-0, 62=44-10-0
Max Horiz 62=-247 (LC 11)
Max Uplift 30=-5 (LC 10), 31=-67 (LC 14), 32=-26 (LC 14), 34=-40 (LC 10), 36=-30 (LC 14), 37=-71 (LC 30), 38=-278 (LC 30), 53=-297 (LC 31), 55=-63 (LC 31), 56=-27 (LC 13), 58=-12 (LC 9), 60=-23 (LC 13), 61=-88 (LC 13), 62=-86 (LC 9)
Max Grav 30=409 (LC 2), 31=118 (LC 12), 32=174 (LC 27), 33=333 (LC 2), 34=539 (LC 2), 35=312 (LC 2), 36=166 (LC 27), 37=115 (LC 12), 38=240 (LC 10), 42=252 (LC 2), 44=121 (LC 31), 47=126 (LC 31), 49=339 (LC 30), 53=217 (LC 9), 55=86 (LC 11), 56=171 (LC 26), 57=292 (LC 2), 58=488 (LC 2), 59=274 (LC 2), 60=176 (LC 2), 61=152 (LC 11), 62=466 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-51/45, 3-4=-445/154, 4-5=-377/126, 5-6=-389/157, 6-7=-456/193, 7-8=-862/195, 8-9=-992/232, 9-10=-1000/290, 10-11=-924/347, 11-12=-933/350, 12-13=-1028/394, 13-14=-850/362, 14-15=-847/362, 15-16=-847/362, 16-17=-847/362, 17-18=-847/362, 18-19=-850/362, 19-20=-1056/388, 20-21=-904/343, 21-22=-999/290, 22-23=-993/232, 23-24=-851/195, 24-25=-397/202, 25-26=-323/164, 26-27=-316/106, 27-28=-373/46, 28-29=0/43, 2-62=-102/157, 28-30=-361/88
BOT CHORD 61-62=-122/307, 60-61=-122/307, 59-60=-122/307, 58-59=-122/307, 57-58=-122/307, 56-57=-122/307, 55-56=-122/307, 53-55=-122/307, 51-53=-43/836, 49-51=-43/836, 47-49=-23/411, 44-47=-71/330, 42-44=-32/412, 39-42=-59/602, 38-39=-59/602, 37-38=-27/248, 36-37=-27/248, 35-36=-27/248, 34-35=-27/248, 33-34=-27/248, 32-33=-27/248, 31-32=-27/248, 30-31=-27/248, 52-54=-30/3, 50-52=-30/3, 48-50=-26/412, 46-48=-33/453, 45-46=-33/453, 43-45=-33/453, 41-43=-33/368, 40-41=-33/2

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WEBS 7-58=-477/17, 7-68=-47/640, 67-68=-46/625, 66-67=-46/621, 53-66=-48/630, 53-54=-168/0, 54-63=-96/136, 11-63=-122/3, 38-40=-332/0, 40-64=-327/18, 20-64=-352/61, 38-69=-98/693, 69-70=-95/685, 70-71=-96/689, 24-71=-98/707, 24-34=-528/45, 63-65=-5/59, 65-75=-5/59, 74-75=-5/64, 73-74=-5/64, 72-73=-5/64, 72-76=-5/64, 76-77=-5/64, 77-78=-5/64, 64-78=-5/58, 12-65=-211/69, 52-65=-368/0, 10-66=-69/116, 55-66=-70/104, 9-67=-134/83, 56-67=-130/83, 8-68=-284/43, 57-68=-259/44, 6-59=-241/51, 5-60=-131/84, 4-61=-108/105, 21-69=-58/147, 37-69=-79/116, 22-70=-131/84, 36-70=-127/84, 23-71=-306/44, 35-71=-278/45, 25-33=-301/8, 26-32=-131/82, 27-31=-129/96, 16-72=-18/24, 15-73=-2/18, 14-74=-79/43, 13-75=-74/247, 17-76=-2/19, 18-77=-84/43, 19-78=-66/268, 3-62=-555/182, 46-47=-34/0, 44-45=-30/0, 50-53=-93/0, 49-50=-524/0, 48-49=-83/0, 47-48=-94/0, 38-41=-53/244, 41-42=-259/0, 42-43=-50/3, 43-44=-93/0

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
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 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) 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 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) Ceiling dead load (5.0 psf) on member(s). 63-65, 65-75, 74-75, 73-74, 72-73, 72-76, 76-77, 77-78, 64-78; Wall dead load (5.0psf) on member(s).40-64, 52-65, 37-69, 25-33
13) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 62, 58, 53, 38, 34, 30, 55, 56, 60, 61, 37, 36, 32, and 31. This connection is for uplift only and does not consider lateral forces.
14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan E14524167
20050049	CP1	Common	5	1	Job Reference (optional)

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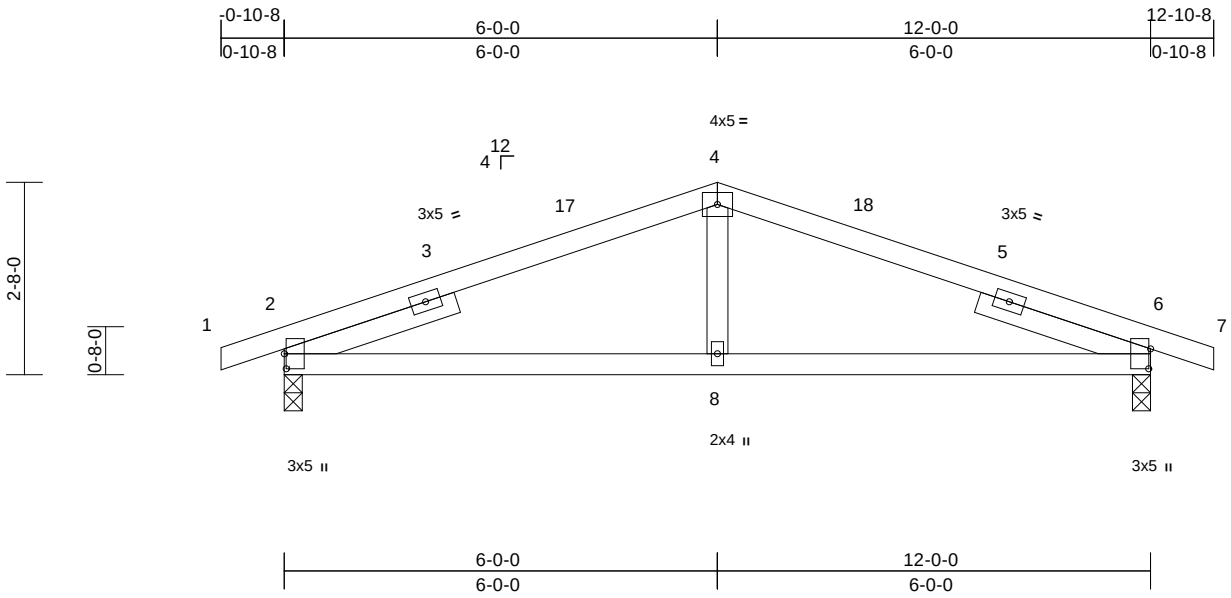

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Plate Offsets (X, Y): [2:0-2-8,0-0-5], [6:0-3-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.04	8-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.06	8-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 50 lb	FT = 20%

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

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) 2=0-3-0, 6=0-3-0
Max Horiz 2=23 (LC 19)
Max Uplift 2=-30 (LC 11), 6=-30 (LC 12)
Max Grav 2=533 (LC 2), 6=532 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-327/11, 3-17=-709/228, 4-17=-699/238, 4-18=-699/238, 5-18=-709/228, 5-6=-327/12, 6-7=0/21
BOT CHORD 2-8=-166/673, 6-8=-148/673
WEBS 4-8=0/154

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	CP1GE	Common Supported Gable	1	1	E14524168
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:04 Page: 1
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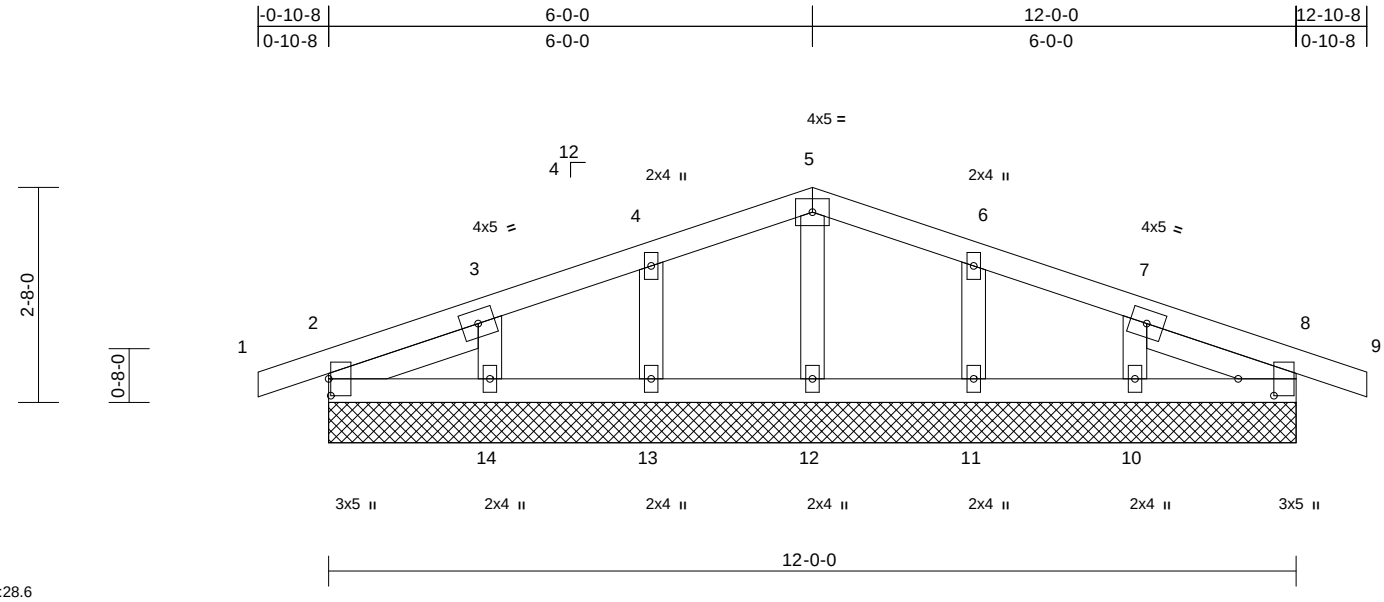

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Plate Offsets (X, Y): [2:0-2-8,0-0-5], [8:0-2-8,0-5-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.02	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-MSH								
BCDL	10.0										Weight: 55 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 14=12-0-0, 15=12-0-0, 19=12-0-0
Max Horiz 2=23 (LC 19), 15=23 (LC 19)
Max Uplift 2=-23 (LC 11), 8=-28 (LC 12), 10=-14 (LC 16), 11=-14 (LC 12), 13=-14 (LC 11), 14=-16 (LC 15), 15=-23 (LC 11), 19=-28 (LC 12)
Max Grav 2=136 (LC 2), 8=136 (LC 2), 10=158 (LC 2), 11=170 (LC 34), 12=143 (LC 2), 13=170 (LC 33), 14=158 (LC 2), 15=136 (LC 2), 19=136 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/21, 2-3=-36/19, 3-4=-27/39, 4-5=-36/74, 5-6=-36/74, 6-7=-27/39, 7-8=-33/18, 8-9=0/21
BOT CHORD	2-14=-4/33, 13-14=-4/33, 12-13=-4/33, 11-12=-4/33, 10-11=-4/33, 8-10=-4/33
WEBS	5-12=-102/22, 4-13=-131/87, 3-14=-114/77, 6-11=-131/87, 7-10=-114/78

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 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 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 8, 15.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	F1	Floor	5	1	E14524169
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:04 Page: 1
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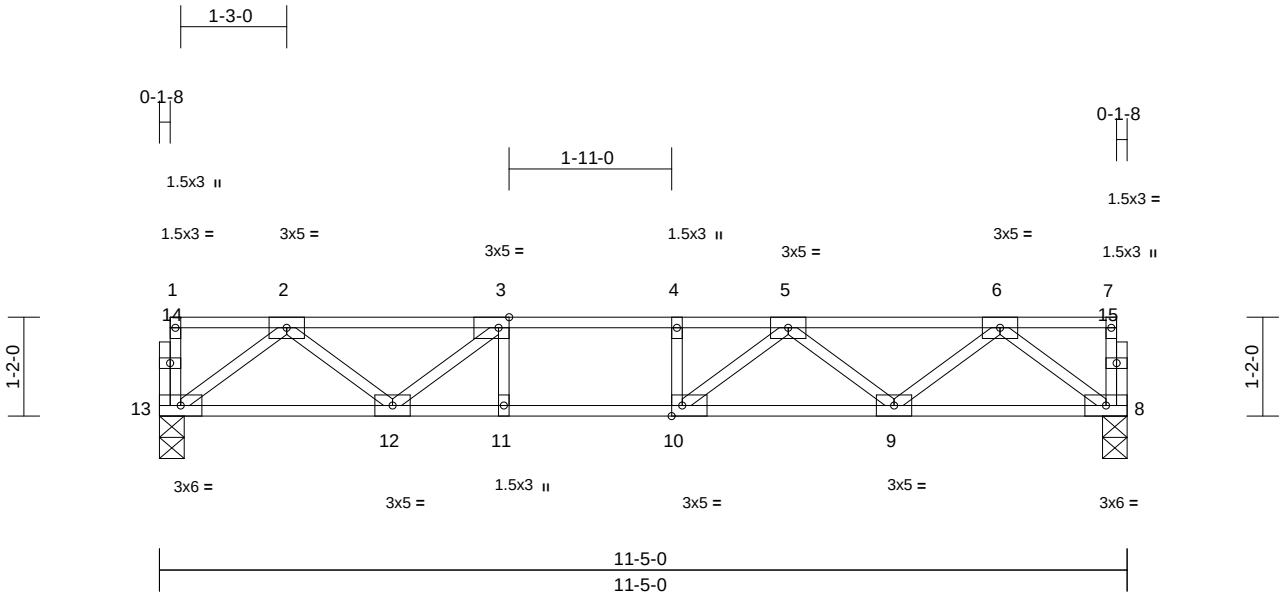

Scale = 1:27.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.11	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.14	9-10	>943	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 57 lb	FT = 20%F, 11%E

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

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) 8=0-3-8, 13=0-3-8
Max Grav 8=608 (LC 1), 13=608 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 13-14=-40/0, 1-14=-40/0, 8-15=-36/0, 7-15=-36/0, 1-2=-2/0, 2-3=-1154/0, 3-4=-1597/0, 4-5=-1597/0, 5-6=-1157/0, 6-7=-2/0
BOT CHORD 12-13=0/733, 11-12=0/1597, 10-11=0/1597, 9-10=0/1518, 8-9=0/746
WEBS 6-8=-933/0, 2-13=-917/0, 6-9=0/536, 2-12=0/547, 5-9=-470/0, 3-12=-584/0, 5-10=-61/327, 3-11=-33/134, 4-10=-148/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) 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.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	F1GE	Floor Supported Gable	1	1	E14524170 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:04 Page: 1
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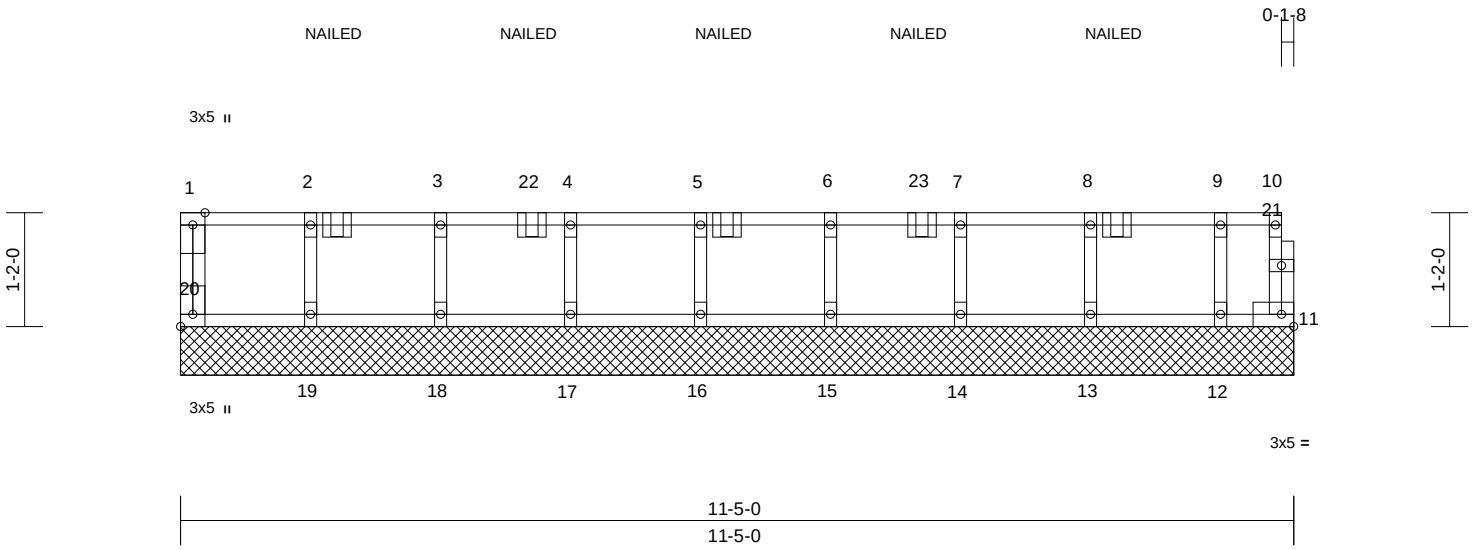

Scale = 1:23.6

Plate Offsets (X, Y): [20:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 50 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat) *Except* 11-21:2x4 SP No.2(flat)

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) 11=11-5-0, 12=11-5-0, 13=11-5-0, 14=11-5-0, 15=11-5-0, 16=11-5-0, 17=11-5-0, 18=11-5-0, 19=11-5-0, 20=11-5-0
Max Grav 11=21 (LC 1), 12=112 (LC 1), 13=237 (LC 1), 14=225 (LC 1), 15=183 (LC 1), 16=223 (LC 1), 17=229 (LC 1), 18=179 (LC 1), 19=236 (LC 1), 20=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-57/0, 11-21=-13/0, 10-21=-13/0, 1-2=-7/0, 2-3=-7/0, 3-22=-7/0, 4-22=-7/0, 4-5=-7/0, 5-6=-7/0, 6-23=-7/0, 7-23=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0
BOT CHORD 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7, 13-14=0/7, 12-13=0/7, 11-12=0/7
WEBS 2-19=-220/0, 3-18=-166/0, 4-17=-216/0, 5-16=-209/0, 6-15=-169/0, 7-14=-212/0, 8-13=-222/0, 9-12=-109/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.
8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-20=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 2=-97 (F), 5=-97 (F), 8=-97 (F), 22=-97 (F), 23=-97 (F)

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	
20050049	F2	Floor	2	1	Job Reference (optional)	E14524171

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:05 Page: 1
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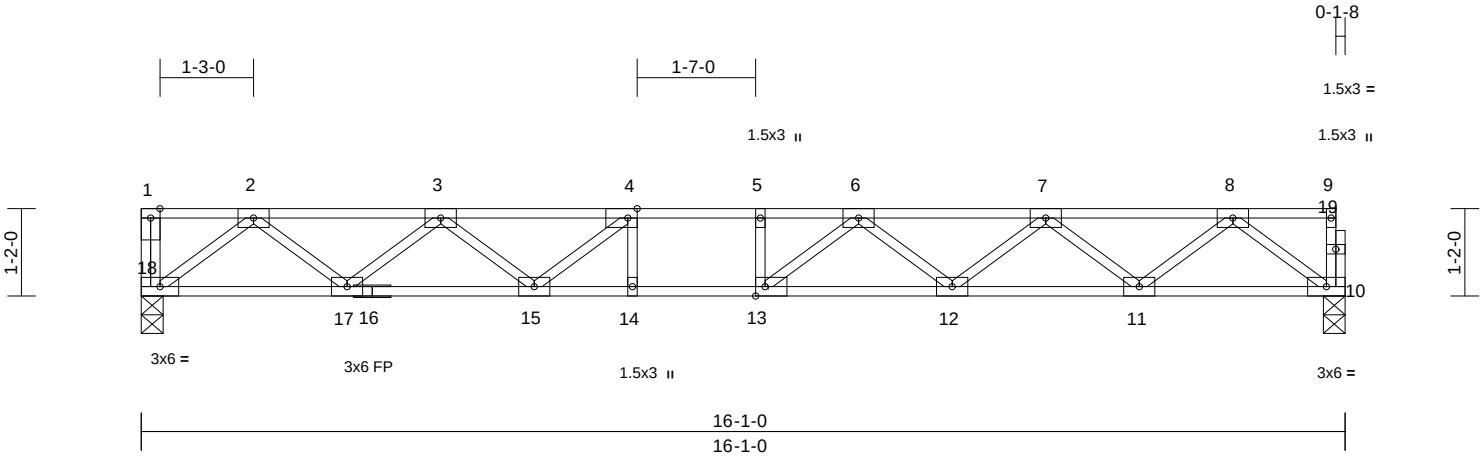

Scale = 1:30.8

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	-0.21	12-13	>892	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.30	12-13	>643	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.05	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 81 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 16-10:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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) 10=0-3-8, 18=0-3-8
Max Grav 10=865 (LC 1), 18=871 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-44/0, 10-19=-38/0, 9-19=-38/0, 1-2=0/0, 2-3=-1799/0, 3-4=-2858/0, 4-5=-3261/0, 5-6=-3261/0, 6-7=-2866/0, 7-8=-1797/0, 8-9=-2/0
BOT CHORD 17-18=0/1079, 16-17=0/2482, 15-16=0/2482, 14-15=0/3261, 13-14=0/3261, 12-13=0/3198, 11-12=0/2489, 10-11=0/1076
WEBS 8-10=-1347/0, 2-18=-1353/0, 8-11=0/939, 2-17=0/938, 7-11=-901/0, 3-17=-889/0, 7-12=0/490, 3-15=0/533, 6-12=-433/0, 4-15=-658/0, 6-13=-194/417, 4-14=-88/182, 5-13=-164/17

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) 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.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	
20050049	F2A	Floor	2	1	Job Reference (optional)	E14524172

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:05 Page: 1
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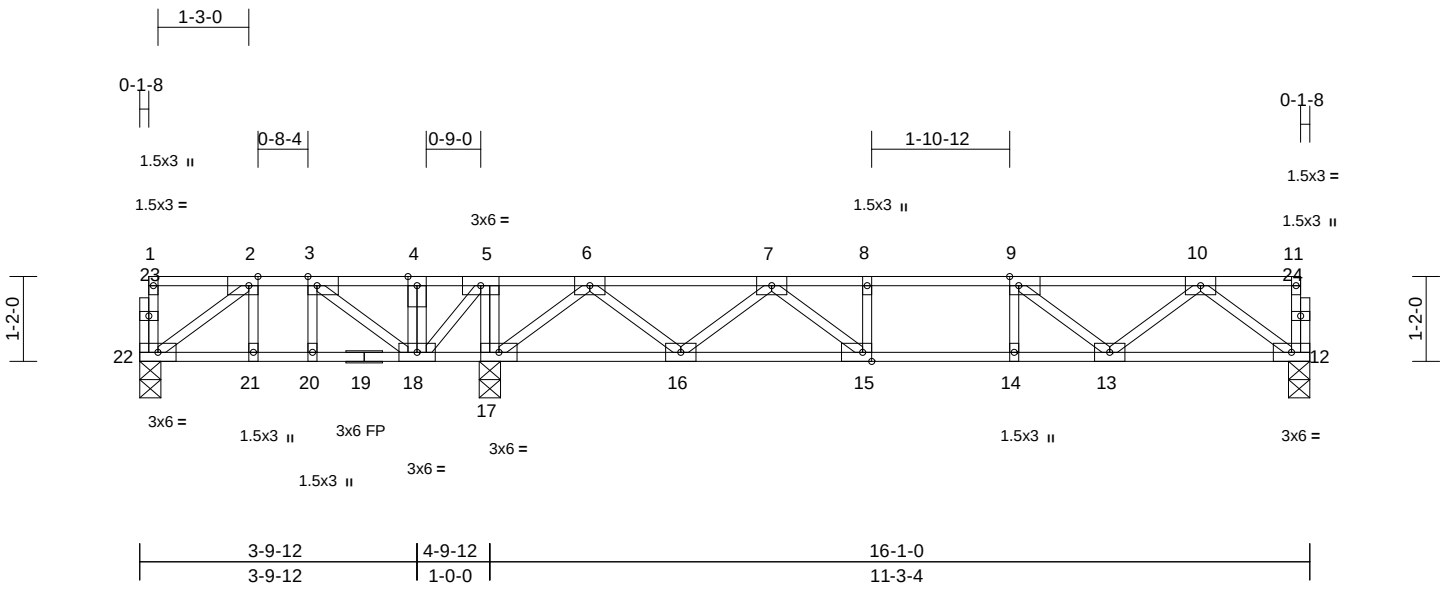

Scale = 1:31.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.06	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.53	Vert(CT)	-0.07	13-14	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 86 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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=0-3-8, 17=0-3-8, 22=0-3-8
Max Uplift 22=-94 (LC 4)
Max Grav 12=539 (LC 7), 17=1122 (LC 1), 22=188 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	22-23=-82/0, 1-23=-82/0, 12-24=-32/0, 11-24=-32/0, 1-2=-5/0, 2-3=-169/209, 3-4=0/535, 4-5=0/535, 5-6=0/895, 6-7=-589/0, 7-8=-1271/0, 8-9=-1271/0, 9-10=-977/0, 10-11=-2/0
BOT CHORD	21-22=-209/169, 20-21=-209/169, 19-20=-209/169, 18-19=-209/169, 17-18=-895/0, 16-17=-129/111, 15-16=0/1046, 14-15=0/1271, 13-14=0/1271, 12-13=0/656
WEBS	4-18=-132/26, 5-17=-487/0, 3-18=-555/0, 2-22=-204/261, 2-21=-97/3, 3-20=0/130, 5-18=0/531, 6-17=-1034/0, 10-12=-820/0, 6-16=0/634, 10-13=0/418, 7-16=-609/0, 9-13=-376/0, 7-15=0/403, 8-15=-174/0, 9-14=-61/49

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x5 MT20 unless otherwise indicated.
3) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22. This connection is for uplift only and does not consider lateral forces.
4) 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.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	F3	Floor	2	1	E14524173 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:05 Page: 1
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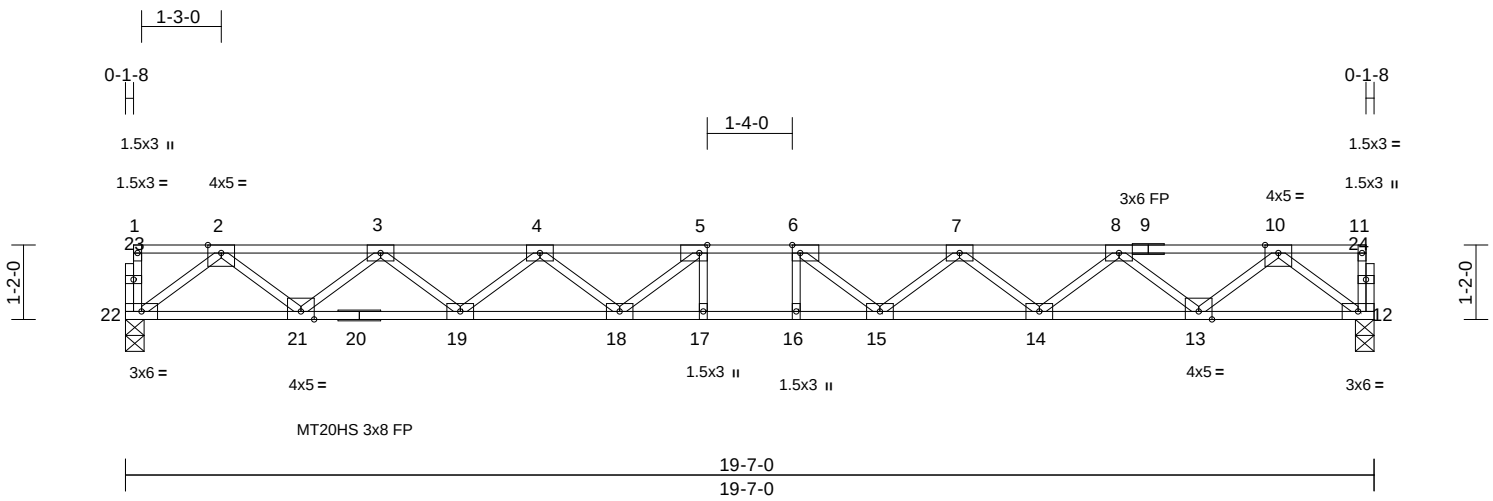

Scale = 1:36.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.40	16-17	>587	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.54	16-17	>426	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.08	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 98 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-12:2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 12=0-3-8, 22=0-3-8
Max Grav 12=1057 (LC 1), 22=1057 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 22-23=-38/0, 1-23=-38/0, 12-24=-38/0, 11-24=-37/0, 1-2=-2/0, 2-3=-2280/0, 3-4=-3807/0, 4-5=-4659/0, 5-6=-4918/0, 6-7=-4659/0, 7-8=-3808/0, 8-9=-2279/0, 9-10=-2279/0, 10-11=-2/0
BOT CHORD 21-22=0/1330, 20-21=0/3196, 19-20=0/3196, 18-19=0/4390, 17-18=0/4918, 16-17=0/4918, 15-16=0/4918, 14-15=0/4390, 13-14=0/3195, 12-13=0/1330
WEBS 10-12=-1666/0, 2-22=-1666/0, 10-13=0/1235, 2-21=0/1237, 8-13=-1193/0, 3-21=-1191/0, 8-14=0/797, 3-19=0/796, 7-14=-758/0, 4-19=-759/0, 7-15=0/479, 4-18=0/479, 6-15=-610/99, 5-18=-610/99, 5-17=-199/224, 6-16=-199/224

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x5 MT20 unless otherwise indicated.
4) 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.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	F3A	Floor	3	1	E14524174
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:05 Page: 1
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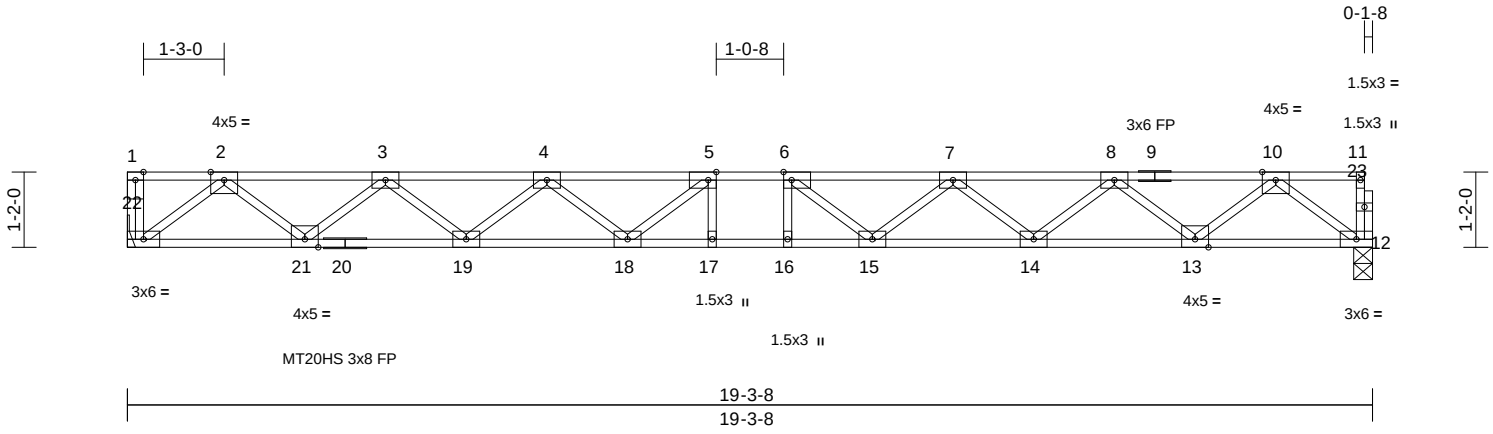

Scale = 1:35.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.41	16-17	>560	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.56	16-17	>407	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.09	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 97 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-12:2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS (size) 12=0-3-8, 22= Mechanical
Max Grav 12=1041 (LC 1), 22=1047 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-42/0, 12-23=-38/0, 11-23=-38/0, 1-2=0/0, 2-3=-2240/0, 3-4=-3730/0, 4-5=-4544/0, 5-6=-4780/0, 6-7=-4543/0, 7-8=-3730/0, 8-9=-2240/0, 9-10=-2240/0, 10-11=-2/0
BOT CHORD 21-22=0/1310, 20-21=0/3136, 19-20=0/3136, 18-19=0/4294, 17-18=0/4780, 16-17=0/4780, 15-16=0/4780, 14-15=0/4294, 13-14=0/3136, 12-13=0/1309
WEBS 10-12=-1640/0, 2-22=-1644/0, 10-13=0/1211, 2-21=0/1211, 8-13=-1168/0, 3-21=-1167/0, 8-14=0/772, 3-19=0/772, 7-14=-735/0, 4-19=-735/0, 7-15=0/457, 4-18=0/457, 6-15=-554/102, 5-18=-554/102, 5-17=-182/202, 6-16=-182/202

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x5 MT20 unless otherwise indicated.
4) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	E14524175
20050049	G01	Common	5	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:06

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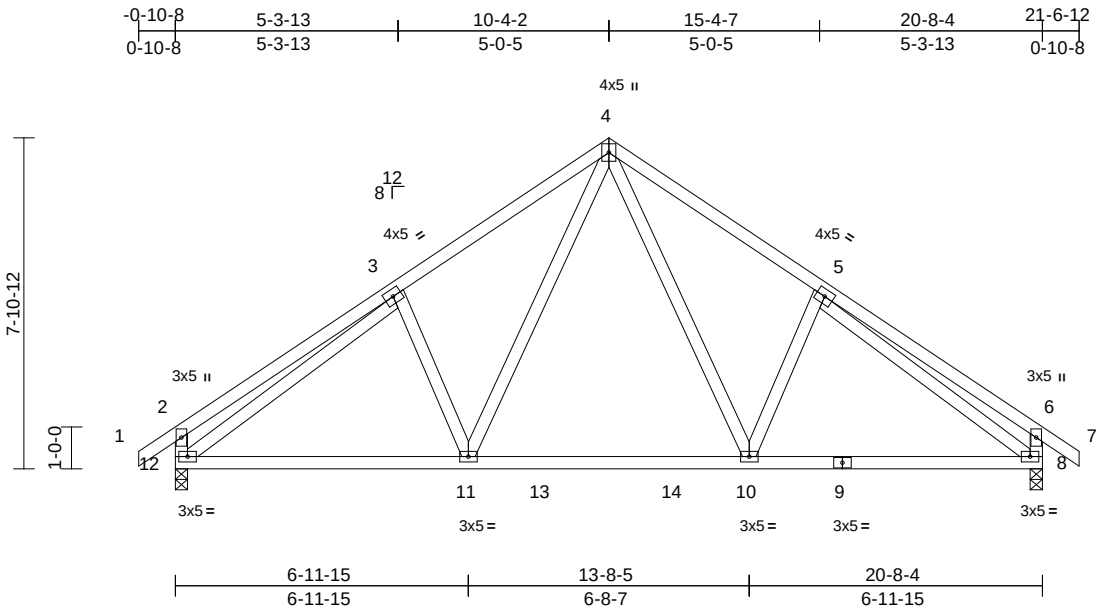

Scale = 1:55

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.09	10-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 128 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 10-5,11-3,12-2,8-6:2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-8-10 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=170 (LC 12)
Max Uplift 8=-1 (LC 14), 12=-1 (LC 13)
Max Grav 8=877 (LC 2), 12=877 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-330/159, 3-4=-928/270, 4-5=-928/270, 5-6=-330/159, 6-7=0/43, 2-12=-335/167, 6-8=-335/167
BOT CHORD 11-12=-73/857, 11-13=0/597, 13-14=0/597, 10-14=0/597, 9-10=-70/769, 8-9=-70/769
WEBS 4-10=-93/428, 5-10=-234/187, 4-11=-93/428, 3-11=-234/187, 3-12=-791/68, 5-8=-791/68

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. This connection is for uplift only and does not consider lateral forces.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan E14524176
20050049	G02	Common Supported Gable	1	1	Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:06 Page: 1
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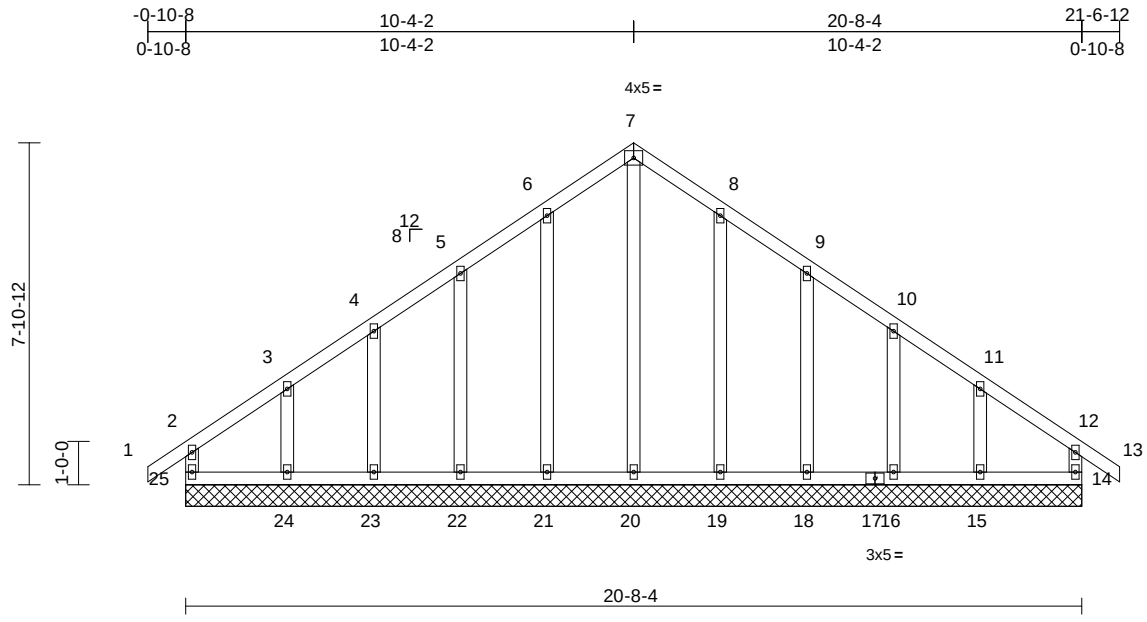

Scale = 1:53.2

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 132 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 *Except* 20-7,21-6,19-8:2x4 SP No.2

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

REACTIONS (size) 14=20-8-4, 15=20-8-4, 16=20-8-4, 18=20-8-4, 19=20-8-4, 20=20-8-4, 21=20-8-4, 22=20-8-4, 23=20-8-4, 24=20-8-4, 25=20-8-4
Max Horiz 25=-165 (LC 11)
Max Uplift 14=-35 (LC 10), 15=-59 (LC 14), 16=-20 (LC 14), 18=-33 (LC 14), 19=-25 (LC 14), 21=-25 (LC 13), 22=-33 (LC 13), 23=-19 (LC 13), 24=-63 (LC 13), 25=-54 (LC 9)
Max Grav 14=159 (LC 25), 15=199 (LC 26), 16=154 (LC 2), 18=162 (LC 26), 19=167 (LC 26), 20=163 (LC 28), 21=168 (LC 25), 22=163 (LC 25), 23=154 (LC 2), 24=207 (LC 25), 25=174 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-25=-143/71, 1-2=0/41, 2-3=-111/99, 3-4=-84/82, 4-5=-119/130, 5-6=-168/190, 6-7=-214/242, 7-8=-214/242, 8-9=-168/190, 9-10=-119/130, 10-11=-75/77, 11-12=-89/76, 12-13=0/41, 12-14=-131/69
BOT CHORD 24-25=-73/84, 23-24=-73/84, 22-23=-73/84, 21-22=-73/84, 20-21=-73/84, 19-20=-73/84, 18-19=-73/84, 17-18=-73/84, 16-17=-73/84, 15-16=-73/84, 14-15=-73/84
WEBS 7-20=-209/127, 6-21=-130/72, 5-22=-127/84, 4-23=-118/76, 3-24=-146/99, 8-19=-129/72, 9-18=-127/84, 10-16=-118/76, 11-15=-148/98

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 25, 14, 21, 22, 23, 24, 19, 18, 16, and 15. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan E14524177
20050049	P1	Monopitch	4	1	Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:06 Page: 1
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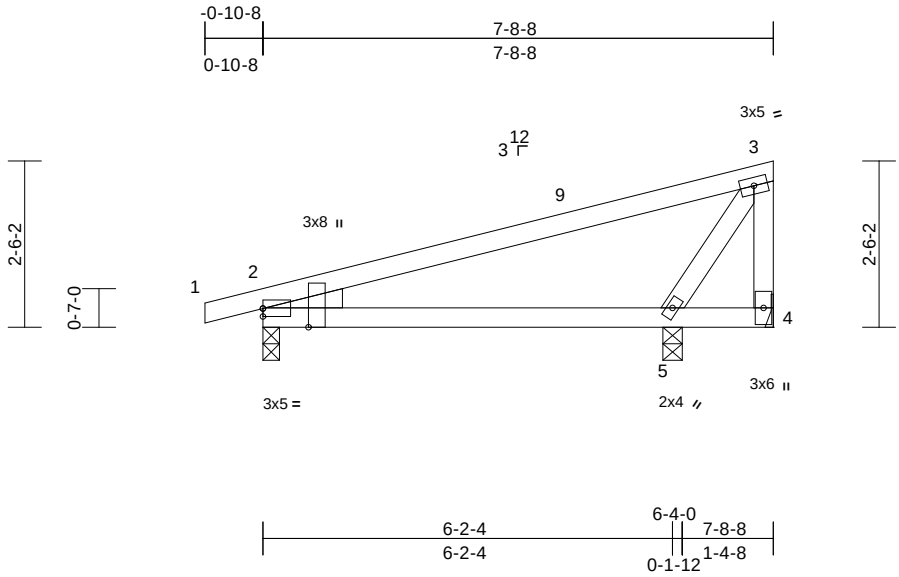

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Plate Offsets (X, Y): [2:Edge,0-1-7], [2:0-3-6,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	0.07	5-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.12	5-8	>591	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 33 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-11 oc bracing.

REACTIONS (size) 2=0-3-0, 4= Mechanical, 5=0-3-8
Max Horiz 2=68 (LC 14)
Max Uplift 2=-58 (LC 11), 4=-118 (LC 15), 5=-408 (LC 2)
Max Grav 2=437 (LC 2), 4=628 (LC 2), 5=129 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-9=-524/270, 3-9=-472/277, 3-4=-733/471
BOT CHORD 2-5=-304/458, 4-5=-38/41
WEBS 3-5=-496/818

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 4.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	
20050049	P1GE	Monopitch Supported Gable	1	1	Job Reference (optional)	E14524178

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:06

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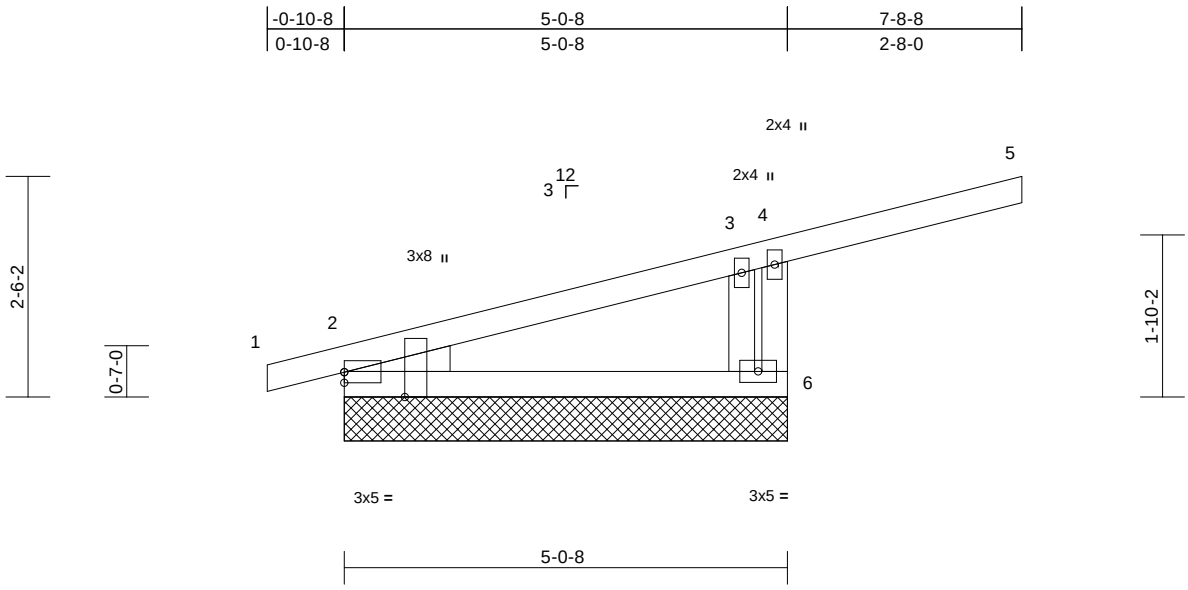

Scale = 1:26.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 26 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
WEDGE	Left: 2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-0-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=5-0-8, 6=5-0-8, 7=5-0-8
Max Horiz 2=66 (LC 12), 7=66 (LC 12)
Max Uplift 2=-18 (LC 11), 6=-74 (LC 12), 7=-18 (LC 11)
Max Grav 2=205 (LC 2), 6=411 (LC 2), 7=205 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-127/142, 3-4=-115/138, 4-5=-51/0, 4-6=-779/555
BOT CHORD	2-6=-120/120
WEBS	3-6=-309/469

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	P2	Monopitch	5	1	E14524179
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:07 Page: 1
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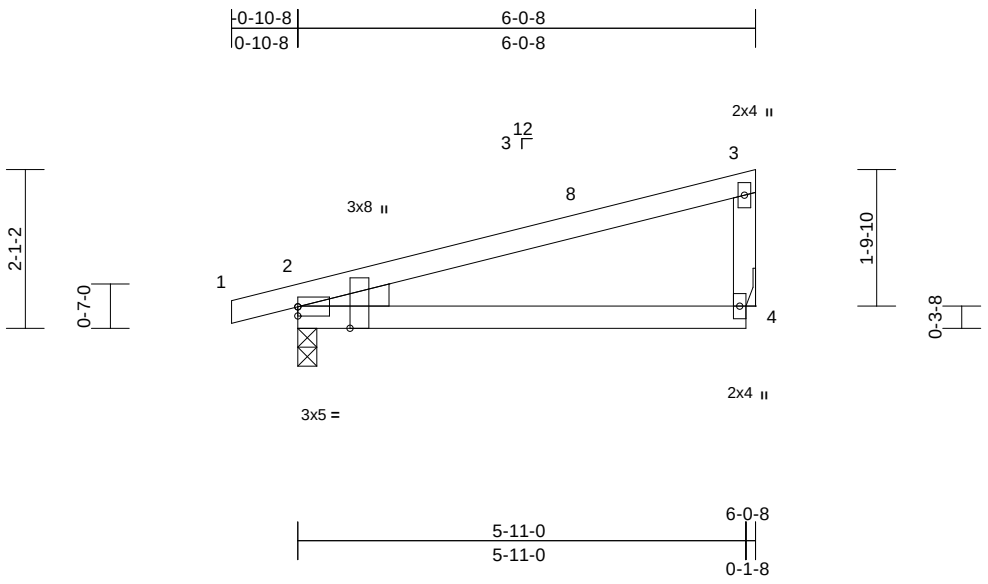

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Plate Offsets (X, Y): [2:Edge,0-1-7], [2:0-3-6,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	0.07	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.13	4-7	>560	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 23 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 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=0-3-0, 4= Mechanical
Max Horiz 2=55 (LC 14)
Max Uplift 2=-32 (LC 11), 4=-11 (LC 15)
Max Grav 2=292 (LC 2), 4=232 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-8=-124/39, 3-8=-55/50, 3-4=-151/114
BOT CHORD 2-4=-107/138

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 4.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

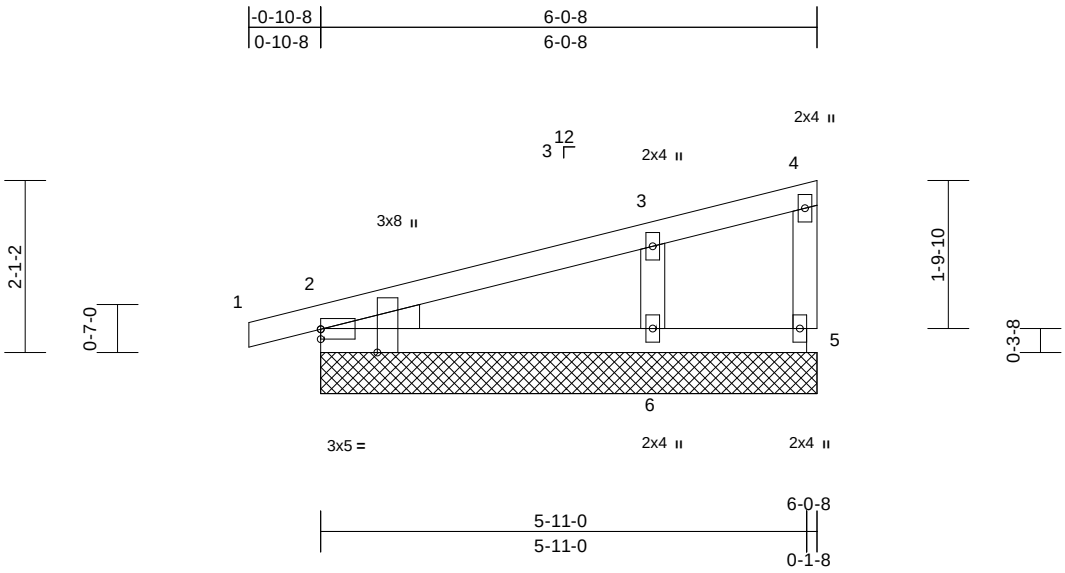
LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	P2GE	Monopitch Supported Gable	1	1	E14524180
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:07 Page: 1
ID:gddoXY6eIB?IWN3wALdqSZzcjj_-M434XGw2LgidH6AwkBym5AdJTbky2kd4ZrPEl2z5JTw



Scale = 1:28.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
WEDGE	Left: 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=6-0-8, 5=6-0-8, 6=6-0-8, 7=6-0-8
Max Horiz 2=55 (LC 14), 7=55 (LC 14)
Max Uplift 2=-26 (LC 11), 7=-26 (LC 11)
Max Grav 2=201 (LC 2), 5=77 (LC 22), 6=327 (LC 2), 7=201 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-78/62, 3-4=-42/29, 4-5=-9/26
BOT CHORD	2-6=-75/87, 5-6=-32/34
WEBS	3-6=-247/157

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5, 2, and 6. This connection is for uplift only and does not consider lateral forces.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 7.
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

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	PB1	Piggyback	11	1	E14524181
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:07 Page: 1

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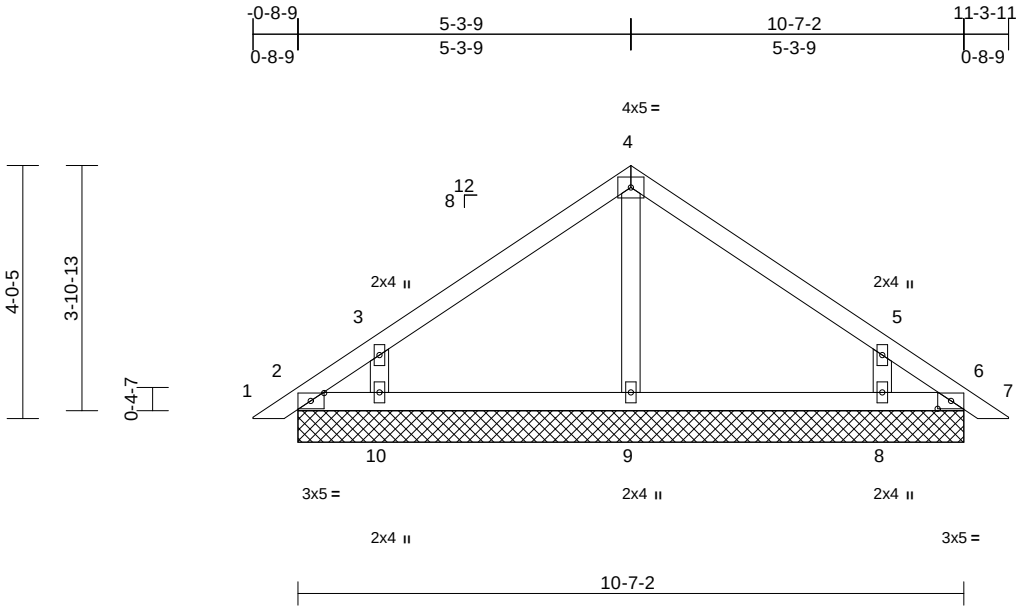

Scale = 1:36.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 44 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=10-7-2, 6=10-7-2, 8=10-7-2, 9=10-7-2, 10=10-7-2, 11=10-7-2, 15=10-7-2
Max Horiz 2=-76 (LC 11), 11=-76 (LC 11)
Max Uplift 2=-32 (LC 9), 6=-18 (LC 10), 8=-64 (LC 14), 10=-64 (LC 13), 11=-32 (LC 9), 15=-18 (LC 10)
Max Grav 2=52 (LC 26), 6=41 (LC 19), 8=301 (LC 26), 9=266 (LC 2), 10=302 (LC 25), 11=52 (LC 26), 15=41 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-78/74, 3-4=-115/80, 4-5=-112/80, 5-6=-60/60, 6-7=0/20
BOT CHORD 2-10=-21/51, 9-10=-20/51, 8-9=-20/51, 6-8=-20/51
WEBS 4-9=-179/29, 3-10=-270/189, 5-8=-270/189

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	E14524182
20050049	PB1GE	Piggyback	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:07 Page: 1
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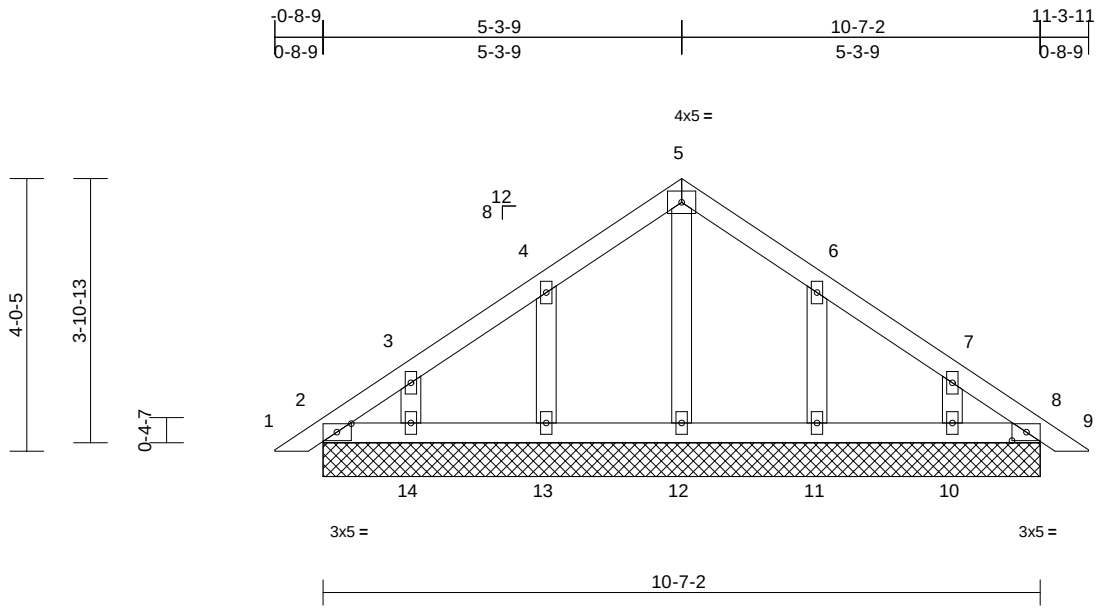

Scale = 1:34

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.02	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-MSH								
BCDL	10.0										Weight: 50 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=10-7-2, 8=10-7-2, 10=10-7-2, 11=10-7-2, 12=10-7-2, 13=10-7-2, 14=10-7-2, 15=10-7-2, 19=10-7-2
Max Horiz 2=-76 (LC 11), 15=-76 (LC 11)
Max Uplift 2=-12 (LC 9), 10=-27 (LC 14), 11=-33 (LC 14), 13=-33 (LC 13), 14=-28 (LC 13), 15=-12 (LC 9)
Max Grav 2=82 (LC 26), 8=81 (LC 2), 10=144 (LC 26), 11=179 (LC 26), 12=125 (LC 2), 13=179 (LC 25), 14=145 (LC 25), 15=82 (LC 26), 19=81 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-62/56, 3-4=-71/44, 4-5=-86/88, 5-6=-86/88, 6-7=-51/23, 7-8=-41/39, 8-9=0/20
BOT CHORD 2-14=-39/64, 13-14=-39/64, 12-13=-39/64, 11-12=-39/64, 10-11=-39/64, 8-10=-39/64
WEBS 5-12=-85/0, 4-13=-141/95, 3-14=-115/76, 6-11=-141/95, 7-10=-115/76

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T1	Half Hip	3	1	E14524183
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:07

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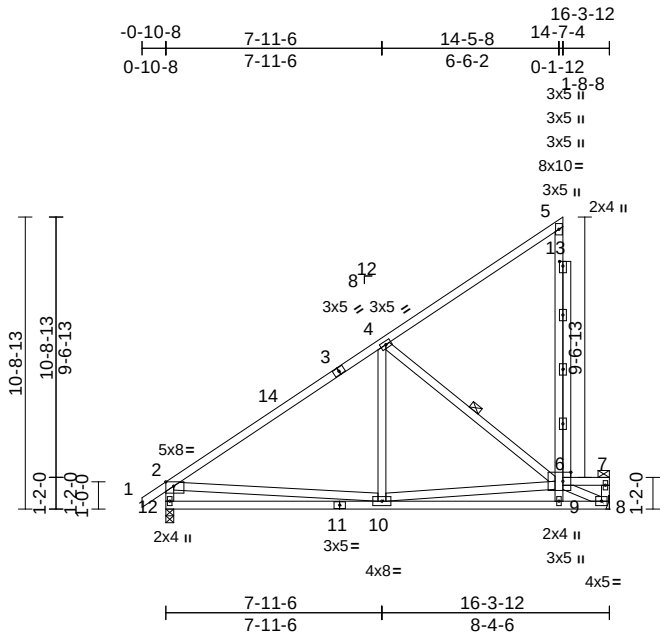

Scale = 1:84.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.07	9-10	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.14	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 126 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-5:2x4 SP No.1

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2 *Except* 7-8,8-6,12-2:2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9, 6-7.

BOT CHORD Rigid ceiling directly applied or 6-2-13 oc bracing.

WEBS 1 Row at midpt 4-6

REACTIONS (size) 8= Mechanical, 12=0-3-8

Max Horiz 12=552 (LC 15)

Max Uplift 8=-213 (LC 15)

Max Grav 8=1410 (LC 39), 12=842 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/43, 2-14=-989/40, 3-14=-878/42, 3-4=-735/67, 4-5=-269/200, 6-9=-51/119, 6-13=-937/318, 5-13=-937/320, 6-7=-122/41, 7-8=-183/110, 2-12=-773/138

BOT CHORD 11-12=-874/1010, 10-11=-874/1010, 9-10=-472/1958, 8-9=-686/2199

WEBS 4-10=0/332, 4-6=-858/269, 6-10=-1238/359, 6-8=-2376/722, 2-10=-178/438

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 16-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
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 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 8.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 693 lb down and 130 lb up at 14-7-4 on top 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=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-48, 2-5=-48, 6-7=-58, 8-12=-20

Concentrated Loads (lb)

Vert: 5=-606

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan E14524184
20050049	T1A	Half Hip	6	1	Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:08 Page: 1

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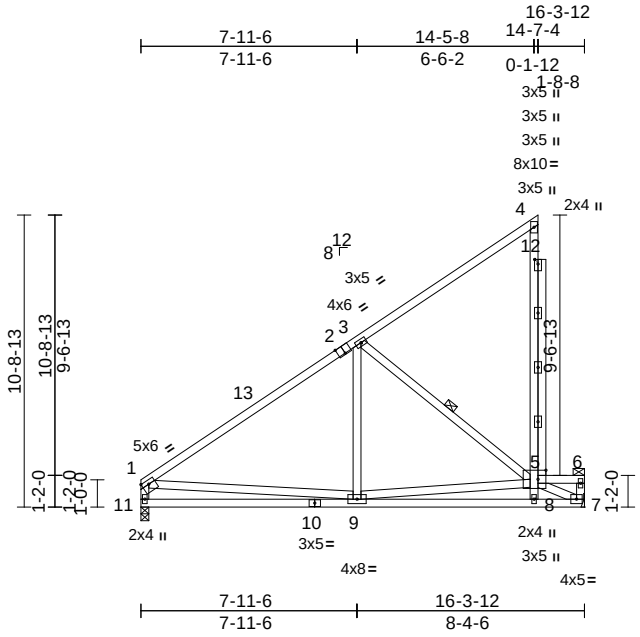

Scale = 1:84.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.07	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.14	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 125 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 2-4:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 6-7,11-1,7-5:2x4 SP No.3

BRACING

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

REACTIONS (size) 7= Mechanical, 11=0-3-8
Max Horiz 11=538 (LC 15)
Max Uplift 7=-213 (LC 15)
Max Grav 7=1411 (LC 38), 11=792 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-13=-988/36, 2-13=-746/61, 2-3=-695/64, 3-4=-271/198, 5-8=-51/119, 5-12=-932/315, 4-12=-932/317, 5-6=-122/41, 6-7=-182/110, 1-11=-723/93
BOT CHORD 10-11=-798/896, 9-10=-798/896, 8-9=-475/1963, 7-8=-687/2202
WEBS 3-9=0/318, 5-9=-1236/357, 1-9=-57/496, 5-7=-2379/722, 3-5=-867/274

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 16-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
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 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 7.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 693 lb down and 130 lb up at 14-7-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
12) 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=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-48, 5-6=-58, 7-11=-20
Concentrated Loads (lb)
Vert: 4=-606 (F)

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T1AGE	Half Hip Supported Gable	1	1	E14524185 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:08 Page: 1
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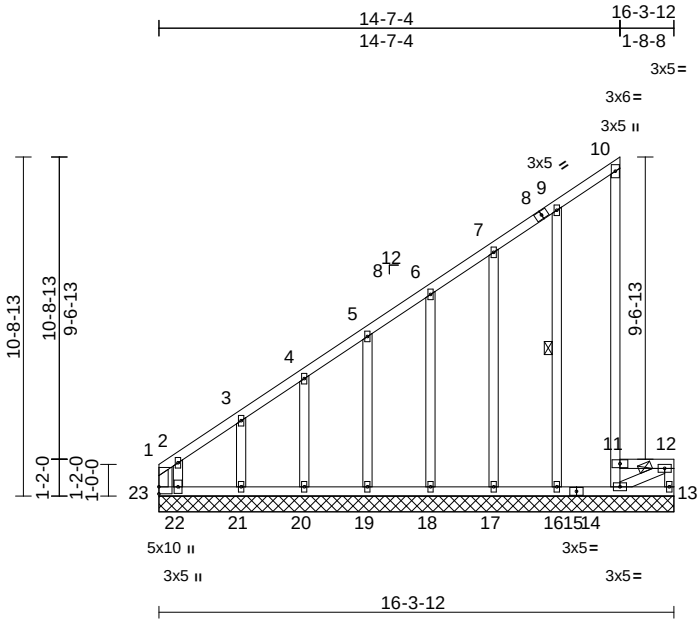

Scale = 1:73

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.13	Horiz(TL)	0.00	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
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 *Except* 10-14:2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 16-9,17-7,18-6:2x4 SP No.2

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.): 11-14, 11-12.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 13-14.
WEBS 1 Row at midpt 9-16

REACTIONS (size) 13=16-3-12, 14=16-3-12, 16=16-3-12, 17=16-3-12, 18=16-3-12, 19=16-3-12, 20=16-3-12, 21=16-3-12, 22=16-3-12, 23=16-3-12
Max Horiz 23=493 (LC 13)
Max Uplift 13=-214 (LC 13), 14=-11 (LC 9), 16=-106 (LC 13), 17=-15 (LC 13), 18=-33 (LC 13), 19=-28 (LC 13), 20=-32 (LC 13), 21=-21 (LC 13), 22=-679 (LC 13), 23=-545 (LC 11)
Max Grav 13=214 (LC 11), 14=833 (LC 26), 16=239 (LC 24), 17=149 (LC 29), 18=170 (LC 24), 19=165 (LC 24), 20=166 (LC 24), 21=167 (LC 24), 22=492 (LC 11), 23=894 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-720/622, 1-2=-809/698, 2-3=-557/482, 3-4=-495/429, 4-5=-437/381, 5-6=-378/333, 6-7=-317/282, 7-8=-268/241, 8-9=-256/247, 9-10=-159/141, 11-14=-734/206, 10-11=-728/185, 11-12=-424/468, 12-13=-288/312
BOT CHORD 22-23=-202/188, 21-22=-202/188, 20-21=-202/188, 19-20=-202/188, 18-19=-202/188, 17-18=-202/188, 16-17=-202/188, 15-16=-202/188, 14-15=-202/188, 13-14=-46/49
WEBS 9-16=-228/172, 7-17=-128/89, 6-18=-132/85, 5-19=-128/83, 4-20=-127/81, 3-21=-135/89, 2-22=-430/448, 12-14=-494/445

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-1-12 to 16-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
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=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23, 13, 16, 17, 18, 19, 20, 21, and 14. This connection is for uplift only and does not consider lateral forces.
12) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22. This connection is for uplift only and does not consider lateral forces.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-10=-48, 11-12=-58, 13-23=-20
Concentrated Loads (lb)
Vert: 10=-606 (F)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	E14524186
20050049	T2	Common	9	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:09 Page: 1
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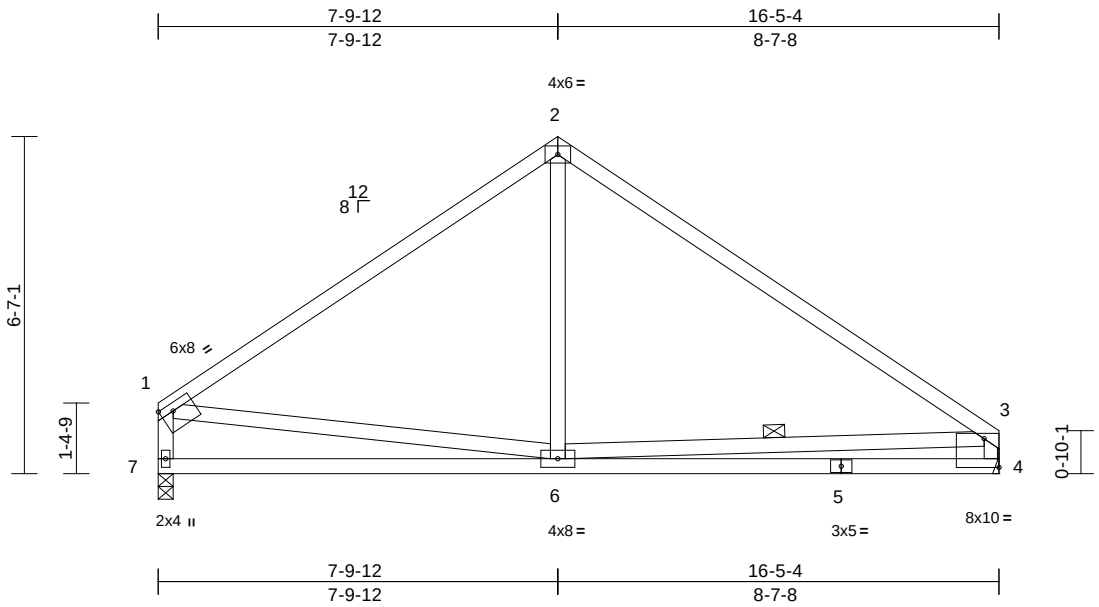

Scale = 1:45

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.01	4-6	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.12	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 88 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-6

REACTIONS (size) 4= Mechanical, 7=0-3-8
Max Horiz 7=-135 (LC 9)
Max Grav 4=646 (LC 2), 7=646 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-691/140, 2-3=-708/133, 1-7=-581/143, 3-4=-570/149
BOT CHORD 6-7=-144/291, 5-6=-184/471, 4-5=-184/471
WEBS 2-6=0/168, 1-6=-14/334, 3-6=-138/217

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T2GE	Common Supported Gable	1	1	E14524187
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:09 Page: 1
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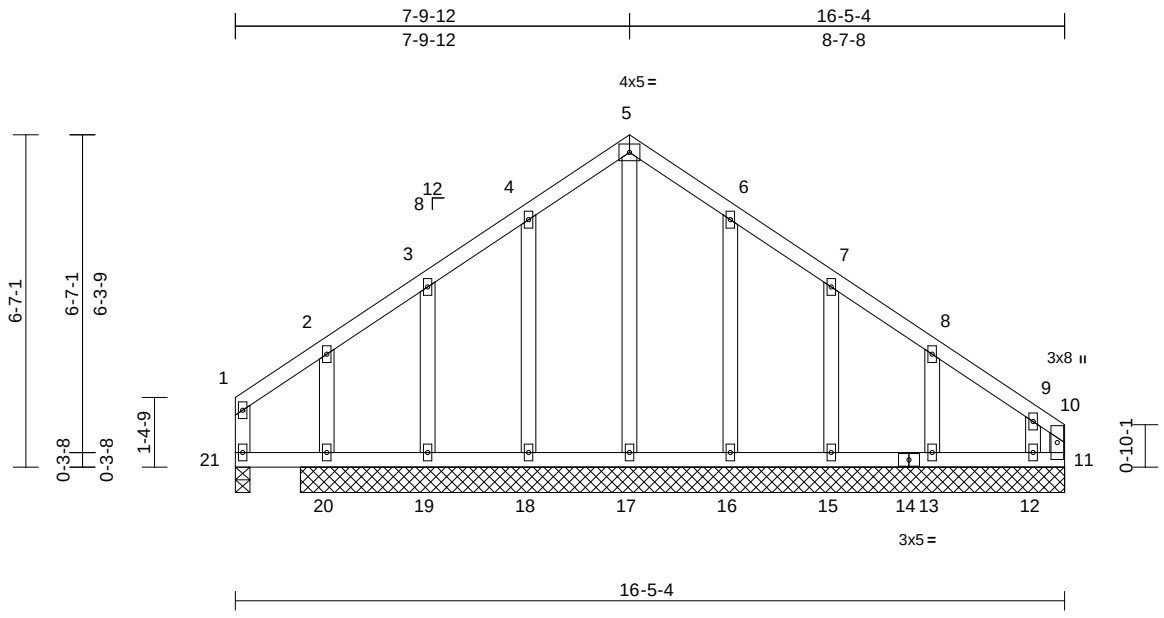

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	20-21	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	20-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 96 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 *Except* 17-5:2x4 SP No.2

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

REACTIONS (size) 11=15-1-12, 12=15-1-12, 13=15-1-12, 15=15-1-12, 16=15-1-12, 17=15-1-12, 18=15-1-12, 19=15-1-12, 20=15-1-12, 21=0-3-8
Max Horiz 21=-135 (LC 9)
Max Uplift 11=-191 (LC 12), 12=-143 (LC 9), 13=-29 (LC 14), 15=-31 (LC 14), 16=-29 (LC 14), 18=-29 (LC 13), 19=-27 (LC 13), 20=-49 (LC 13), 21=-16 (LC 9)
Max Grav 11=199 (LC 9), 12=228 (LC 25), 13=170 (LC 25), 15=164 (LC 25), 16=175 (LC 25), 17=157 (LC 26), 18=173 (LC 24), 19=162 (LC 24), 20=186 (LC 24), 21=78 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-54/19, 1-2=-50/34, 2-3=-81/84, 3-4=-131/144, 4-5=-180/201, 5-6=-180/201, 6-7=-131/144, 7-8=-99/97, 8-9=-111/99, 9-10=-147/136, 10-11=-125/114
BOT CHORD 20-21=-95/105, 19-20=-95/105, 18-19=-95/105, 17-18=-95/105, 16-17=-95/105, 15-16=-95/105, 14-15=-95/105, 13-14=-95/105, 12-13=-95/105, 11-12=-95/105
WEBS 5-17=-164/88, 4-18=-133/79, 3-19=-129/84, 2-20=-134/90, 6-16=-135/79, 7-15=-129/84, 8-13=-132/84, 9-12=-142/98

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21, 11, 18, 19, 20, 16, 15, 13, and 12. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T3	Common	5	1	E14524188
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:09 Page: 1

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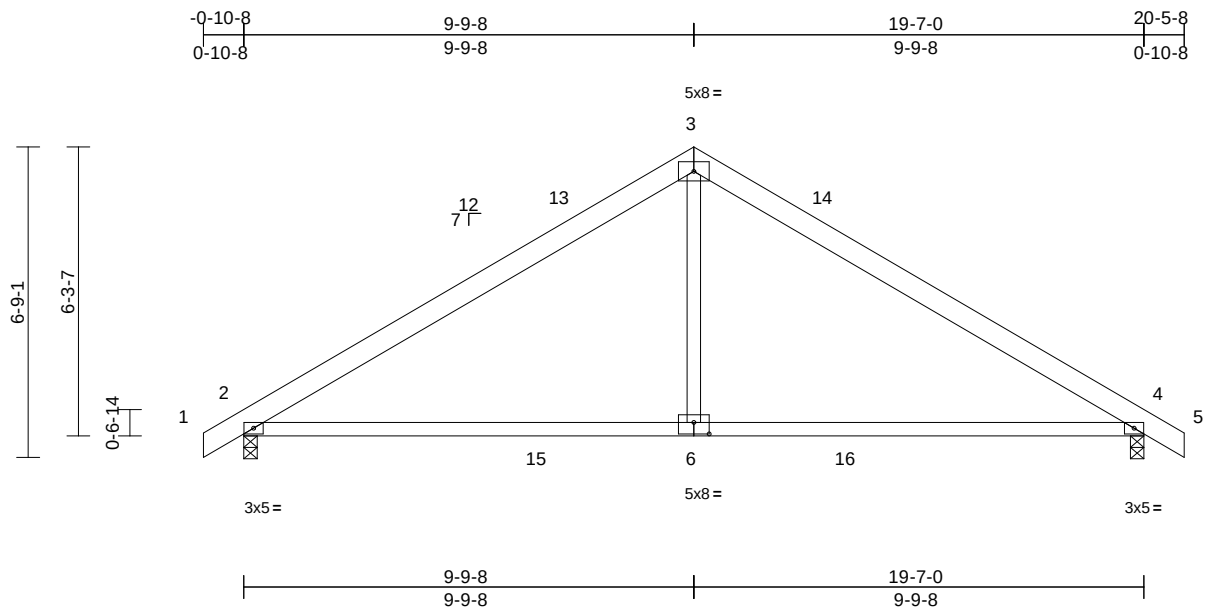

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Plate Offsets (X, Y): [6:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.13	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.29	6-9	>813	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 96 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-123 (LC 13)
Max Uplift 2=-4 (LC 15), 4=-4 (LC 16)
Max Grav 2=874 (LC 29), 4=874 (LC 30)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-13=-1065/148, 3-13=-876/178, 3-14=-876/178, 4-14=-1064/148, 4-5=0/33
BOT CHORD 2-15=-92/876, 6-15=-8/876, 6-16=-8/876, 4-16=-8/876
WEBS 3-6=0/456

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T3GE	Common Supported Gable	1	1	E14524189
					Job Reference (optional)

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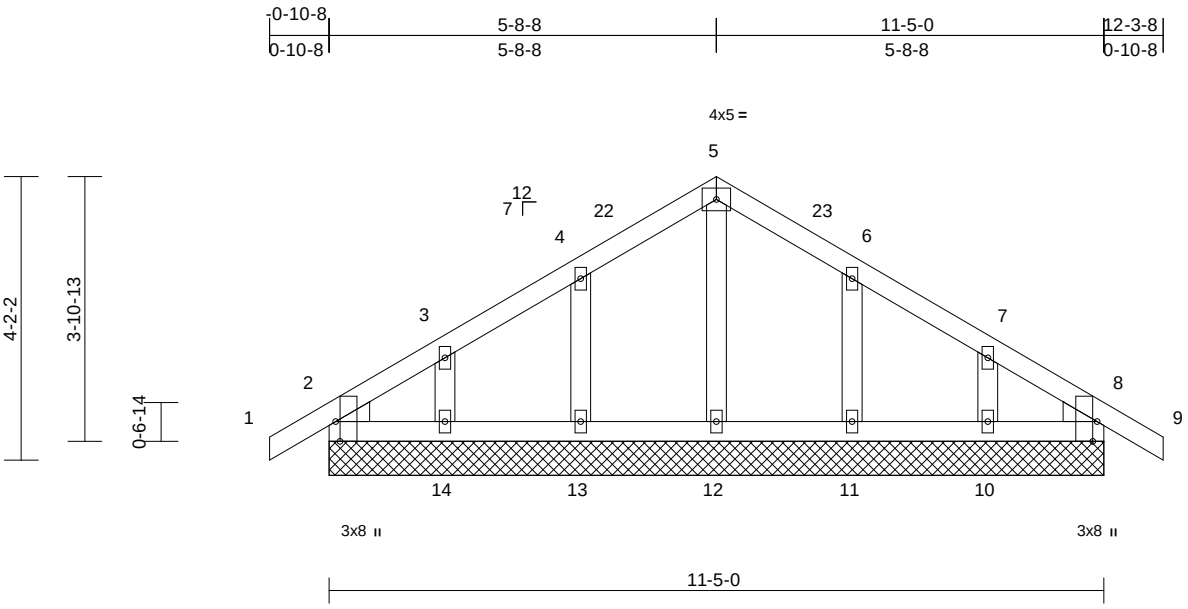

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Plate Offsets (X, Y): [2:0-3-8,Edge], [8:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.02	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-MSH								
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
WEDGE	Left: 2x4 SP No.3 Right: 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=11-5-0, 8=11-5-0, 10=11-5-0, 11=11-5-0, 12=11-5-0, 13=11-5-0, 14=11-5-0, 15=11-5-0, 19=11-5-0
Max Horiz 2=-76 (LC 13), 15=-76 (LC 13)
Max Uplift 2=-8 (LC 11), 10=-29 (LC 16), 11=-25 (LC 16), 13=-25 (LC 15), 14=-31 (LC 15), 15=-8 (LC 11)
Max Grav 2=133 (LC 2), 8=133 (LC 2), 10=151 (LC 30), 11=175 (LC 30), 12=129 (LC 2), 13=175 (LC 29), 14=154 (LC 29), 15=133 (LC 2), 19=133 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/33, 2-3=-58/51, 3-4=-65/42, 4-22=-90/80, 5-22=-79/91, 5-23=-79/91, 6-23=-90/80, 6-7=-46/36, 7-8=-36/26, 8-9=0/33
BOT CHORD	2-14=-33/64, 13-14=-33/64, 12-13=-33/64, 11-12=-33/64, 10-11=-33/64, 8-10=-33/64
WEBS	5-12=-90/0, 4-13=-135/84, 3-14=-119/72, 6-11=-135/84, 7-10=-120/72

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 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 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	
20050049	T3GR	Common Girder	1	2	Job Reference (optional)	E14524190

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:10 Page: 1

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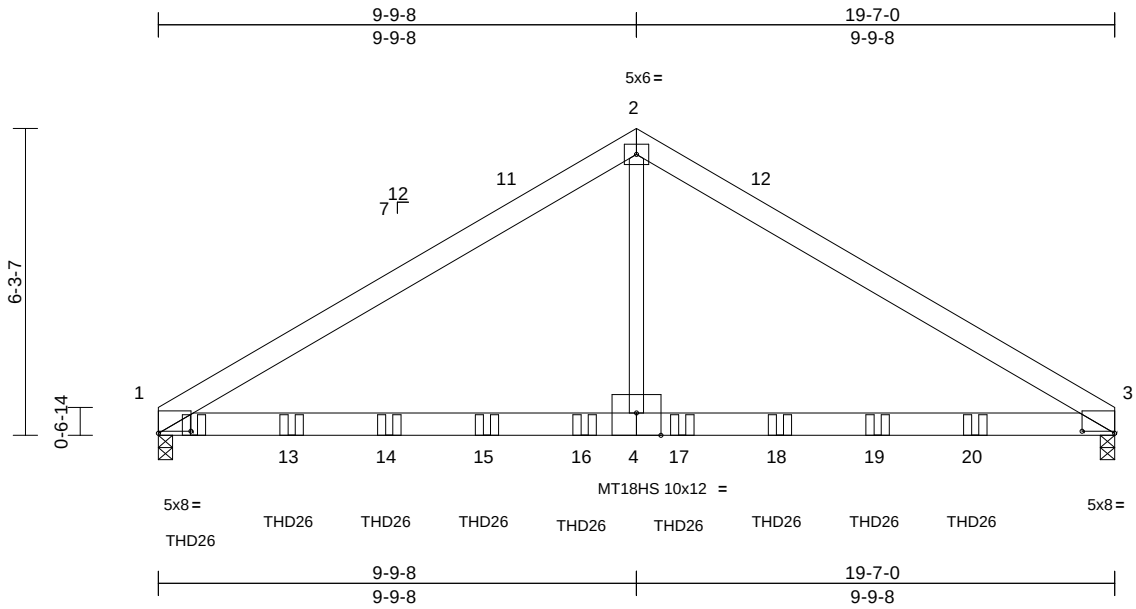

Scale = 1:47.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.18	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.36	4-7	>662	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.02	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 216 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=0-3-8, 3=0-3-8
Max Horiz 1=113 (LC 8)
Max Grav 1=3908 (LC 2), 3=3294 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-4543/0, 2-11=-4365/0, 2-12=-4333/0, 3-12=-4553/0
BOT CHORD 1-13=0/3889, 13-14=0/3889, 14-15=0/3889, 15-16=0/3889, 4-16=0/3889, 4-17=0/3889, 17-18=0/3889, 18-19=0/3889, 19-20=0/3889, 3-20=0/3889
WEBS 2-4=0/3738

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) All plates are MT20 plates unless otherwise indicated.
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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 16-8-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-48, 2-3=-48, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-529 (B), 13=-527 (B), 14=-527 (B), 15=-527 (B), 16=-527 (B), 17=-527 (B), 18=-527 (B), 19=-527 (B), 20=-527 (B)

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	T3SE	Common Structural Gable	1	1	E14524191
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:11 Page: 1

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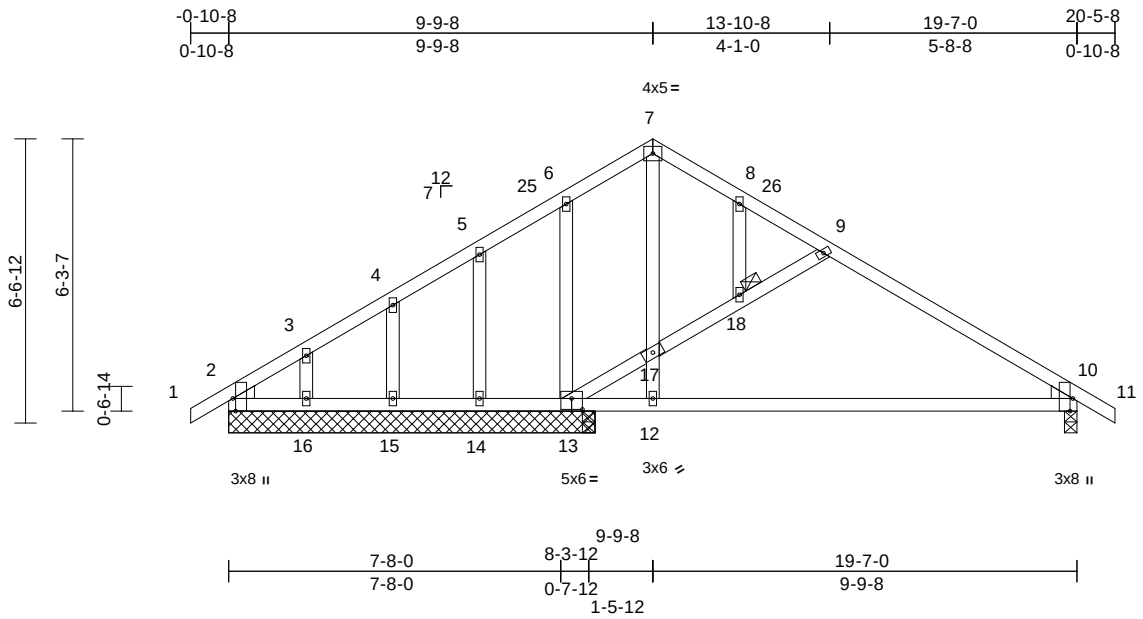

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Plate Offsets (X, Y): [2:0-3-8,Edge], [10:0-3-8,Edge], [13:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	0.04	12-24	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.21	12-24	>674	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 107 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 12-7:2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3
	Right: 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.
JOINTS	1 Brace at Jt(s): 18

REACTIONS (size) 2=8-5-8, 10=0-3-8, 13=8-5-8, 14=8-5-8, 15=8-5-8, 16=8-5-8, 19=8-5-8

Max Horiz 2=-123 (LC 13), 19=-123 (LC 13)

Max Uplift 13=-69 (LC 16), 14=-26 (LC 15), 15=-17 (LC 15), 16=-61 (LC 15)

Max Grav 2=315 (LC 2), 10=623 (LC 2), 13=313 (LC 2), 14=158 (LC 33), 15=174 (LC 29), 16=120 (LC 29), 19=315 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/33, 2-3=-345/0, 3-4=-341/0, 4-5=-338/0, 5-25=-323/0, 6-25=-278/0, 6-7=-328/0, 7-8=-309/0, 8-26=-317/0, 9-26=-373/0, 9-10=-688/49, 10-11=0/33
BOT CHORD	2-16=-7/278, 15-16=0/278, 14-15=0/278, 13-14=0/278, 12-13=0/571, 10-12=0/558
WEBS	12-17=0/221, 7-17=0/200, 17-18=-369/182, 9-18=-365/175, 13-17=-393/169, 6-13=-154/54, 5-14=-115/83, 4-15=-133/71, 3-16=-108/82, 8-18=-17/13

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 13.9 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
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) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 15, and 16. This connection is for uplift only and does not consider lateral forces.
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) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1008 from left end and 1008 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan
20050049	V1	Valley	1	1	E14524192
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:11 Page: 1

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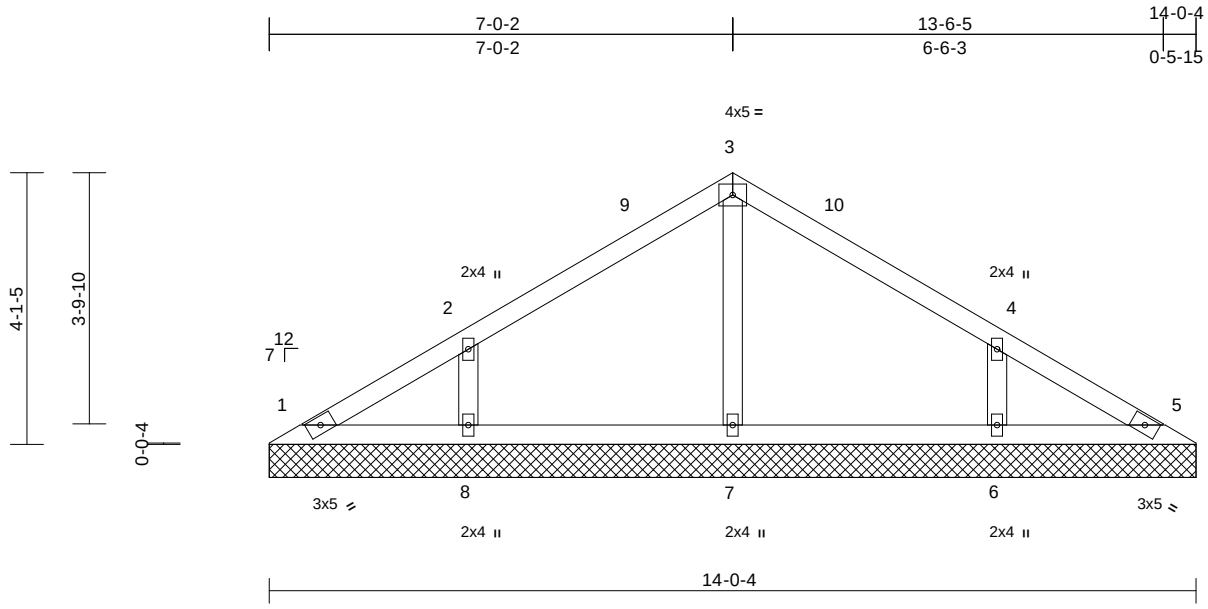

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 52 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=14-0-4, 5=14-0-4, 6=14-0-4, 7=14-0-4, 8=14-0-4

Max Horiz 1=-75 (LC 11)

Max Uplift 1=-3 (LC 11), 6=-53 (LC 16), 8=-53 (LC 15)

Max Grav 1=84 (LC 29), 5=78 (LC 2), 6=317 (LC 29), 7=274 (LC 2), 8=317 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-80/61, 2-9=-104/72, 3-9=-71/84, 3-10=-71/84, 4-10=-98/72, 4-5=-58/35
BOT CHORD	1-8=-17/42, 7-8=-17/42, 6-7=-17/42, 5-6=-17/42
WEBS	3-7=-191/24, 2-8=-244/146, 4-6=-244/146

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
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) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
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

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	E14524193
20050049	V2	Valley	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

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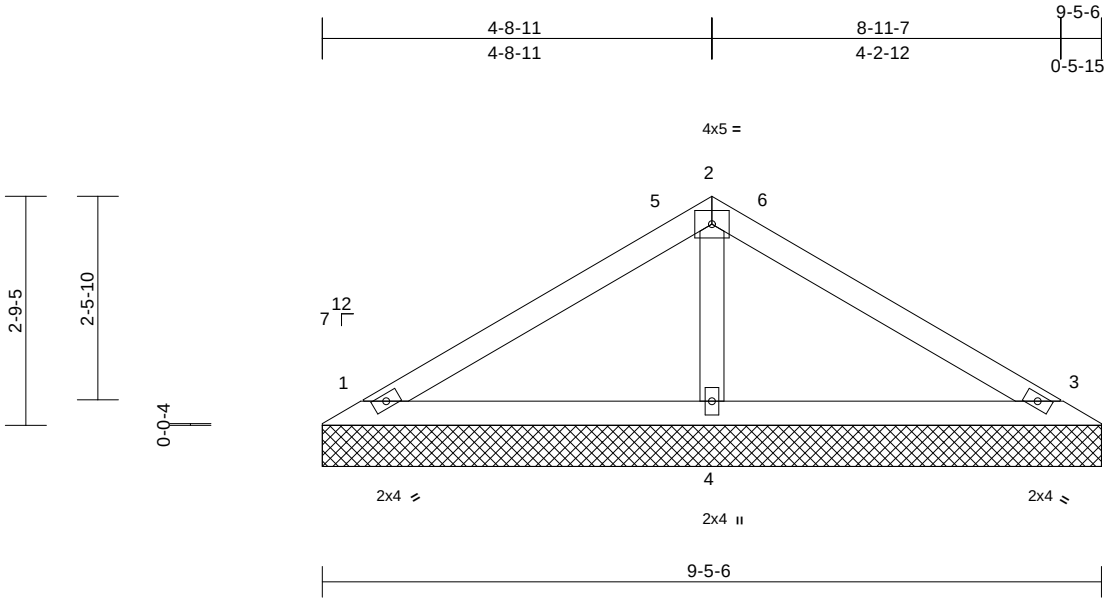

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 32 lb	FT = 20%

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

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

REACTIONS (size) 1=9-5-6, 3=9-5-6, 4=9-5-6
Max Horiz 1=49 (LC 14)
Max Uplift 1=-7 (LC 15), 3=-12 (LC 16)
Max Grav 1=158 (LC 32), 3=158 (LC 33), 4=362 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-101/36, 2-5=-30/48, 2-6=-30/48, 3-6=-100/36
BOT CHORD 1-4=-6/39, 3-4=-6/39
WEBS 2-4=-220/76

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
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) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 18,2020

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

Job	Truss	Truss Type	Qty	Ply	Stockton XL Plan	E14524194
20050049	V3	Valley	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Wed Jun 17 17:09:11 Page: 1
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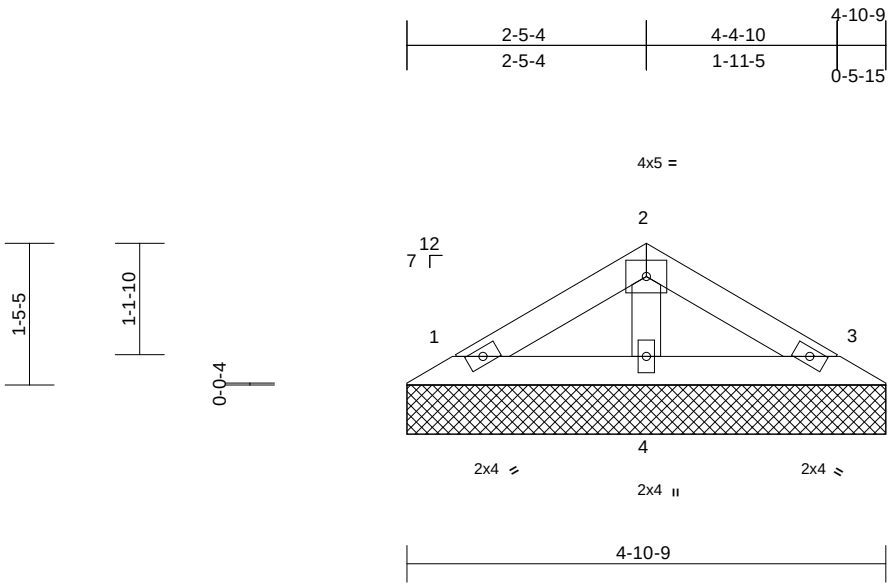

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 15 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 4-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-10-9, 3=4-10-9, 4=4-10-9
Max Horiz 1=22 (LC 14)
Max Uplift 1=-7 (LC 15), 3=-9 (LC 16)
Max Grav 1=81 (LC 2), 3=81 (LC 2), 4=148 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-42/22, 2-3=-40/22
BOT CHORD 1-4=-3/17, 3-4=-3/17
WEBS 2-4=-99/41

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
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) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

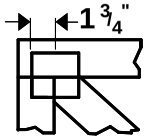
LOAD CASE(S) Standard

June 18,2020

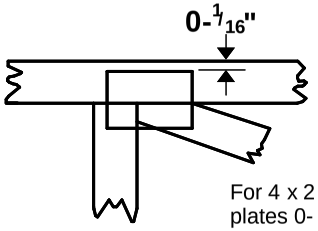
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

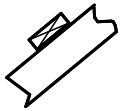
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

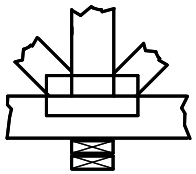
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

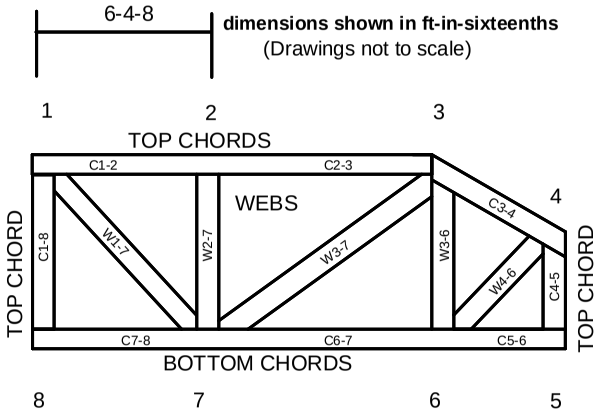


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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.