

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 21020141-A
2854 Norrington-Roof-Marinette

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 (Chesapeake, VA).

Pages or sheets covered by this seal: E15512279 thru E15512344

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



March 18, 2021

Gilbert, Eric

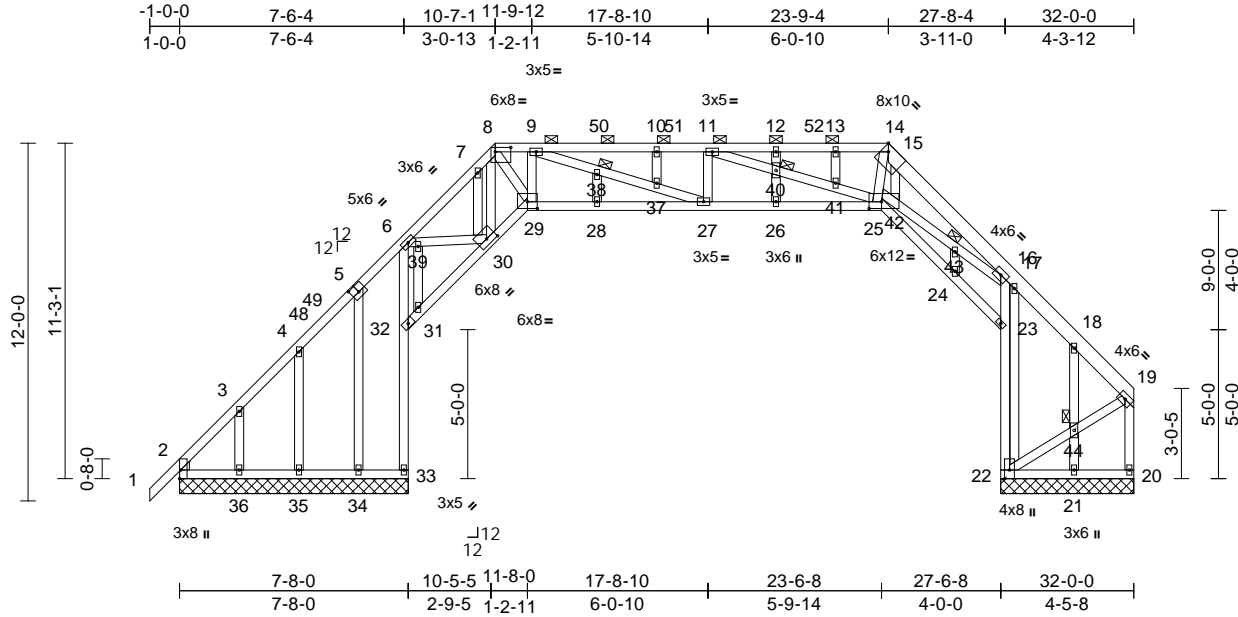
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 21020141-A	Truss A01	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512279
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



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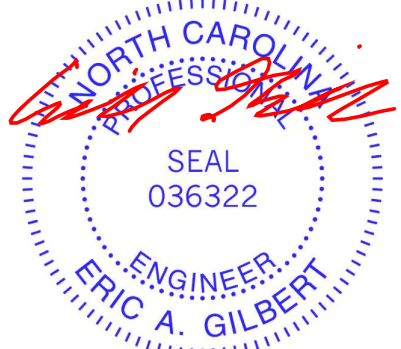
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.20	26	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.31	26	>783	180		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.27	23	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 251 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 14-19:2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 33-6,16-22:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* 25-16:2x4 SP No.1, 14-25:2x4 SP 2400F 2.0E
OTHERS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-5 max.): 8-14.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 38, 40, 43, 44
REACTIONS (size)
2=7-8-0, 20=4-5-8, 21=4-5-8, 22=4-5-8, 23=4-5-8, 32=7-8-0, 33=7-8-0, 34=7-8-0, 35=7-8-0, 36=7-8-0, 45=7-8-0
Max Horiz 2=319 (LC 13), 45=319 (LC 13)
Max Uplift 2=-293 (LC 10), 20=-90 (LC 10), 21=-142 (LC 53), 22=-84 (LC 53), 23=-71 (LC 11), 32=-259 (LC 11), 33=-30 (LC 39), 34=-79 (LC 14), 35=-98 (LC 14), 36=-150 (LC 14), 45=-293 (LC 10)
Max Grav 2=375 (LC 13), 20=148 (LC 13), 21=105 (LC 13), 22=28 (LC 10), 23=1478 (LC 2), 32=1171 (LC 2), 33=11 (LC 11), 34=186 (LC 48), 35=202 (LC 2), 36=266 (LC 31), 45=375 (LC 13)
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/57, 2-3=-431/396, 3-4=-387/368, 4-48=-362/354, 48-49=-354/356, 5-49=-338/365, 5-6=-326/357, 6-7=-1089/185, 7-8=-1091/251, 8-9=-1679/259, 9-50=-2652/343, 10-50=-2652/343, 10-51=-2652/343, 11-51=-2652/343, 11-12=-1480/154, 12-52=-1480/154, 13-52=-1480/154, 13-14=-1480/154, 14-15=-1368/156, 15-16=-2154/240, 16-17=-104/444, 17-18=-145/268, 18-19=-151/178, 19-20=-165/170
BOT CHORD 2-36=-178/153, 35-36=-38/3, 34-35=-38/3, 33-34=-38/4, 32-33=0/0, 6-32=-976/239, 31-32=-194/23, 30-31=-126/22, 29-30=-241/1082, 28-29=-335/1740, 27-28=-335/1740, 26-27=-408/2652, 25-26=-408/2652, 24-25=-310/50, 23-24=-291/33, 22-23=-173/15, 16-23=-1437/85, 21-22=-34/41, 20-21=-34/41
WEBS 6-39=-175/789, 30-39=-178/798, 8-30=-724/131, 8-29=-320/1894, 9-29=-833/151, 9-38=-111/965, 37-38=-123/970, 27-37=-108/941, 11-27=-81/43, 11-40=-1224/197, 40-41=-1227/195, 25-41=-1275/207, 25-42=-223/1524, 42-43=-270/1862, 16-43=-274/1838, 22-44=-48/35, 19-44=-48/35, 14-25=-62/586, 10-37=-93/54, 28-38=-23/66, 7-30=-205/105, 31-39=-89/29, 5-34=-125/106, 4-35=-177/129, 3-36=-185/142, 12-40=-59/47, 26-40=-50/66, 13-41=-139/36, 15-42=-101/758, 24-43=0/72, 17-22=-36/281, 18-44=-51/213, 21-44=-51/211

- 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) exterior zone and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 7-4-10, Corner (3) 7-4-10 to 13-9-7, Exterior (2) 13-9-7 to 20-6-14, Corner (3) 20-6-14 to 26-11-10, Exterior (2) 26-11-10 to 28-7-14, Corner (3) 28-7-14 to 31-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.

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



March 18, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss A01	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512279
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Carter Components, Chesapeake, VA - 23323,

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Page: 2

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) This truss is not designed to support a ceiling and is not intended for use where aesthetics are a consideration.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Bearing at joint(s) 32, 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 33.
- 15) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 32, 23, 20, 34, 35, 36, and 21. This connection is for uplift only and does not consider lateral forces.
- 16) One RT16A 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.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Edenton, NC 27932

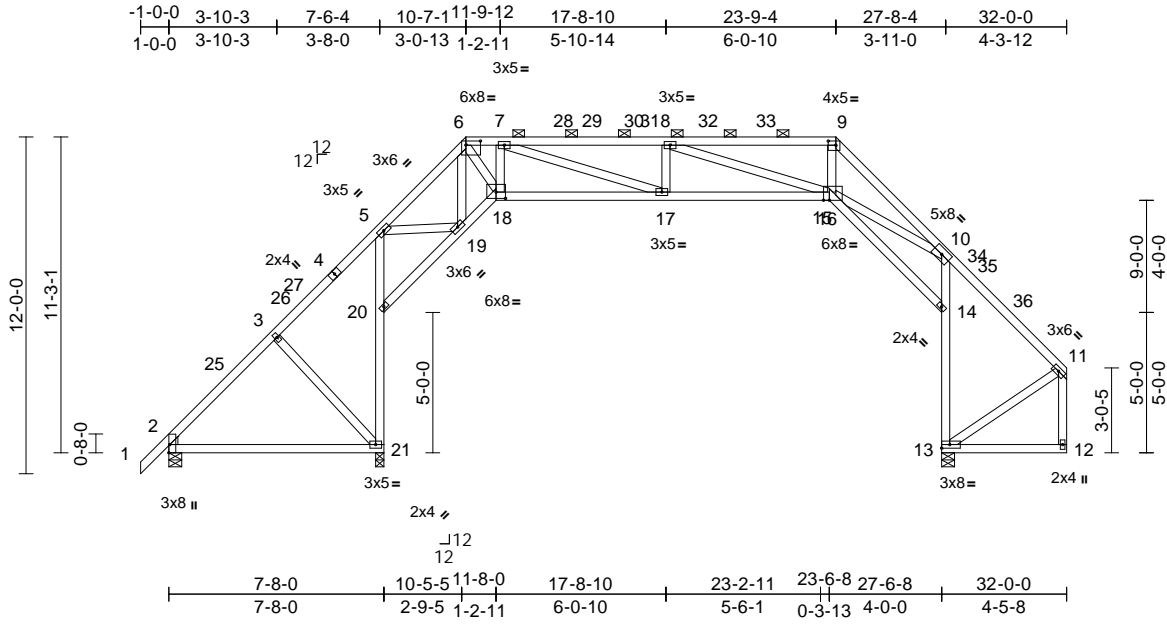
Job 21020141-A	Truss A02	Truss Type Piggyback Base	Qty 4	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512280
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Carter Components, Chesapeake, VA - 23323,

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Page: 1

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Plate Offsets (X, Y): [2:Edge,0-0-7], [6:0-6-4,0-1-12], [9:0-3-4,0-1-12], [15:0-2-8,Edge], [18:0-4-0,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.17	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.27	16-17	>894	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.73	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 198 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* 21-5:2x4 SP No.2, 10-13:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-15 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 5-1-12 oc bracing.

REACTIONS (size) 2=0-5-8, 13=0-5-8, 21=0-3-8
Max Horiz 2=321 (LC 13)
Max Uplift 2=-161 (LC 10), 13=-182 (LC 15), 21=-335 (LC 11)
Max Grav 2=533 (LC 32), 13=1455 (LC 2), 21=1386 (LC 55)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-25=-470/295, 3-25=-402/322, 3-26=-375/322, 26-27=-369/325, 4-27=-362/329, 4-5=-350/350, 5-6=-1176/130, 6-7=-1750/288, 7-28=-2795/444, 28-29=-2795/444, 29-30=-2795/444, 30-31=-2795/444, 8-31=-2795/444, 8-32=-1561/301, 32-33=-1561/301, 9-33=-1561/301, 9-10=-2078/399, 10-34=-19/297, 34-35=-21/262, 35-36=-24/242, 11-36=-47/125, 11-12=-88/99
BOT CHORD 2-21=-224/173, 20-21=-1151/305, 5-20=-1074/306, 19-20=-93/38, 18-19=-257/1152, 17-18=-368/1811, 16-17=-511/2795, 15-16=-368/1561, 14-15=-704/725, 13-14=-1370/324, 10-14=-1016/137, 12-13=-40/41

WEBS 5-19=-192/836, 6-19=-804/210, 6-18=-347/1920, 7-18=-826/174, 7-17=-151/1036, 8-17=-197/130, 8-16=-1303/354, 9-15=-228/1126, 10-15=-238/1776, 11-13=-123/117, 3-21=-263/172

- 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-2-6, Interior (1) 2-2-6 to 6-0-12, Exterior (2) 6-0-12 to 15-1-5, Interior (1) 15-1-5 to 19-2-15, Exterior (2) 19-2-15 to 28-3-9, Interior (1) 28-3-9 to 28-7-14, Exterior (2) 28-7-14 to 31-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, and 21. This connection is for uplift only and does not consider lateral forces.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



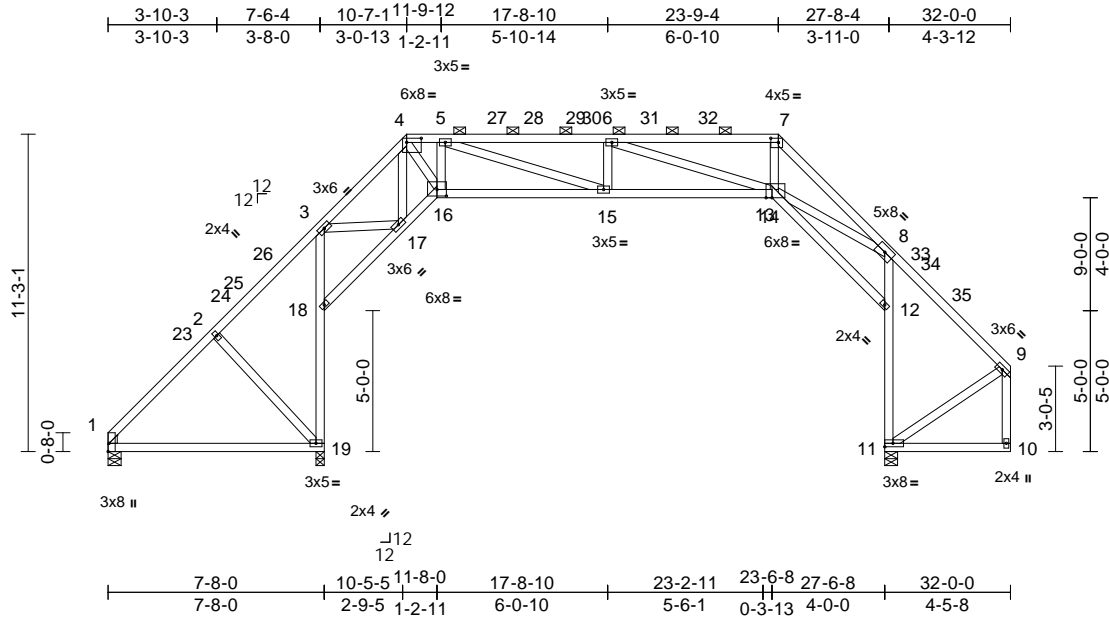
March 18, 2021

Job 21020141-A	Truss A03	Truss Type Piggyback Base	Qty 4	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512281
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.17	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.10	19-22	>868	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.73	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 196 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* 19-3:2x4 SP No.2,
8-11:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP 2400F 2.0E

WEBS
3-17=-192/836, 4-17=-804/210,
4-16=-347/1920, 5-16=-826/173,
5-15=-151/1036, 6-15=-197/130,
6-14=-1303/355, 7-13=-228/1126,
8-13=-238/1777, 9-11=-123/117,
2-19=-270/175

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
LOAD CASE(S) Standard

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-15 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 5-1-15 oc bracing.
REACTIONS (size) 1=0-5-8, 11=0-5-8, 19=0-3-8
Max Horiz 1=304 (LC 13)
Max Uplift 1=-163 (LC 10), 11=-182 (LC 15),
19=-336 (LC 11)
Max Grav 1=478 (LC 31), 11=1456 (LC 2),
19=1390 (LC 54)

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) exterior zone and C-C Exterior (2) 0-0-0 to 3-2-6, Interior (1) 3-2-6 to 6-0-12, Exterior (2) 6-0-12 to 15-1-5, Interior (1) 15-1-5 to 19-2-15, Exterior (2) 19-2-15 to 28-3-9, Interior (1) 28-3-9 to 28-7-14, Exterior (2) 28-7-14 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 1, and 19. This connection is for uplift only and does not consider lateral forces.

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-471/295, 2-23=-385/322,
2-24=-375/322, 24-25=-369/325,
25-26=-362/329, 3-26=-348/350,
3-4=-1177/130, 4-5=-1751/288,
5-27=-2795/445, 27-28=-2795/445,
28-29=-2795/445, 29-30=-2795/445,
6-30=-2795/445, 6-31=-1561/301,
31-32=-1561/301, 7-32=-1561/301,
7-8=-2079/399, 8-33=-19/296,
33-34=-21/262, 34-35=-24/242,
9-35=-47/131, 9-10=-88/99
BOT CHORD 1-19=-224/179, 18-19=-1147/304,
3-18=-1072/306, 17-18=-92/39,
16-17=-257/1153, 15-16=-368/1812,
14-15=-512/2795, 13-14=-368/1561,
12-13=-704/725, 11-12=-1370/325,
8-12=-1016/137, 10-11=-40/41



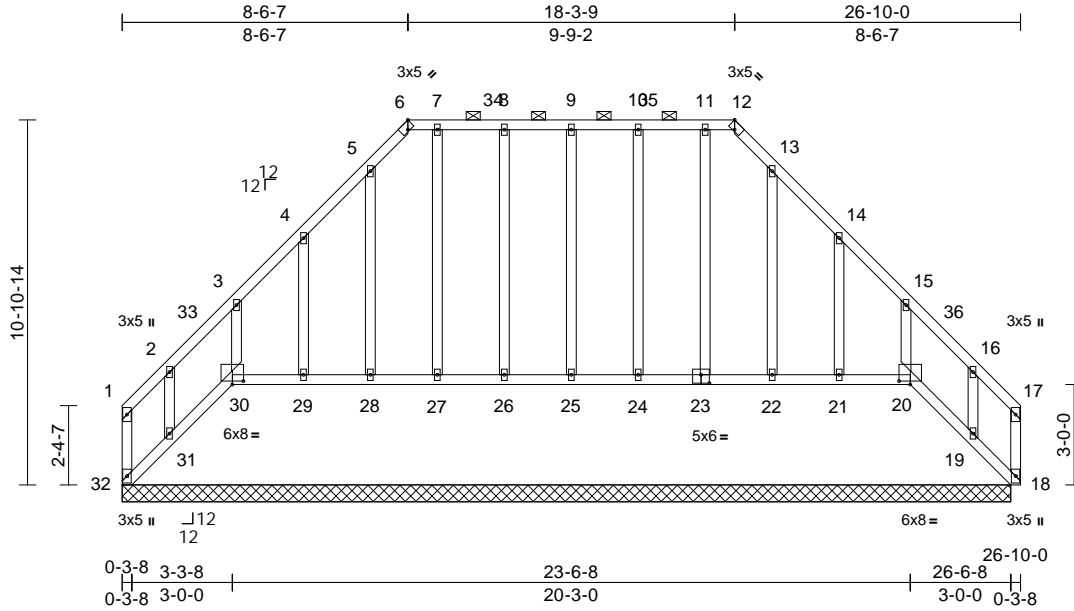
March 18, 2021

Job 21020141-A	Truss B01	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512282
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



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Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	-0.01	18	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 200 lb	FT = 20%

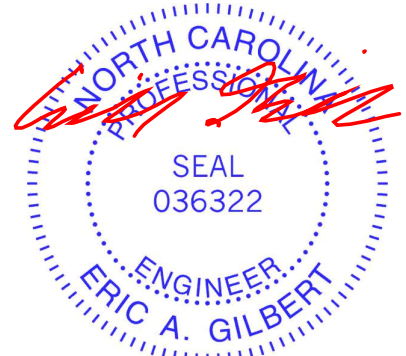
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-10-12 oc bracing: 31-32
6-0-0 oc bracing: 30-31,19-20.

REACTIONS All bearings 26-6-8.
(lb) - Max Horiz 32=281 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 23, 24, 25, 26, 30 except 18=206 (LC 11), 19=359 (LC 10), 20=150 (LC 11), 21=155 (LC 15), 29=152 (LC 14), 31=376 (LC 11), 32=498 (LC 10)
Max Grav All reactions 250 (lb) or less at joint(s) 18, 22, 23, 24, 25, 26, 27, 28 except 19=436 (LC 13), 20=319 (LC 44), 21=277 (LC 46), 29=272 (LC 44), 30=272 (LC 44), 31=451 (LC 12), 32=540 (LC 13)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-255/243, 3-4=-222/251, 4-5=-332/381, 5-6=-316/360, 6-7=-274/324, 7-34=-274/324, 8-34=-274/324, 8-9=-274/324, 9-10=-274/324, 10-35=-274/324, 11-35=-274/324, 11-12=-272/321, 12-13=-313/356, 13-14=-329/377
BOT CHORD 31-32=-310/305
WEBS 2-31=-278/235, 16-19=-272/229

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Corner (3) 0-1-12 to 3-5-0, Exterior (2) 3-5-0 to 5-5-0, Corner (3) 5-5-0 to 11-5-0, Exterior (2) 11-5-0 to 15-3-9, Corner (3) 15-3-9 to 21-5-0, Exterior (2) 21-5-0 to 23-5-0, Corner (3) 23-5-0 to 26-8-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.



March 18, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette
21020141-A	B01	Piggyback Base Supported Gable	1	1	E15512282
					Job Reference (optional)

Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Feb 12 2021 Print: 8.430 S Feb 12 2021 MiTek Industries, Inc. Thu Mar 18 12:42:59

Page: 2

ID:Czb28pWOkvy3F3IMR55_1KzaSbW-LrorWuD0PcuC_Ucg6jOzjHrSZEVLWNzkhhoUSszZiti

- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32, 18, 30, 31, and 19. This connection is for uplift only and does not consider lateral forces.
- 13) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20, 25, 26, 29, 24, 23, and 21. This connection is for uplift only and does not consider lateral forces.
- 14) Non Standard bearing condition. Review required.
- 15) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



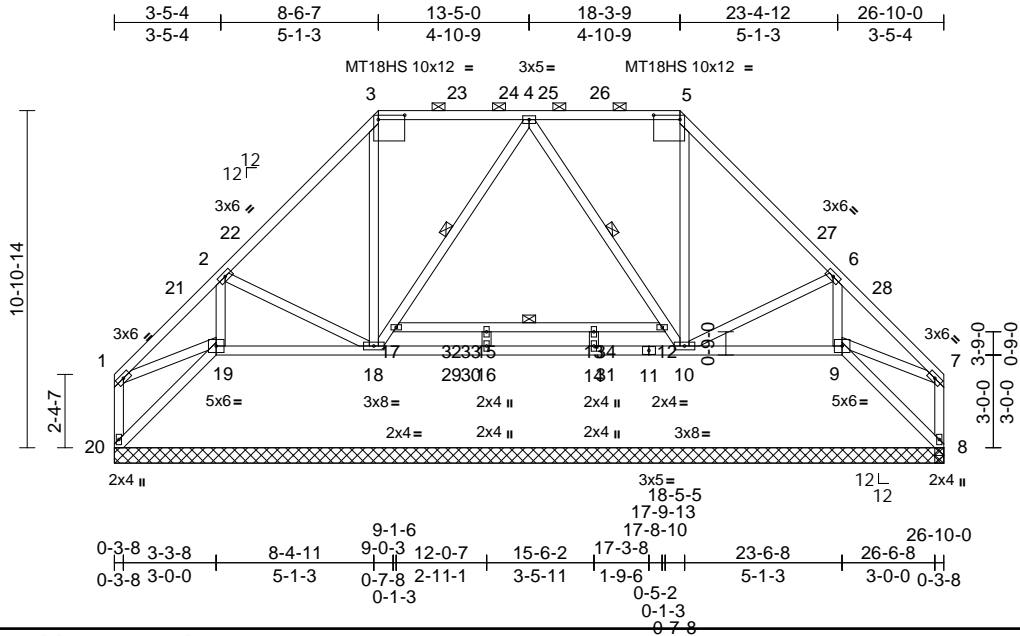
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B02	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512283
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:46
ID:6NsEICBCc6JkphXePN_rdzaSJs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:74.5

Plate Offsets (X, Y): [3:0-10-4:0-1-12], [5:0-10-4:0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.02	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	9-10	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 196 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-3-8 oc bracing. Except:
6-0-0 oc bracing: 12-17
WEBS 1 Row at midpt 4-18, 4-10

REACTIONS (size)
8=26-10-0, 9=26-10-0, 10=26-10-0,
14=26-10-0, 16=26-10-0,
18=26-10-0, 19=26-10-0,
20=26-10-0
Max Horiz 20=290 (LC 11)
Max Uplift 8=-30 (LC 14), 9=-93 (LC 15),
10=-90 (LC 15), 18=-84 (LC 11),
19=-247 (LC 11), 20=-272 (LC 10)
Max Grav 8=167 (LC 31), 9=502 (LC 39),
10=706 (LC 55), 14=357 (LC 22),
16=413 (LC 22), 18=728 (LC 54),
19=642 (LC 47), 20=360 (LC 13)

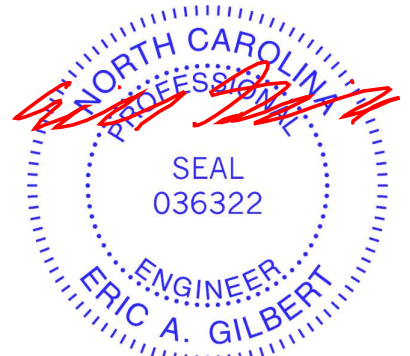
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-125/54, 1-21=-162/87, 2-21=-81/99,
2-22=-239/81, 3-22=-95/142, 3-23=-140/156,
23-24=-140/156, 4-24=-140/156,
4-25=-138/157, 25-26=-138/157,
5-26=-138/157, 5-27=-92/132, 6-27=-236/82,
6-28=-19/53, 7-28=-131/28, 7-8=-125/54

BOT CHORD 19-20=-406/398, 18-19=-181/203,
18-29=-144/245, 29-30=-144/245,
16-30=-144/245, 14-16=-144/245,
14-31=-144/245, 11-31=-144/245,
10-11=-144/245, 9-10=-53/93, 8-9=-51/63,
17-32=-31/0, 32-33=-31/0, 15-33=-31/0,
13-15=-31/0, 13-34=-31/0, 12-34=-31/0
WEBS 1-19=91/119, 2-19=-406/141,
2-18=-147/151, 3-18=-335/102,
17-18=-375/111, 4-17=-339/123,
4-12=-343/121, 10-12=-374/109,
5-10=-337/84, 6-10=-148/153, 6-9=-404/138,
7-9=-42/70, 15-16=-171/0, 13-14=-145/0

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) exterior zone and C-C Exterior (2) 0-1-12 to 3-5-4, Interior (1) 3-5-4 to 4-3-8, Exterior (2) 4-3-8 to 12-9-6, Interior (1) 12-9-6 to 14-0-10, Exterior (2) 14-0-10 to 22-6-8, Interior (1) 22-6-8 to 23-4-12, Exterior (2) 23-4-12 to 26-8-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) 200.0lb AC unit load placed on the bottom chord, 13-5-0 from left end, supported at two points, 5-0-0 apart.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.

8) All plates are 2x4 MT20 unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20, 8, 19, and 9. This connection is for uplift only and does not consider lateral forces.
12) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 10. This connection is for uplift only and does not consider lateral forces.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



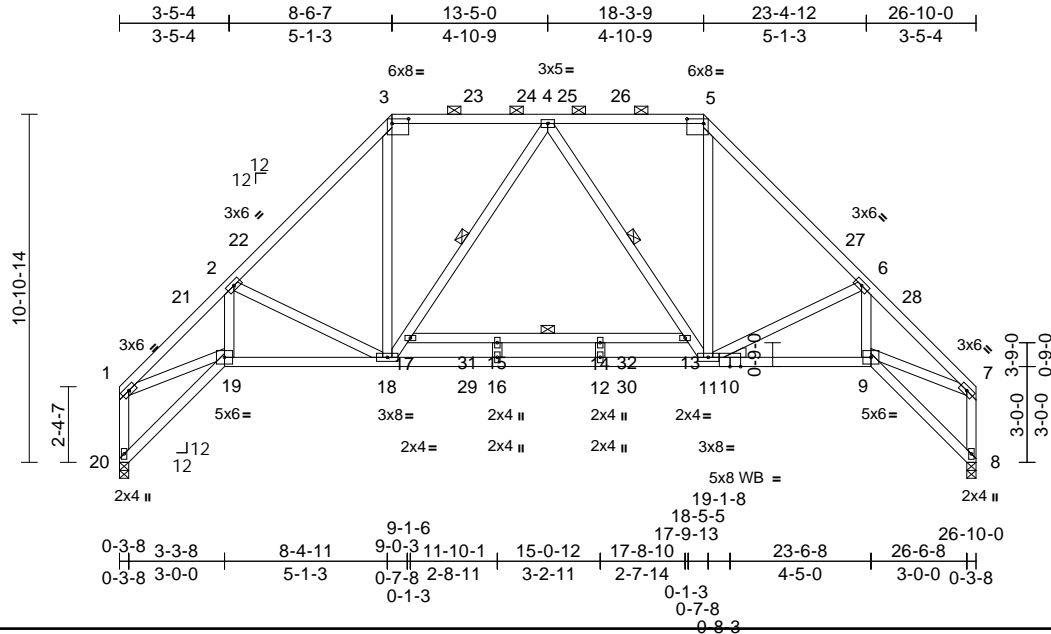
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B03	Truss Type Piggyback Base	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512284
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:47
ID:0aTa73FiQelFMZ0rGW6jgpzaYpW-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:72.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.26	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.67	14-15	>476	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.26	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 197 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 19-10:2x4 SP 2400F
2.0E, 17-13,10-9:2x4 SP No.1
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

WEBS
1-19=64/1932, 2-19=277/661,
2-18=801/313, 3-18=0/945, 17-18=466/132,
4-17=360/203, 4-13=364/199,
11-13=471/123, 5-11=0/942, 6-11=677/244,
6-9=0/514, 7-9=0/1933, 15-16=31/8,
12-14=24/13

10) Bearing at joint(s) 20, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-14 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 19-20,8-9.
6-0-0 oc bracing: 13-17
WEBS 1 Row at midpt 4-18, 4-11
REACTIONS (size) 8=0-3-8, 20=0-3-8
Max Horiz 20=290 (LC 13)
Max Grav 8=1517 (LC 2), 20=1517 (LC 2)

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) exterior zone and C-C Exterior (2) 0-1-12 to 3-5-4, Interior (1) 3-5-4 to 4-3-8, Exterior (2) 4-3-8 to 12-9-6, Interior (1) 12-9-6 to 14-0-10, Exterior (2) 14-0-10 to 22-6-8, Interior (1) 22-6-8 to 23-4-12, Exterior (2) 23-4-12 to 26-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) 200.0lb AC unit load placed on the bottom chord, 13-5-0 from left end, supported at two points, 5-0-0 apart.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

LOAD CASE(S) Standard

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-1485/98, 1-21=-2730/158,
2-21=-2586/166, 2-22=-1954/0,
3-22=-1804/0, 3-23=-1251/64,
23-24=-1251/64, 4-24=-1251/64,
4-25=-1249/66, 25-26=-1249/66,
5-26=-1249/66, 5-27=-1801/0, 6-27=-1951/0,
6-28=-2563/0, 7-28=-2730/0, 7-8=-1481/9
19-20=-410/392, 18-19=-309/2009,
18-29=0/1447, 16-29=0/1447, 12-16=0/1447,
12-30=0/1447, 11-30=0/1447, 10-11=0/1853,
9-10=0/1853, 8-9=-59/57, 17-31=-96/0,
15-31=-96/0, 14-15=-96/0, 14-32=-96/0,
13-32=-96/0



March 18, 2021

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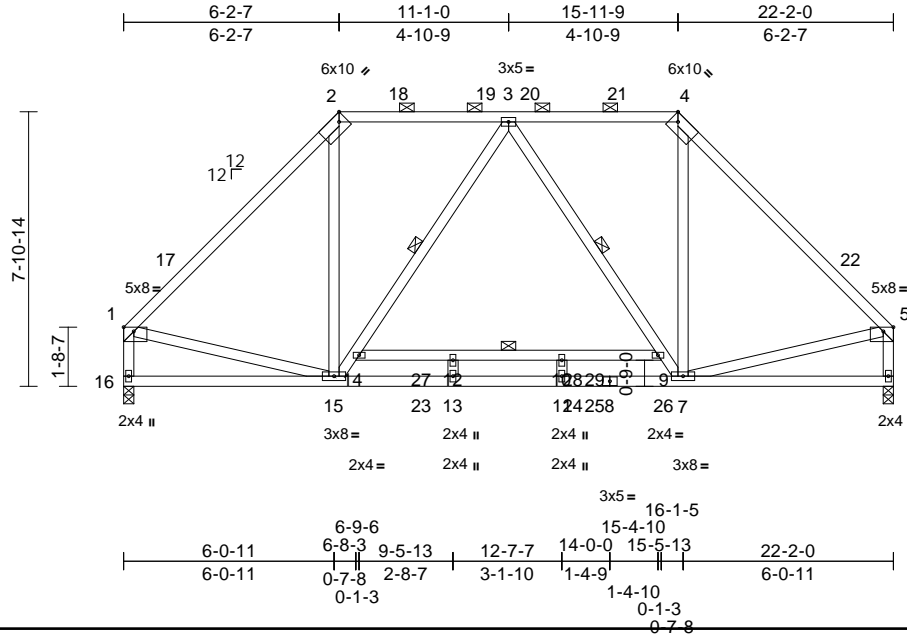


Job 21020141-A	Truss B05	Truss Type Piggyback Base	Qty 3	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512285
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:48
ID:dPrs3_nlQQYxEGAgb6shMszaSS8-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:66.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.31	10-12	>848	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.72	10-12	>365	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 157 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 6=0-3-8, 16=0-3-8
Max Horiz 16=205 (LC 11)
Max Grav 6=1283 (LC 2), 16=1283 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-1353/0, 2-17=-1181/0, 2-18=-823/93, 18-19=-823/93, 3-19=-823/93, 3-20=-823/93, 20-21=-823/93, 4-21=-823/93, 4-22=-1183/0, 5-22=-1353/0, 1-16=-1269/0, 5-6=-1269/0
BOT CHORD 15-16=-242/244, 15-23=0/1033, 13-23=0/1033, 11-13=0/1033, 11-24=0/1033, 24-25=0/1033, 8-25=0/1033, 8-26=0/1033, 7-26=0/1033, 6-7=-107/121, 14-27=-111/0, 12-27=-111/0, 10-12=-111/0, 10-28=-111/0, 28-29=-111/0, 9-29=-111/0
WEBS 2-15=0/554, 14-15=-456/81, 3-14=-333/162, 3-9=-333/162, 7-9=-456/79, 4-7=0/556, 1-15=0/812, 5-7=0/815, 12-13=-15/18, 10-11=-9/17

NOTES

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

- 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) exterior zone and C-C Exterior (2) 0-1-12 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 200.0lb AC unit load placed on the bottom chord, 11-1-0 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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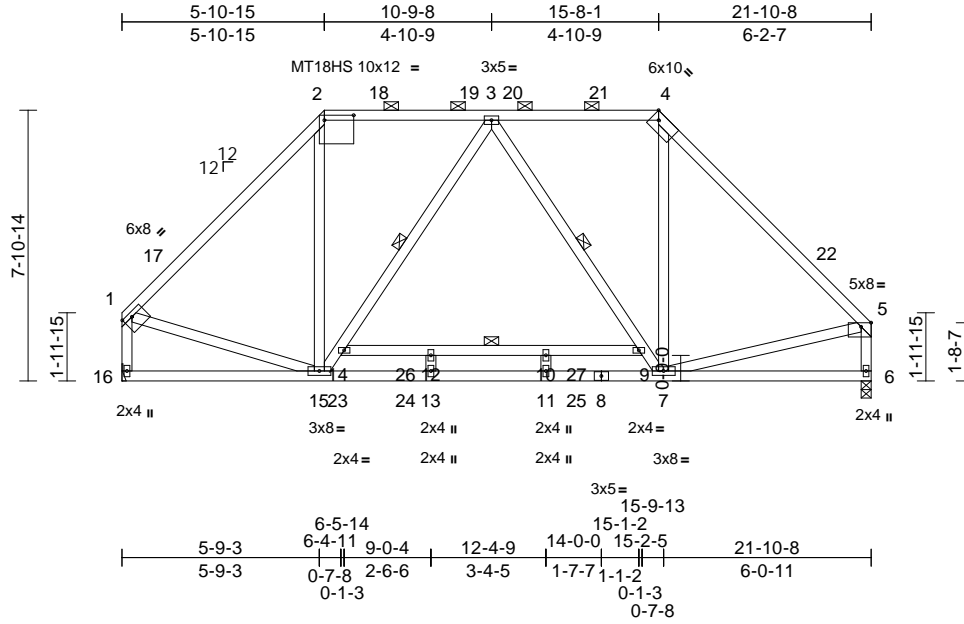
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B06	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512286
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:49
ID:oMncqEGLssoqk36emM7NoVzaSU5-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:67.3

Plate Offsets (X, Y): [1:0-3-4,0-1-8], [2:0-10-4,0-1-12], [4:0-2-8,Edge], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.30	10-12	>849	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.72	10-12	>359	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 157 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* 8-6:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

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

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

6-0-0 oc bracing: 9-14

WEBS 1 Row at midpt 3-15, 3-7

REACTIONS (size) 6=0-3-8, 16= Mechanical

Max Horiz 16=209 (LC 10)

Max Grav 6=1266 (LC 2), 16=1271 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-1292/0, 2-17=-1129/1, 2-18=-786/91, 18-19=-786/91, 3-19=-786/91, 3-20=-807/94, 20-21=-807/94, 4-21=-807/94, 4-22=-1158/0, 5-22=-1331/0, 1-16=-1263/0, 5-6=-1249/0

BOT CHORD 15-16=-228/220, 15-23=0/1013, 23-24=0/1013, 13-24=0/1013, 11-13=0/1013, 11-25=0/1013, 8-25=0/1013, 7-8=0/1013, 6-7=-104/122, 14-26=-113/0, 12-26=-113/0, 10-12=-113/0, 10-27=-113/0, 9-27=-113/0

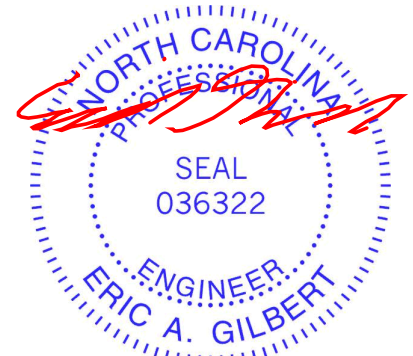
WEBS 2-15=0/528, 14-15=-474/79, 3-14=-350/161, 3-9=-319/163, 7-9=-444/77, 4-7=0/537, 1-15=0/801, 5-7=0/791, 12-13=-11/17, 10-11=-9/21

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) exterior zone and C-C Exterior (2) 0-5-4 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) 200.0lb AC unit load placed on the bottom chord, 10-9-8 from left end, supported at two points, 5-0-0 apart.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Refer to girder(s) for truss to truss connections.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



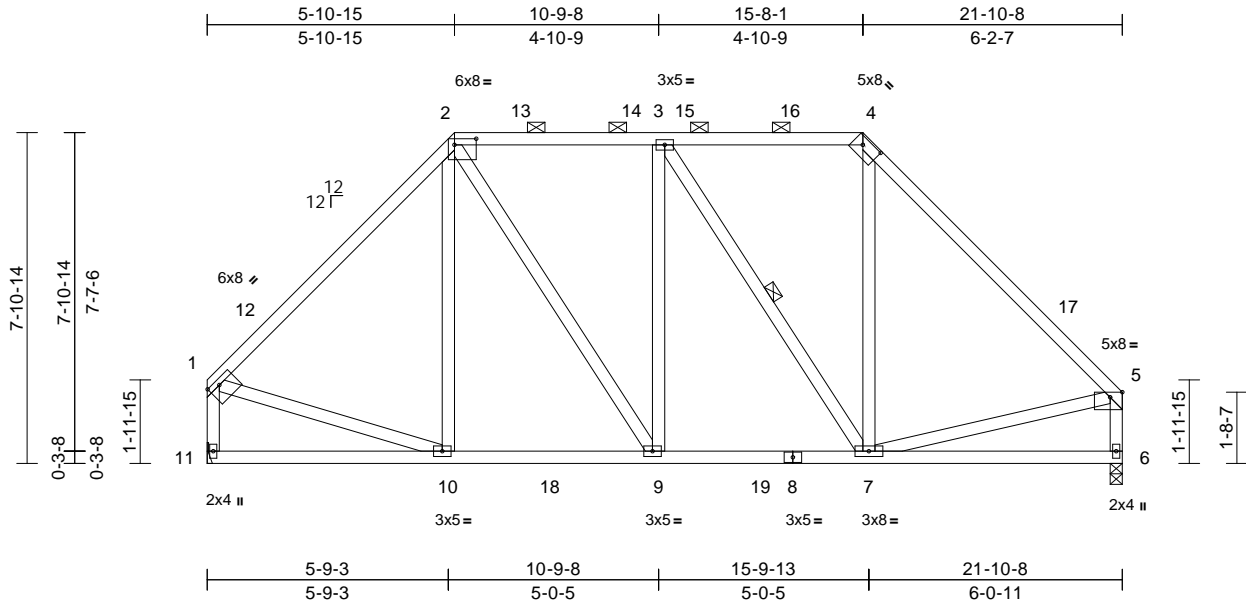
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B07	Truss Type Piggyback Base	Qty 2	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512287
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:50
ID:xy5DIRjdJKLTYn3HTFL8HDzaSxN-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC7f

Page: 1



Scale = 1:55.1

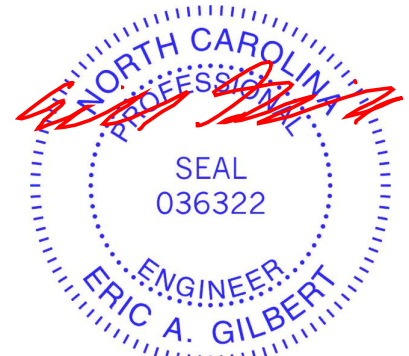
Plate Offsets (X, Y): [1:0-3-4,0-1-8], [2:0-6-4,0-1-12], [4:0-5-4,0-2-0], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.07	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 153 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x4 SP No.2
 - BOT CHORD 2x4 SP No.2
 - WEBS 2x4 SP No.3
- BRACING**
- TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-11-3 max.): 2-4.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 - WEBS 1 Row at midpt 3-7
- REACTIONS** (size) 6=0-3-8, 11= Mechanical
- Max Horiz 11=-209 (LC 10)
 - Max Uplift 6=-94 (LC 15), 11=-93 (LC 14)
 - Max Grav 6=1079 (LC 2), 11=1079 (LC 2)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-12=-1046/160, 2-12=-882/199, 2-13=-799/247, 13-14=-799/247, 3-14=-799/247, 3-15=-637/232, 15-16=-637/232, 4-16=-637/232, 4-17=-912/198, 5-17=-1085/160, 1-11=-1026/175, 5-6=-1022/176
 - BOT CHORD 10-11=-208/250, 10-18=-135/622, 9-18=-135/622, 9-19=-127/799, 8-19=-127/799, 7-8=-127/799, 6-7=-84/152
 - WEBS 2-10=-56/128, 3-7=-380/130, 4-7=-17/324, 1-10=-75/565, 5-7=-82/556, 3-9=-247/162, 2-9=-128/401

- 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) exterior zone and C-C Exterior (2) 0-5-4 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 11.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

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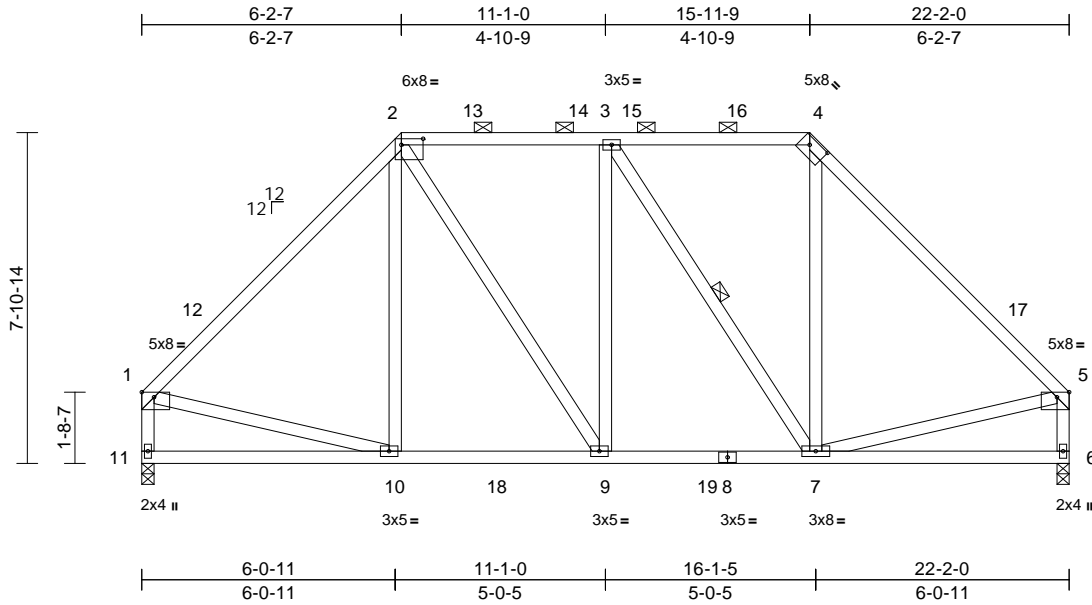
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B08	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512288
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:50
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Page: 1



Scale = 1:55.1

Plate Offsets (X, Y): [1:Edge,0-1-7], [2:0-6-4,0-1-12], [4:0-5-4,0-2-0], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.03	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.07	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 154 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x4 SP No.2
 - BOT CHORD 2x4 SP No.2
 - WEBS 2x4 SP No.3
- BRACING**
- TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-8 max.): 2-4.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 - WEBS 1 Row at midpt 3-7
- REACTIONS** (size) 6=0-3-8, 11=0-3-8
- Max Horiz 11=-205 (LC 12)
 - Max Uplift 6=-95 (LC 15), 11=-95 (LC 14)
 - Max Grav 6=1094 (LC 2), 11=1094 (LC 2)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-12=-1101/162, 2-12=-928/200, 2-13=-816/250, 13-14=-816/250, 3-14=-816/250, 3-15=-649/233, 15-16=-649/233, 4-16=-649/233, 4-17=-928/200, 5-17=-1101/162, 1-11=-1037/178, 5-6=-1037/178
 - BOT CHORD 10-11=-219/289, 10-18=-136/654, 9-18=-136/654, 9-19=-127/816, 8-19=-127/816, 7-8=-127/816, 6-7=-84/152
 - WEBS 2-10=-20/156, 3-7=-392/130, 4-7=-17/331, 1-10=-80/566, 5-7=-82/566, 3-9=-234/162, 2-9=-129/385

- 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) exterior zone and C-C Exterior (2) 0-1-12 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 11. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S)** Standard

NOTES

- Unbalanced roof live loads have been considered for this design.



March 18, 2021

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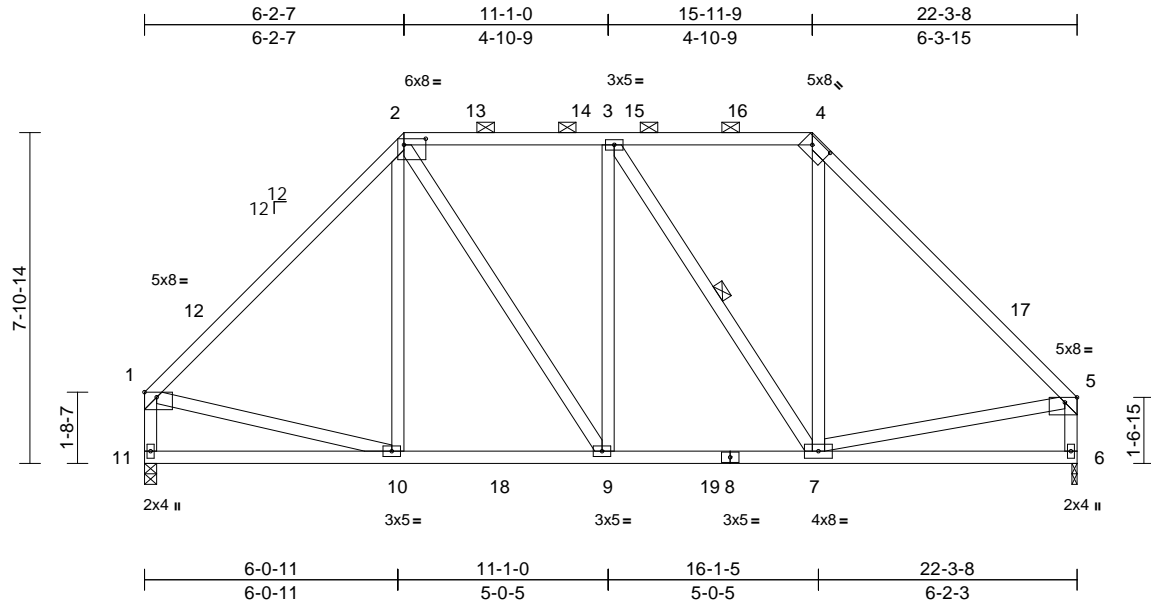
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B09	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512289
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:51
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Page: 1



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Plate Offsets (X, Y): [1:Edge,0-1-7], [2:0-6-4,0-1-12], [4:0-5-4,0-2-0], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 154 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

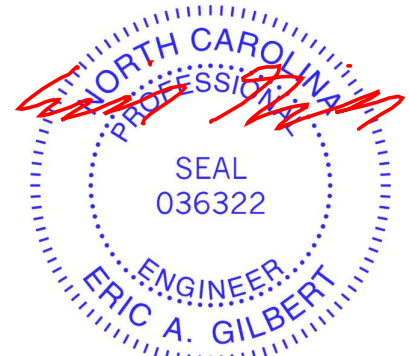
REACTIONS (size) 6=0-1-8, 11=0-3-8
Max Horiz 11=-206 (LC 10)
Max Uplift 6=-96 (LC 15), 11=-95 (LC 14)
Max Grav 6=1100 (LC 2), 11=1100 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-1108/162, 2-12=-936/201, 2-13=-823/251, 13-14=-823/251, 3-14=-823/251, 3-15=-666/235, 15-16=-666/235, 4-16=-666/235, 4-17=-949/200, 5-17=-1126/162, 1-11=-1043/179, 5-6=-1041/180
BOT CHORD 10-11=-217/289, 10-18=-134/659, 9-18=-134/659, 9-19=-126/823, 8-19=-126/823, 7-8=-126/823, 6-7=-92/174
WEBS 2-10=-21/156, 3-7=-383/131, 4-7=-18/340, 1-10=-80/570, 5-7=-86/565, 3-9=-241/161, 2-9=-130/390

- 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) exterior zone and C-C Exterior (2) 0-1-12 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 11. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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



March 18, 2021

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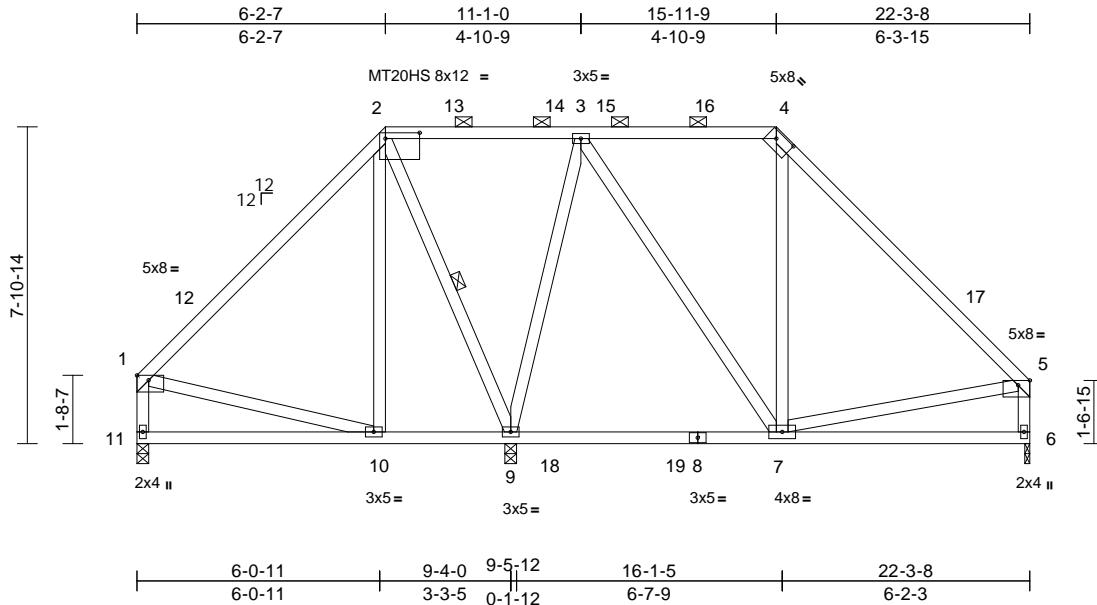
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss B10	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512290
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:51
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Page: 1



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Plate Offsets (X, Y): [1:Edge,0-1-7], [2:0-10-4,0-1-12], [4:0-5-4,0-2-0], [5:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.07	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.10	7-9	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 153 lb	FT = 20%

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

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

REACTIONS (size) 6=0-1-8, 9=0-3-8, 11=0-3-8
Max Horiz 11=-206 (LC 10)
Max Uplift 6=-88 (LC 15), 9=-79 (LC 11), 11=-59 (LC 14)
Max Grav 6=664 (LC 39), 9=1064 (LC 2), 11=531 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-446/93, 2-12=-235/131, 2-13=-142/164, 13-14=-142/164, 3-14=-142/164, 3-15=-318/197, 15-16=-318/197, 4-16=-318/197, 4-17=-441/146, 5-17=-618/108, 1-11=-472/117, 5-6=-609/132
BOT CHORD 10-11=-215/293, 9-10=-98/201, 9-18=-82/177, 18-19=-82/177, 8-19=-82/177, 7-8=-82/177, 6-7=-95/170
WEBS 2-10=0/180, 2-9=-371/101, 3-9=-716/157, 3-7=-51/322, 4-7=-137/101, 1-10=-113/142, 5-7=-55/243

- 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) exterior zone and C-C Exterior (2) 0-1-12 to 10-5-6, Interior (1) 10-5-6 to 11-8-10, Exterior (2) 11-8-10 to 22-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 11. This connection is for uplift only and does not consider lateral forces.
- One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

Job 21020141-A	Truss C01	Truss Type Attic Supported Gable	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512291
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:52
ID:yBWh?CIOEBu9_3s5M41BqUzaTFp-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 2

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 3x5 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Ceiling dead load (5.0 psf) on member(s). 4-5, 11-12, 5-40, 39-40, 39-41, 11-41; Wall dead load (5.0psf) on member(s).4-33, 12-20
- 15) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 36, 16, 34, 18, 17, and 35. This connection is for uplift only and does not consider lateral forces.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



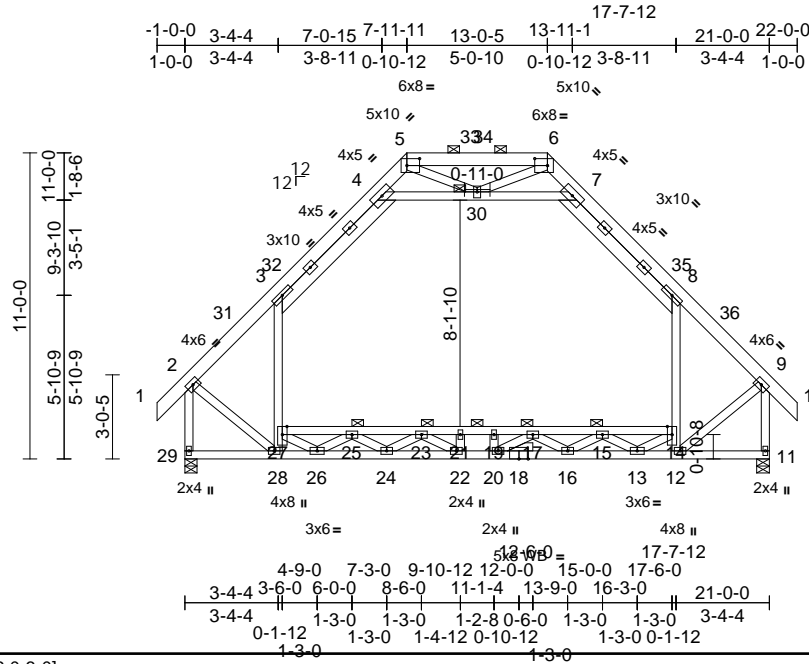
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss C02	Truss Type Attic	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512292
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:54
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Page: 1



Scale = 1:82.8
Plate Offsets (X, Y): [5:0-5-8,0-3-0], [6:0-5-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.24	19-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.41	19-21	>606	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	14-27	>951	360		
BCDL	10.0											
											Weight: 229 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 27-14:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-11-0 oc bracing: 17-23
3-4-0 oc bracing: 23-25, 15-17
5-7-0 oc bracing: 25-27, 14-15

JOINTS
1 Brace at Jt(s): 30, 15, 25, 17, 23

REACTIONS (size) 11=0-5-8, 29=0-5-4
Max Horiz 29=322 (LC 12)
Max Grav 11=1720 (LC 3), 29=1720 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/65, 2-31=-1261/0, 3-31=-1129/22, 3-32=-912/133, 4-32=-878/173, 4-5=-368/322, 5-33=-249/440, 33-34=-249/440, 6-34=-249/440, 6-7=-368/322, 7-35=-878/173, 8-35=-912/133, 8-36=-1129/22, 9-36=-1261/0, 9-10=0/65, 2-29=-1719/0, 9-11=-1719/0
BOT CHORD 28-29=-312/323, 26-28=-146/829, 24-26=0/2657, 22-24=0/3746, 20-22=0/3986, 18-20=0/3746, 16-18=0/3746, 13-16=0/2621, 12-13=0/655, 11-12=-34/43, 25-27=-993/6, 23-25=-2632/0, 21-23=-3390/0, 19-21=-3390/0, 17-19=-3390/0, 15-17=-2632/0, 14-15=-1009/26

WEBS 27-28=-431/19, 3-27=-107/579, 12-14=-431/21, 8-14=-107/579, 4-30=-1324/162, 7-30=-1326/162, 2-28=0/1015, 9-12=0/1016, 5-30=-136/242, 6-30=-136/242, 13-14=0/1254, 26-27=0/1254, 13-15=-1303/0, 25-26=-1303/0, 15-16=0/741, 24-25=0/741, 16-17=-633/0, 23-24=-633/0, 17-20=-12/313, 22-23=-8/309, 21-22=-123/10, 19-20=-125/13

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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-8-12, Exterior (2) 3-8-12 to 17-3-4, Interior (1) 17-3-4 to 19-0-0, Exterior (2) 19-0-0 to 22-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 3x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-30, 7-30; Wall dead load (5.0psf) on member(s).3-27, 8-14
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 25-27, 23-25, 21-23, 19-21, 17-19, 15-17, 14-15
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



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

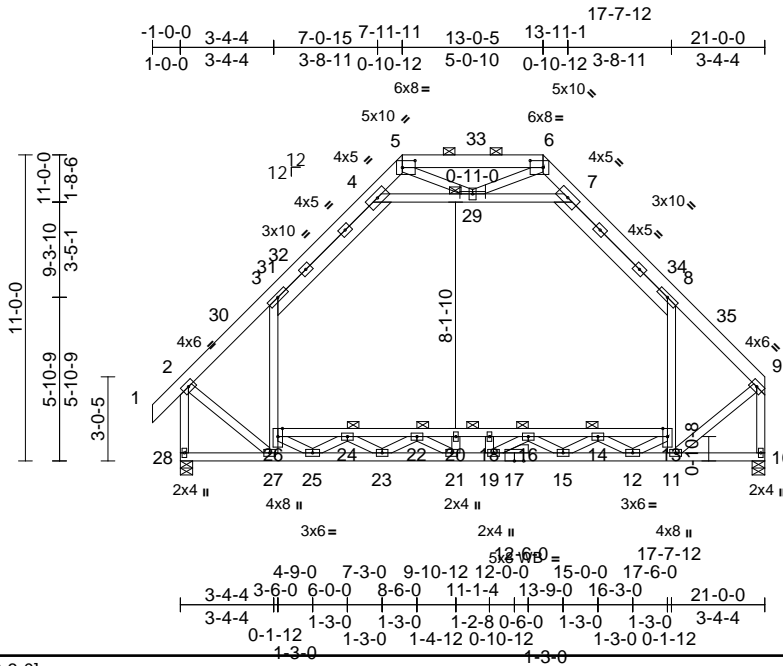
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss C03	Truss Type Attic	Qty 3	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512293
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:56
ID:90y6_5xwcoiTCtBtTbneffzaTD_-RfC?PsB70Hq3NSgPqL8w3ulTXbGKWvCDOI7J4zJC?#

Page: 1



Scale = 1:82.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.24	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.41	18-20	>606	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	13-26	>951	360		
BCDL	10.0											
											Weight: 226 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x6 SP No.2
 - BOT CHORD 2x4 SP No.1 *Except* 26-13:2x4 SP No.2
 - WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP No.2
 - OTHERS 2x4 SP No.3
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-11-0 oc bracing: 16-22
3-4-0 oc bracing: 22-24, 14-16
5-7-0 oc bracing: 24-26, 13-14
- JOINTS**
- 1 Brace at Jt(s): 14, 24, 16, 22, 29
- REACTIONS**
- (size) 10=0-5-8, 28=0-5-4
 - Max Horiz 28=312 (LC 11)
 - Max Grav 10=1643 (LC 3), 28=1722 (LC 3)
- FORCES**
- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/65, 2-30=-1264/0, 3-30=-1132/20, 3-31=-915/131, 31-32=-894/137, 4-32=-784/170, 4-5=-365/326, 5-33=-246/443, 6-33=-246/443, 6-7=-366/326, 7-34=-880/173, 8-34=-914/133, 8-35=-1127/0, 9-35=-1259/0, 2-28=-1723/0, 9-10=-1641/0
 - BOT CHORD 27-28=-302/304, 25-27=-158/815, 23-25=0/2641, 21-23=0/3747, 19-21=0/3988, 17-19=0/3749, 15-17=0/3749, 12-15=0/2625, 11-12=0/664, 10-11=-35/39, 24-26=-986/9, 22-24=-2631/0, 20-22=-3391/0, 18-20=-3391/0, 16-18=-3391/0, 14-16=-2634/0, 13-14=-1017/19

- WEBS**
- 26-27=-430/23, 3-26=-107/580, 11-13=-442/44, 8-13=-113/575, 4-29=-1333/144, 7-29=-1334/151, 2-27=0/1018, 9-11=-1/1004, 12-13=0/1256, 25-26=0/1253, 12-14=-1302/0, 24-25=-1304/0, 14-15=0/740, 23-24=0/742, 15-16=-632/0, 22-23=-633/0, 16-19=-14/309, 21-22=-7/313, 20-21=-124/10, 18-19=-124/13, 6-29=-138/239, 5-29=-133/241

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-8-12, Exterior (2) 3-8-12 to 17-3-4, Interior (1) 17-3-4 to 17-7-15, Exterior (2) 17-7-15 to 20-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 3x5 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * 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.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-29, 7-29; Wall dead load (5.0psf) on member(s).3-26, 8-13
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 24-26, 22-24, 20-22, 18-20, 16-18, 14-16, 13-14
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



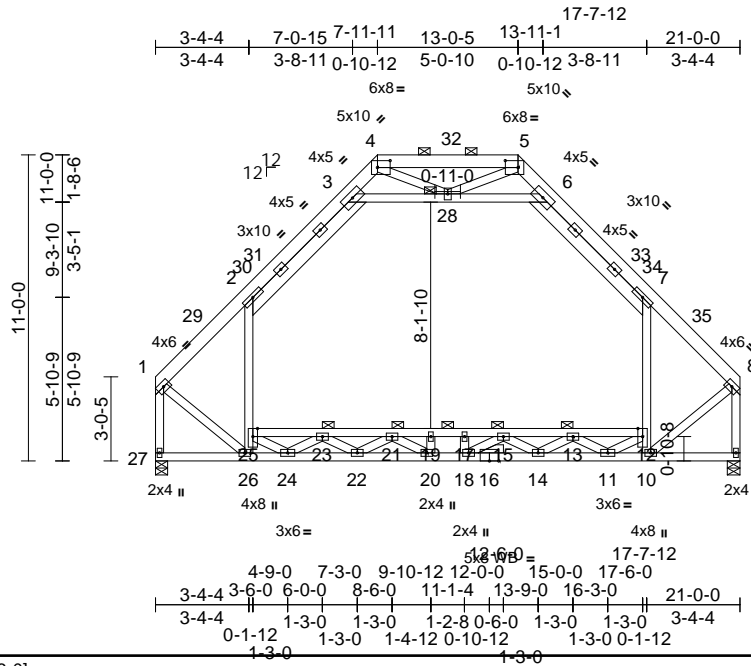
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss C04	Truss Type Attic	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512294
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:58
ID: xv4GVu3GiNQHs9olPdyRxGzaTBX-RC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:82.8
Plate Offsets (X, Y): [4:0-5-8,0-3-0], [5:0-5-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.24	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.41	17-19	>605	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.06	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	12-25	>951	360		
BCDL	10.0											
											Weight: 223 lb	FT = 20%

LUMBER	WEBS	NOTES
TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.1 *Except* 25-12:2x4 SP No.2 WEBS 2x4 SP No.3 *Except* 3-6:2x4 SP No.2 OTHERS 2x4 SP No.3	25-26=-441/45, 2-25=-113/575, 10-12=-441/45, 7-12=-113/575, 3-28=-1342/142, 6-28=-1343/139, 1-26=0/1006, 8-10=0/1007, 11-12=0/1255, 24-25=0/1255, 11-13=-1303/0, 23-24=-1303/0, 13-14=0/741, 22-23=0/741, 14-15=-633/0, 21-22=-633/0, 15-18=-12/312, 20-21=-8/309, 19-20=-123/10, 17-18=-125/13, 5-28=-135/238, 4-28=-135/238	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) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 3-8-12, Exterior (2) 3-8-12 to 17-3-4, Interior (1) 17-3-4 to 17-7-15, Exterior (2) 17-7-15 to 20-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding. 6) All plates are 3x5 MT20 unless otherwise indicated. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
BRACING TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2-11-0 oc bracing: 15-21 3-4-0 oc bracing: 21-23, 13-15 5-7-0 oc bracing: 23-25, 12-13	9) Ceiling dead load (5.0 psf) on member(s). 2-3, 6-7, 3-28, 6-28; Wall dead load (5.0psf) on member(s).2-25, 7-12 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 23-25, 21-23, 19-21, 17-19, 15-17, 13-15, 12-13 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 12) Attic room checked for L/360 deflection.	LOAD CASE(S) Standard
REACTIONS (size) 9=0-5-8, 27=0-5-4 Max Horiz 27=294 (LC 11) Max Grav 9=1645 (LC 3), 27=1645 (LC 3)		
FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-29=-1261/0, 2-29=-1129/0, 2-30=-916/131, 30-31=-895/131, 3-31=-786/170, 3-4=-363/330, 4-32=-242/446, 5-32=-242/446, 5-6=-363/330, 6-33=-786/170, 33-34=-895/131, 7-34=-916/131, 7-35=-1129/0, 8-35=-1261/0, 1-27=-1644/0, 8-9=-1644/0 BOT CHORD 26-27=-284/297, 24-26=-153/823, 22-24=0/2652, 20-22=0/3749, 18-20=0/3989, 16-18=0/3749, 14-16=0/3749, 11-14=0/2624, 10-11=0/663, 9-10=-36/39, 23-25=-994/4, 21-23=-2633/0, 19-21=-3391/0, 17-19=-3391/0, 15-17=-3391/0, 13-15=-2633/0, 12-13=-1008/23		



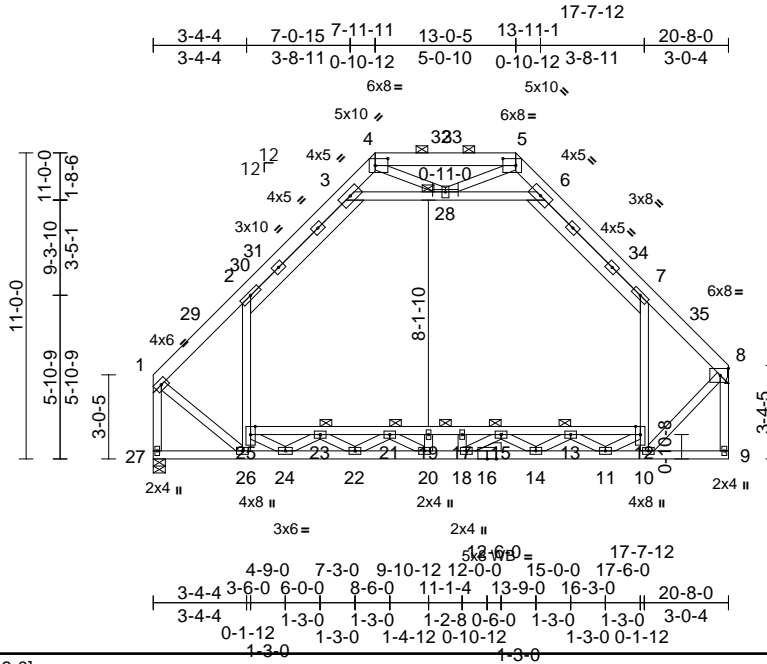
March 18, 2021

Job 21020141-A	Truss C05	Truss Type Attic	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512295
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:44:59
ID:ASiy5Pouapzm3OOHwD0WmWzaTAB-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCdoi7J4zJC?f

Page: 1



Scale = 1:82.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.24	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.39	17-19	>620	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	-0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	12-25	>957	360		
BCDL	10.0											
											Weight: 222 lb	FT = 20%

LUMBER	WEBS	NOTES
TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.1 *Except* 25-12:2x4 SP No.2 WEBS 2x4 SP No.3 *Except* 3-6:2x4 SP No.2 OTHERS 2x4 SP No.3	25-26=-457/42, 2-25=-113/574, 10-12=-470/37, 7-12=-186/518, 3-28=-1220/134, 6-28=-1282/149, 1-26=-3/963, 8-10=-2/1077, 11-12=0/1183, 24-25=0/1285, 11-13=-1332/0, 23-24=-1279/0, 13-14=0/767, 22-23=0/719, 14-15=-651/0, 21-22=-613/0, 15-18=-6/344, 20-21=-14/278, 19-20=-112/13, 17-18=-137/10, 5-28=-132/251, 4-28=-141/226	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) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 3-8-12, Exterior (2) 3-8-12 to 20-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding. 6) All plates are 3x5 MT20 unless otherwise indicated. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
BRACING TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10. 3-0-0 oc bracing: 15-21 3-4-0 oc bracing: 21-23, 13-15 5-5-0 oc bracing: 23-25 5-11-0 oc bracing: 12-13 JOINTS 1 Brace at Jt(s): 13, 23, 15, 21, 28 REACTIONS (size) 8= Mechanical, 27=0-5-4 Max Horiz 27=298 (LC 11) Max Grav 8=1643 (LC 3), 27=1618 (LC 3) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-29=-1231/0, 2-29=-1099/0, 2-30=-882/134, 30-31=-861/134, 3-31=-835/173, 3-4=-392/280, 4-32=-275/397, 32-33=-275/397, 5-33=-275/397, 5-6=-380/303, 6-34=-771/171, 7-34=-900/137, 7-35=-1050/3, 8-35=-1169/0, 1-27=-1602/0, 8-9=-75/56 BOT CHORD 26-27=-286/298, 24-26=-155/827, 22-24=0/2662, 20-22=0/3726, 18-20=0/3941, 16-18=0/3677, 14-16=0/3677, 11-14=0/2516, 10-11=0/576, 9-10=-41/45, 23-25=-1060/0, 21-23=-2654/0, 19-21=-3372/0, 17-19=-3372/0, 15-17=-3372/0, 13-15=-2575/0, 12-13=-893/46	9) Ceiling dead load (5.0 psf) on member(s). 2-3, 6-7, 3-28, 6-28; Wall dead load (5.0psf) on member(s).2-25, 7-12 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 23-25, 21-23, 19-21, 17-19, 15-17, 13-15, 12-13 11) Refer to girder(s) for truss to truss connections. 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in. 14) Attic room checked for L/360 deflection.	LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



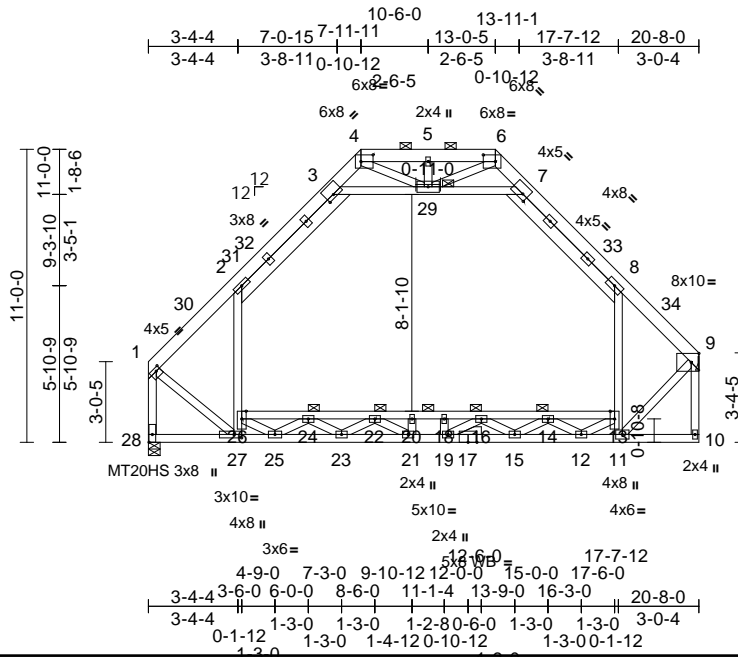
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss C06	Truss Type Attic	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512296
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:01
ID:FQDKWnoy1JR_W8EEI90zDQzaT9l-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:86.5

Plate Offsets (X, Y): [1:0-2-0,0-1-8], [3:0-3-10,0-1-7], [4:0-5-8,0-3-0], [6:0-5-8,0-3-0], [7:0-2-7,0-2-4], [27:0-3-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.24	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.38	18-20	>638	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.17	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	13-26	>959	360		
BCDL	10.0											
										Weight: 223 lb	FT = 20%	

LUMBER	WEBS
TOP CHORD 2x6 SP No.2	26-27=-1024/0, 2-26=-774/461, 11-13=-1127/0, 8-13=-967/384, 3-29=-867/800, 7-29=-919/709, 1-27=0/1811, 9-11=0/2014, 4-29=0/2387, 6-29=0/2490, 5-29=-2265/0, 12-13=0/1153, 25-26=0/1264, 12-14=-1338/0, 24-25=-1277/0, 14-15=0/771, 23-24=0/717, 15-16=-652/0, 22-23=-609/0, 16-19=-3/369, 21-22=-18/271, 20-21=-111/13, 18-19=-148/8
BOT CHORD 2x4 SP No.1 *Except* 26-13:2x4 SP No.2	
WEBS 2x4 SP No.3 *Except*	
2-27,8-11,3-7,29-4,29-6:2x4 SP No.2	
OTHERS	NOTES
2x4 SP No.3	1) Unbalanced roof live loads have been considered for this design.
TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-7 max.): 4-6.	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) exterior zone and C-C Exterior (2) 0-1-12 to 3-4-1, Interior (1) 3-4-1 to 3-8-12, Exterior (2) 3-8-12 to 20-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 27-28,10-11. 3-0-0 oc bracing: 16-22 3-4-0 oc bracing: 22-24 3-5-0 oc bracing: 14-16 5-6-0 oc bracing: 24-26 6-0-0 oc bracing: 13-14	3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
JOINTS 1 Brace at Jt(s): 29, 14, 24, 16, 22	4) Unbalanced snow loads have been considered for this design.
REACTIONS	5) Provide adequate drainage to prevent water ponding.
(size) 9= Mechanical, 28=0-5-4	6) All plates are MT20 plates unless otherwise indicated.
Max Horiz 28=298 (LC 11)	7) All plates are 3x5 MT20 unless otherwise indicated.
Max Grav 9=2634 (LC 47), 28=2573 (LC 47)	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
FORCES	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.
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD 1-30=-1977/0, 2-30=-1902/0, 2-31=-2300/0, 31-32=-2269/0, 3-32=-2059/0, 3-4=-2549/0, 4-5=-4215/0, 5-6=-4215/0, 6-7=-2518/0, 7-33=-2270/0, 8-33=-2333/0, 8-34=-1763/0, 9-34=-1850/0, 1-28=-2572/0, 9-10=-116/46 27-28=-289/294, 25-27=-41/1397, 23-25=0/3150, 21-23=0/3965, 19-21=0/4084, 17-19=0/3771, 15-17=0/3771, 12-15=0/2742, 11-12=0/1178, 10-11=-46/41, 24-26=-993/21, 22-24=-2615/0, 20-22=-3328/0, 18-20=-3328/0, 16-18=-3328/0, 14-16=-2525/0, 13-14=-798/122	
BOT CHORD	

- 10) Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-29, 7-29; Wall dead load (5.0psf) on member(s).2-26, 8-13
 - 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 24-26, 22-24, 20-22, 18-20, 16-18, 14-16, 13-14
 - 12) Refer to girder(s) for truss to truss connections.
 - 13) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 15) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
 - 16) Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft)



March 18, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette	E15512296
21020141-A	C06	Attic	1	1	Job Reference (optional)	

Carter Components, Chesapeake, VA - 23323,

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Page: 2

Vert: 1-2=-60, 2-3=-70, 3-4=-60, 4-6=-60, 6-7=-60,
 7-8=-70, 8-9=-60, 10-28=-20, 13-26=-30, 3-29=-10,
 7-29=-10

Drag: 2-26=-10, 8-13=-10

Concentrated Loads (lb)

Vert: 5=-2520

- 2) Dead + Roof Live (balanced): Lumber Increase=1.15,
 Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-80, 2-3=-90, 3-4=-80, 4-6=-80, 6-7=-80,
 7-8=-90, 8-9=-80, 10-28=-20, 13-26=-30, 3-29=-10,
 7-29=-10

Drag: 2-26=-10, 8-13=-10

Concentrated Loads (lb)

Vert: 5=-840

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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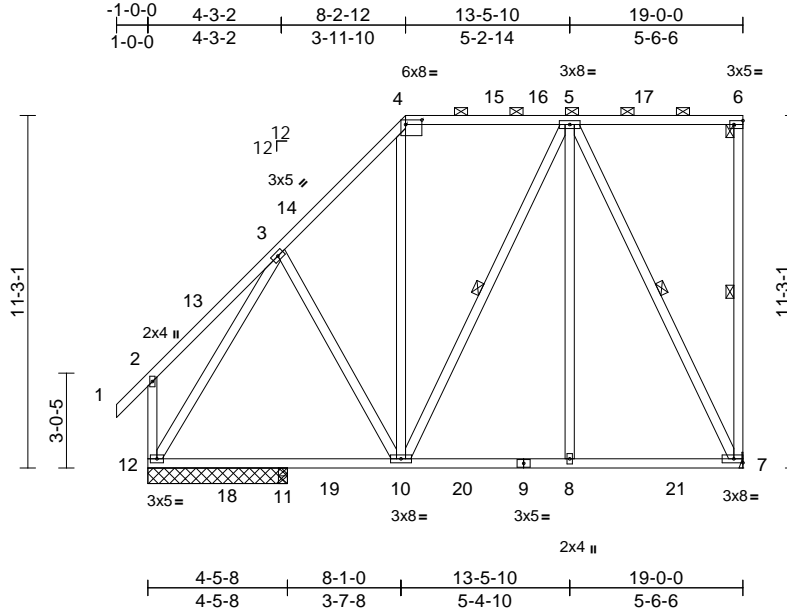
818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss D01	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512297
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Feb 12 2021 Print: 8.430 S Feb 12 2021 MiTek Industries, Inc. Thu Mar 18 12:44:19
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Page: 1



Scale = 1:73.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 173 lb	FT = 20%

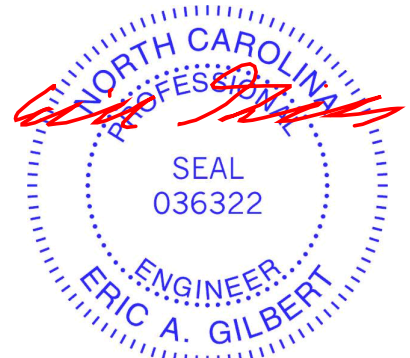
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 10-3,12-2,12-3:2x4 SP No.3

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

REACTIONS (lb/size) 7=726/ Mechanical, 11=89/0-3-8, 12=750/4-5-8
Max Horiz 12=428 (LC 11)
Max Uplift 7=-241 (LC 11), 12=-127 (LC 14)
Max Grav 7=983 (LC 33), 11=194 (LC 23), 12=960 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-13=-136/264, 3-14=-664/251, 4-14=-540/282, 4-15=-384/255, 15-16=-384/255, 5-16=-384/255, 2-12=-299/268
BOT CHORD 12-18=-319/502, 11-18=-319/502, 11-19=-319/502, 10-19=-319/502, 10-20=-190/385, 9-20=-190/385, 8-9=-190/385, 8-21=-190/385, 7-21=-190/385
WEBS 5-8=0/337, 5-7=-817/233, 3-12=-771/65

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-11-13, Exterior (2) 3-11-13 to 12-5-11, Interior (1) 12-5-11 to 15-10-4, Exterior (2) 15-10-4 to 18-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 241 lb uplift at joint 7.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
 - 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.



March 18, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette	E15512297
21020141-A	D01	Piggyback Base	1	1	Job Reference (optional)	

Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Feb 12 2021 Print: 8.430 S Feb 12 2021 MiTek Industries, Inc. Thu Mar 18 12:44:19
 ID:DVhTkHR2lu1UWzWzegprE?zaVG1-xdlrkwCS5pEZq5tRwxtC2ZFO_ITHKHaoYRfpK6zZisQ

Page: 2

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



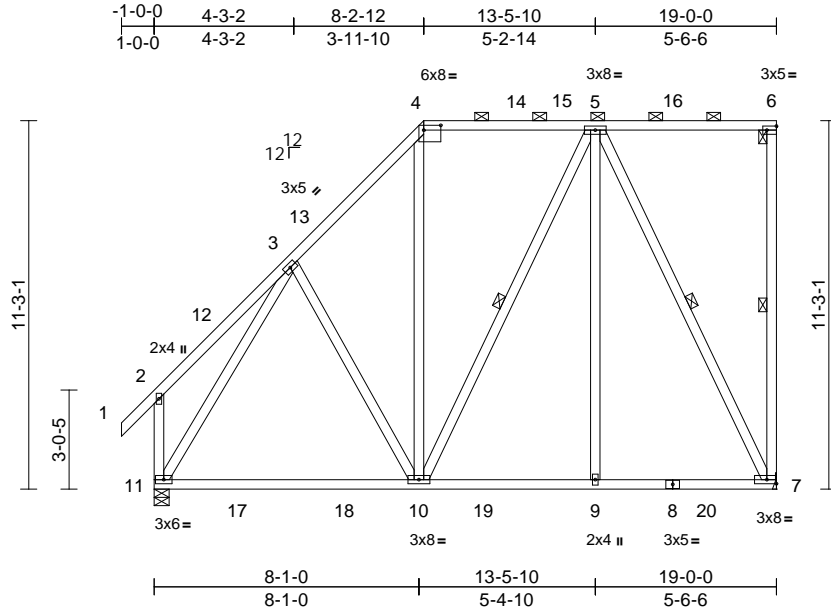
818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss D02	Truss Type Piggyback Base	Qty 4	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512298
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:03
ID:ihEysdShWC9L7759CNK4nDzaVG0-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:70.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.14	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.25	10-11	>899	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 173 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 6-7:2x4 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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-10, 5-7

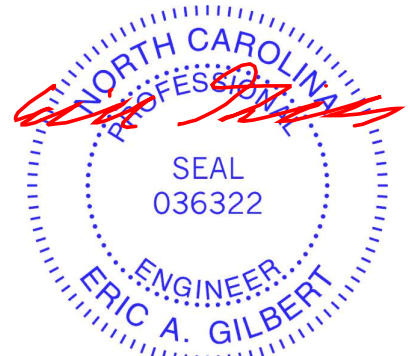
REACTIONS (size) 7= Mechanical, 11=0-5-8
Max Horiz 11=428 (LC 11)
Max Uplift 7=231 (LC 11), 11=92 (LC 14)
Max Grav 7=1013 (LC 38), 11=1030 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/65, 2-12=-238/236, 3-12=-161/255, 3-13=-701/235, 4-13=-597/266, 4-14=-417/243, 14-15=-417/243, 5-15=-417/243, 5-16=-170/185, 6-16=-170/185, 6-7=-218/97, 2-11=-333/261
BOT CHORD 11-17=-307/548, 17-18=-307/548, 10-18=-307/548, 10-19=-186/401, 9-19=-186/401, 8-9=-186/401, 8-20=-186/401, 7-20=-186/401
WEBS 3-10=-185/225, 4-10=-59/192, 5-10=-108/280, 5-9=0/292, 5-7=-850/224, 3-11=-803/56

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

- 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-11-13, Exterior (2) 3-11-13 to 12-5-11, Interior (1) 12-5-11 to 15-10-4, Exterior (2) 15-10-4 to 18-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 7.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 11. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



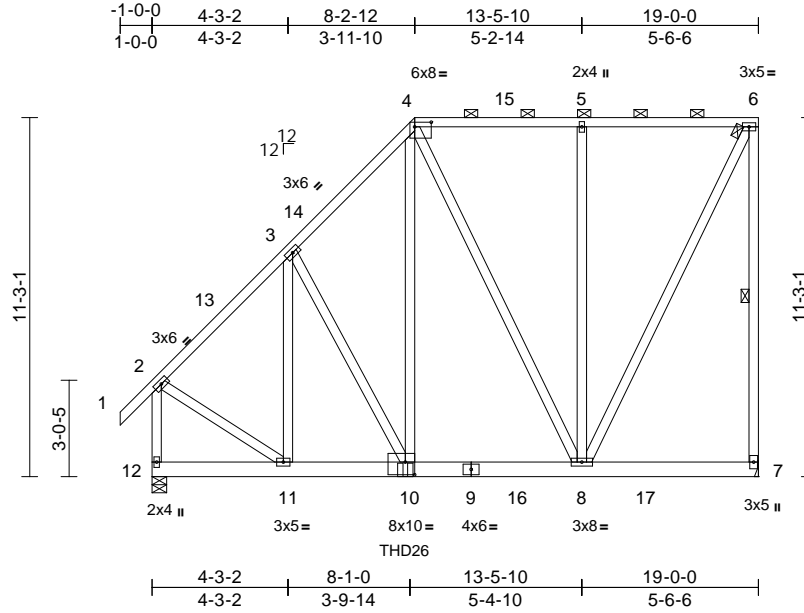
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss D03	Truss Type Piggyback Base Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512299
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:04
ID:AtoE9zTJHVHClHgLm5rJKQzaVG?-RfC?PsB70Hq3NSgPqnL8w3uITxBGKwRcDoi7J4zJC?f

Page: 1



Scale = 1:72.2

Plate Offsets (X, Y): [4:0-6-4,0-1-12], [10:0-3-8,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	0.03	10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.04	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 386 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except*
 3-11,10-3,12-2,11-2:2x4 SP No.3

BRACING

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

REACTIONS (size) 7= Mechanical, 12=0-5-8

Max Horiz 12=425 (LC 9)
 Max Uplift 7=506 (LC 9), 12=468 (LC 12)
 Max Grav 7=1539 (LC 31), 12=1803 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/65, 2-13=-1419/409, 3-13=-1324/428, 3-14=-1549/575, 4-14=-1457/605, 4-15=-681/303, 5-15=-681/303, 5-6=-681/303, 6-7=-1490/508, 2-12=-1760/486
 BOT CHORD 11-12=-403/273, 10-11=-519/1064, 9-10=-502/1075, 9-16=-502/1075, 8-16=-502/1075, 8-17=-151/114, 7-17=-151/114
 WEBS 3-11=-545/194, 3-10=-206/375, 4-10=-658/1592, 4-8=-933/419, 5-8=-628/188, 6-8=-520/1446, 2-11=-281/1145

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 506 lb uplift at joint 7.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent at 7-11-4 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-2=-60, 2-4=-60, 4-6=-60, 7-12=-20
 Concentrated Loads (lb)



March 18, 2021

Continued on page 2

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818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss D03	Truss Type Piggyback Base Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512299
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:04
ID:AtoE9zTJHVHCiHgLm5rJKQzaVG?-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 2

Vert: 10=-1263 (F)

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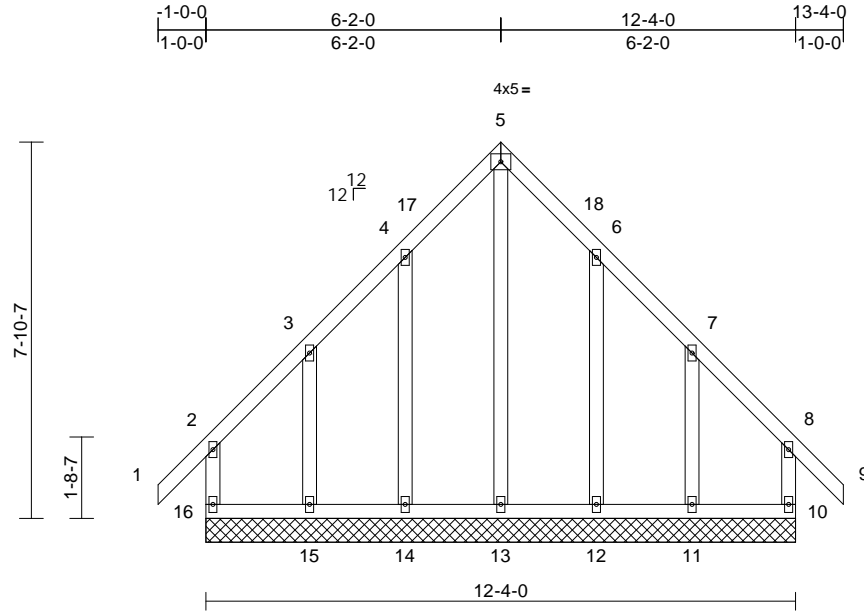
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss E01	Truss Type Common Supported Gable	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512300
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:04
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Page: 1



Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 89 lb	FT = 20%

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

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

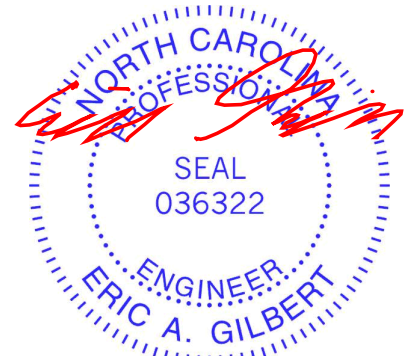
REACTIONS (size)
10=12-4-0, 11=12-4-0, 12=12-4-0, 13=12-4-0, 14=12-4-0, 15=12-4-0, 16=12-4-0
Max Horiz 16=231 (LC 13)
Max Uplift 10=-132 (LC 11), 11=-175 (LC 15), 12=-86 (LC 15), 14=-86 (LC 14), 15=-176 (LC 14), 16=-140 (LC 10)
Max Grav 10=255 (LC 28), 11=288 (LC 29), 12=215 (LC 33), 13=305 (LC 15), 14=215 (LC 32), 15=292 (LC 28), 16=261 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-209/176, 1-2=0/65, 2-3=-146/156, 3-4=-156/253, 4-17=-238/340, 5-17=-224/353, 5-18=-224/353, 6-18=-238/340, 6-7=-156/253, 7-8=-140/148, 8-9=0/65, 8-10=-204/176
BOT CHORD 15-16=-118/114, 14-15=-118/114, 13-14=-118/114, 12-13=-118/114, 11-12=-118/114, 10-11=-118/114
WEBS 5-13=-428/212, 4-14=-176/119, 3-15=-204/168, 6-12=-176/119, 7-11=-202/167

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

- 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) exterior zone and C-C Corner (3) -1-0-0 to 2-2-0, Exterior (2) 2-2-0 to 3-2-0, Corner (3) 3-2-0 to 9-2-0, Exterior (2) 9-2-0 to 10-2-0, Corner (3) 10-2-0 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

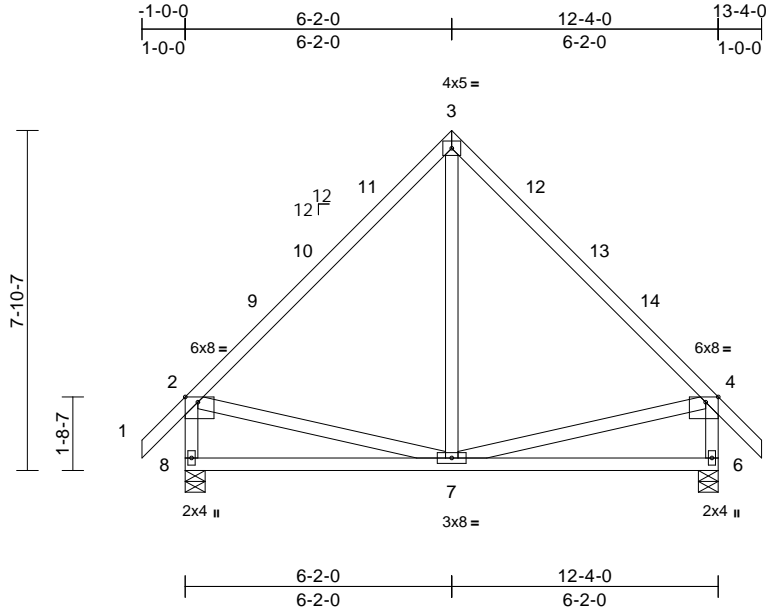
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss E02	Truss Type Common	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512301
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:05
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Page: 1



Scale = 1:53.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 81 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 6=0-5-8, 8=0-5-8

Max Horiz 8=231 (LC 13)
Max Uplift 6=-53 (LC 14), 8=-53 (LC 15)
Max Grav 6=694 (LC 2), 8=694 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/65, 2-9=-552/89, 9-10=-381/110, 10-11=-370/112, 3-11=-300/135, 3-12=-300/135, 12-13=-370/112, 13-14=-381/110, 4-14=-552/89, 4-5=0/65, 2-8=-639/160, 4-6=-639/160

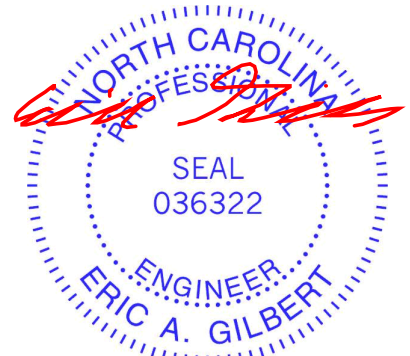
BOT CHORD 7-8=-247/322, 6-7=-112/161
WEBS 3-7=-15/224, 2-7=-101/237, 4-7=-103/238

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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-2-0, Exterior (2) 3-2-0 to 9-2-0, Interior (1) 9-2-0 to 10-4-0, Exterior (2) 10-4-0 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- 8) 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.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



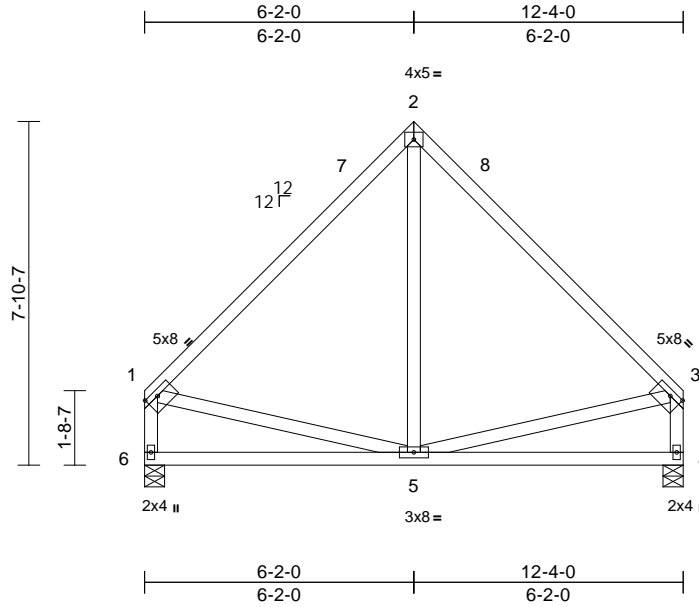
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss E03	Truss Type Common	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512302
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:05
ID:17wmk1YH6YaZoGEVjObl3nzaT72-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:52.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 77 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 4=0-5-8, 6=0-5-8

Max Horiz 6=203 (LC 10)
Max Uplift 4=47 (LC 14), 6=47 (LC 15)
Max Grav 4=602 (LC 2), 6=602 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

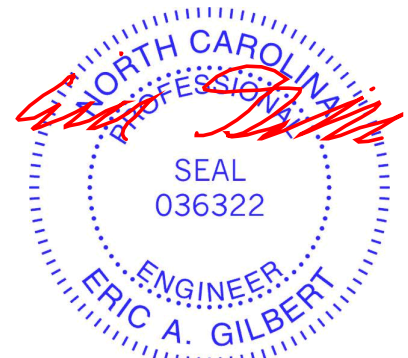
TOP CHORD 1-7=-552/101, 2-7=-293/127, 2-8=-293/127, 3-8=-552/101, 1-6=-548/115, 3-4=-548/115
BOT CHORD 5-6=-221/262, 4-5=-82/122
WEBS 2-5=0/219, 1-5=-63/231, 3-5=-65/232

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 4. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



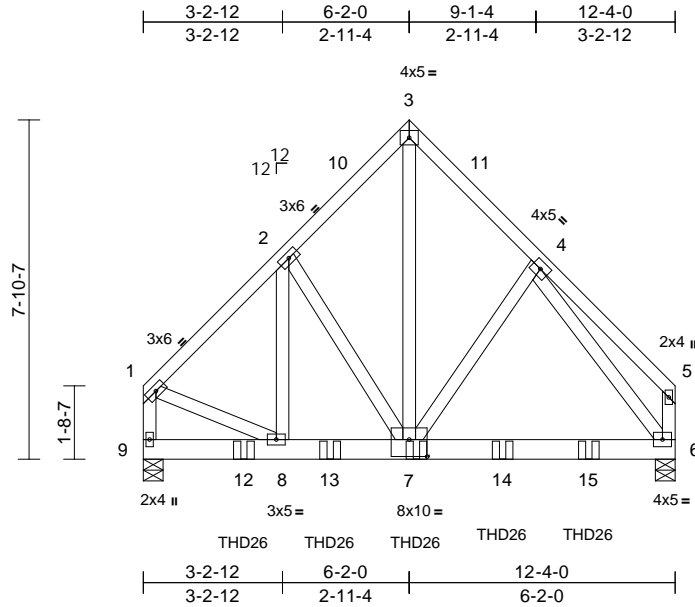
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss E04	Truss Type Common Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512303
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:06
ID:w2MMmObqfo0m1bU9XRpbIRzaSEh-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwCDoi7J4zJC7f

Page: 1



Scale = 1:53.4

Plate Offsets (X, Y): [7:0-5-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.08	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 204 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING

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

REACTIONS (size) 6=0-5-8, 9=0-5-8

Max Horiz 9=200 (LC 8)
Max Uplift 6=-146 (LC 12), 9=-130 (LC 13)
Max Grav 6=1922 (LC 2), 9=1799 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1587/161, 2-10=-1448/192,
3-10=-1358/214, 3-11=-1353/213,
4-11=-1451/200, 4-5=-412/91,
1-9=-1637/140, 5-6=-354/87
BOT CHORD 9-12=-190/215, 8-12=-190/215,
8-13=-140/1075, 7-13=-140/1075,
7-14=-52/922, 14-15=-52/922, 6-15=-52/922
WEBS 2-8=-22/101, 2-7=-226/152, 3-7=-219/1749,
4-7=-60/245, 1-8=-55/1095, 4-6=-1239/90

NOTES

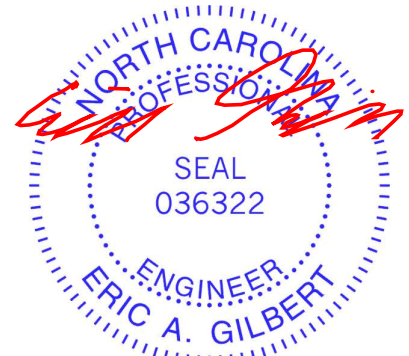
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied 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.

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 6. This connection is for uplift only and does not consider lateral forces.
- 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 2-4-0 from the left end to 10-4-0 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 6-9=-20
Concentrated Loads (lb)

Vert: 7=-560 (B), 12=-486 (B), 13=-560 (B), 14=-560 (B), 15=-560 (B)



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



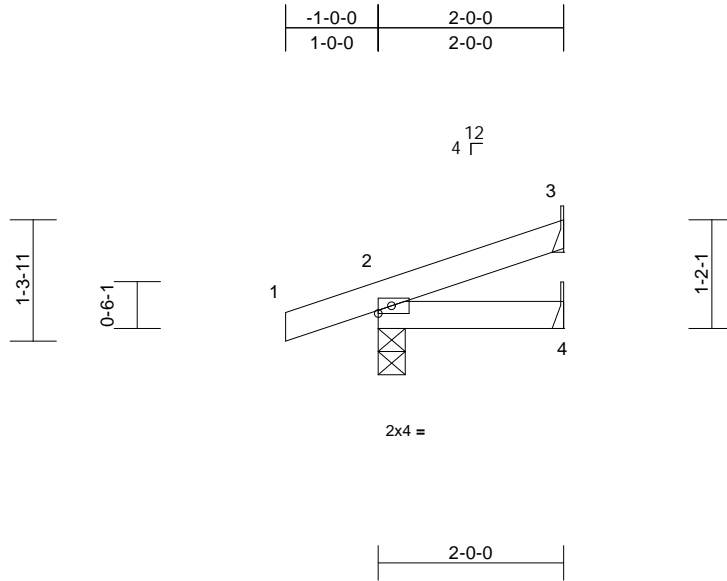
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss EJ1	Truss Type Jack-Open	Qty 3	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512304
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 lb	FT = 20%

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

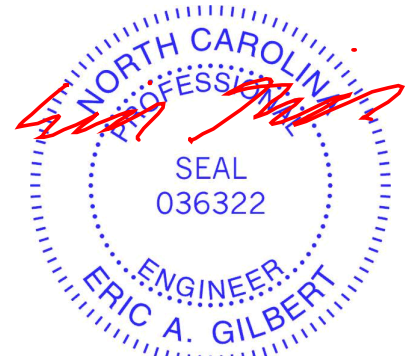
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=43 (LC 10)
Max Uplift 2=-57 (LC 10), 3=-22 (LC 14)
Max Grav 2=200 (LC 2), 3=59 (LC 2), 4=34 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-62/67
BOT CHORD 2-4=-29/19

- 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 22 lb uplift at joint 3.
- 9) 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.
- LOAD CASE(S)** Standard

- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



March 18, 2021

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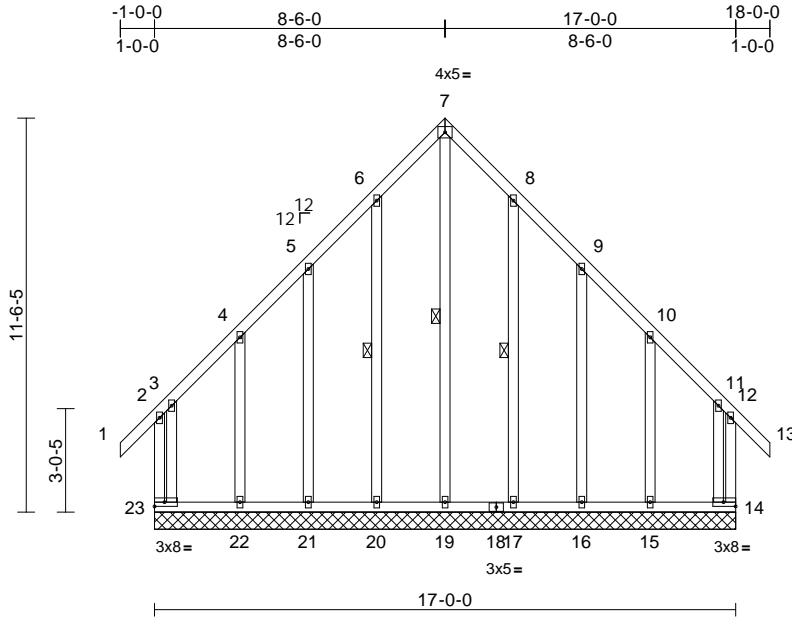
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss F01	Truss Type Common Supported Gable	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512305
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:07
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Page: 1



Scale = 1:67.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 161 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 19-7:2x4 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.

WEBS 1 Row at midpt 7-19, 6-20, 8-17
REACTIONS (size) 14=17-0-0, 15=17-0-0, 16=17-0-0, 17=17-0-0, 19=17-0-0, 20=17-0-0, 21=17-0-0, 22=17-0-0, 23=17-0-0
Max Horiz 23=337 (LC 12)
Max Uplift 14=279 (LC 11), 15=312 (LC 10), 16=79 (LC 15), 17=97 (LC 15), 20=97 (LC 14), 21=79 (LC 14), 22=319 (LC 11), 23=287 (LC 10)
Max Grav 14=395 (LC 28), 15=434 (LC 29), 16=197 (LC 2), 17=234 (LC 29), 19=458 (LC 15), 20=235 (LC 28), 21=198 (LC 29), 22=439 (LC 28), 23=402 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-23=-565/507, 1-2=0/65, 2-3=-366/349, 3-4=-269/276, 4-5=-199/317, 5-6=-287/426, 6-7=-361/510, 7-8=-361/510, 8-9=-287/426, 9-10=-199/317, 10-11=-262/269, 11-12=-360/343, 12-13=0/65, 12-14=-555/497
BOT CHORD 22-23=-177/165, 21-22=-177/165, 20-21=-177/165, 19-20=-177/165, 18-19=-177/165, 17-18=-177/165, 16-17=-177/165, 15-16=-177/165, 14-15=-177/165

WEBS 7-19=-642/381, 6-20=-189/119, 5-21=-165/133, 4-22=-326/267, 3-23=-763/727, 8-17=-188/119, 9-16=-165/133, 10-15=-323/263, 11-14=-745/710

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 5-6-0, Corner (3) 5-6-0 to 11-6-0, Exterior (2) 11-6-0 to 15-0-0, Corner (3) 15-0-0 to 18-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23, 14, 20, 21, 22, 17, 16, and 15. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

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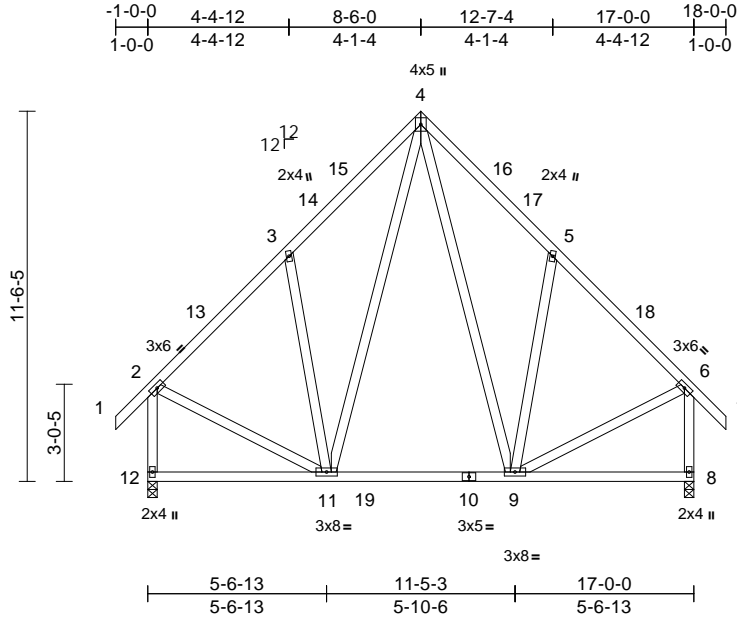
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss F02	Truss Type Common	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512306
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:07
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Page: 1



Scale = 1:71.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.06	9-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.08	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 145 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 11-4,9-4:2x4 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) 8=0-3-8, 12=0-3-8
 Max Horiz 12=337 (LC 13)
 Max Uplift 8=-75 (LC 14), 12=-75 (LC 15)
 Max Grav 8=927 (LC 2), 12=927 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/65, 2-13=-708/148, 3-13=-595/168, 3-14=-648/287, 14-15=-590/301, 4-15=-587/318, 4-16=-587/318, 16-17=-590/301, 5-17=-648/287, 5-18=-595/168, 6-18=-708/148, 6-7=0/65, 2-12=-878/162, 6-8=-878/162

BOT CHORD 11-12=-314/315, 11-19=-67/404, 10-19=-67/404, 9-10=-67/404, 8-9=-30/49

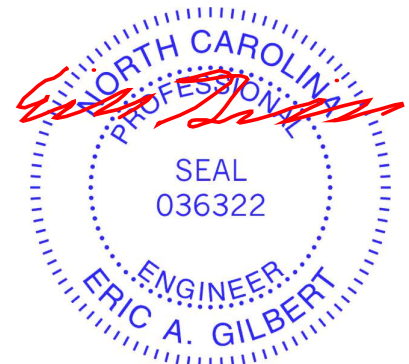
WEBS 2-11=-3/500, 6-9=-4/500, 3-11=-338/263, 4-11=-222/363, 4-9=-222/359, 5-9=-338/263

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 5-6-0, Exterior (2) 5-6-0 to 11-6-0, Interior (1) 11-6-0 to 15-0-0, Exterior (2) 15-0-0 to 18-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 12. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



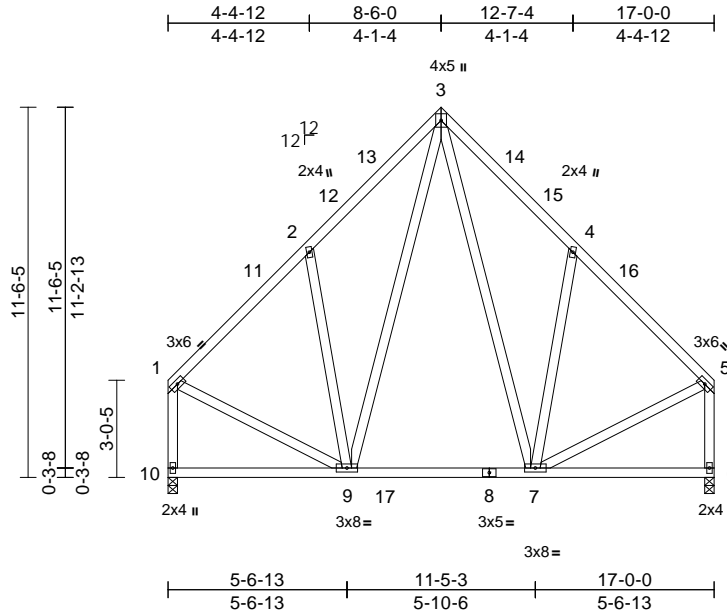
818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss F03	Truss Type Common	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512307
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:08
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Page: 1



Scale = 1:71.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.06	7-9	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.08	7-9	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.01	6	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 141 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 9-3,7-3:2x4 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) 6=0-3-8, 10=0-3-8
 Max Horiz 10=299 (LC 11)
 Max Uplift 6=-70 (LC 14), 10=-70 (LC 15)
 Max Grav 6=835 (LC 2), 10=835 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-11=-712/128, 2-11=-519/149, 2-12=-661/282, 12-13=-598/298, 3-13=-598/314, 3-14=-598/314, 14-15=-598/298, 4-15=-661/282, 4-16=-516/149, 5-16=-712/128, 1-10=-787/119, 5-6=-787/119
 BOT CHORD 9-10=-283/287, 9-17=-75/394, 8-17=-75/394, 7-8=-75/394, 6-7=-34/40
 WEBS 1-9=-11/491, 5-7=-8/493, 2-9=-354/273, 3-9=-219/369, 3-7=-216/366, 4-7=-353/273

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) interior zone and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 5-6-0, Exterior (2) 5-6-0 to 11-6-0, Interior (1) 11-6-0 to 13-10-4, Exterior (2) 13-10-4 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



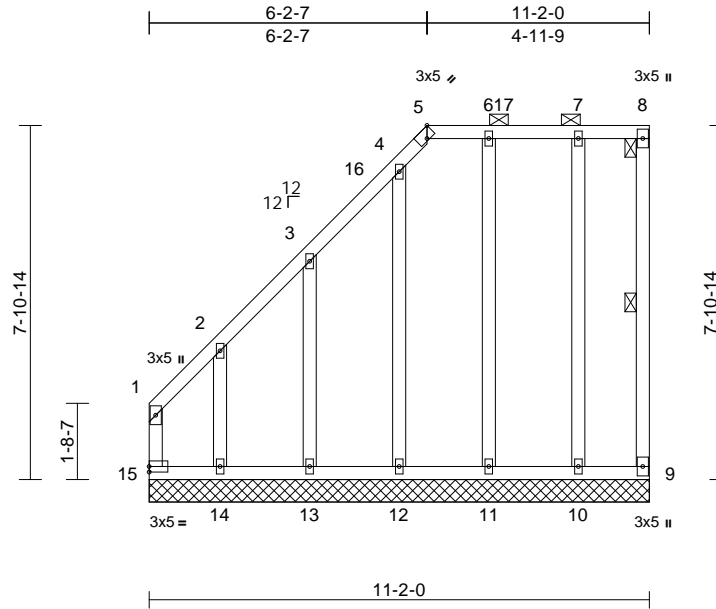
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss G01	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512308
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:08
ID:gnG6lghsnbcsN_iuWvXWWMzaSFM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCoI7J4zJC?

Page: 1



Scale = 1:51.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
										Weight: 93 lb	FT = 20%	

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-9
REACTIONS	(size)
	9=11-2-0, 10=11-2-0, 11=11-2-0, 12=11-2-0, 13=11-2-0, 14=11-2-0, 15=11-2-0
Max Horiz	15=285 (LC 11)
Max Uplift	9=-34 (LC 11), 10=-56 (LC 10), 11=-59 (LC 11), 12=-93 (LC 11), 13=-86 (LC 14), 14=-339 (LC 11), 15=-257 (LC 12)
Max Grav	9=67 (LC 35), 10=221 (LC 35), 11=246 (LC 35), 12=223 (LC 40), 13=250 (LC 36), 14=379 (LC 40), 15=440 (LC 11)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-15=-289/169, 1-2=-339/224, 2-3=-200/143, 3-16=-193/152, 4-16=-165/156, 4-5=-133/159, 5-6=-127/162, 6-17=-127/162, 7-17=-127/162, 7-8=-127/162, 8-9=-93/121
BOT CHORD	14-15=-125/159, 13-14=-125/159, 12-13=-125/159, 11-12=-125/159, 10-11=-125/159, 9-10=-125/159
WEBS	4-12=-180/111, 3-13=-210/148, 2-14=-254/218, 6-11=-205/75, 7-10=-184/70

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Corner (3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15, 9, 12, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.
- Non Standard bearing condition. Review required.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



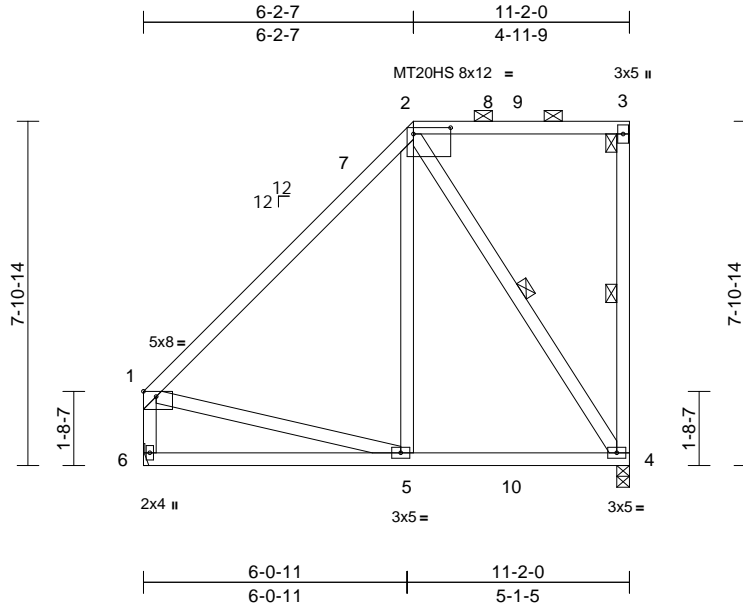
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss G02	Truss Type Piggyback Base	Qty 4	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512309
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:09
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Page: 1



Scale = 1:52.9

Plate Offsets (X, Y): [1:Edge,0-1-7], [2:0-10-4,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.03	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	5-6	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 82 lb	FT = 20%

LUMBER

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

BRACING

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

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

WEBS 1 Row at midpt 3-4, 2-4

REACTIONS (size) 4=0-3-8, 6= Mechanical
Max Horiz 6=285 (LC 11)
Max Uplift 4=-152 (LC 11), 6=-28 (LC 14)
Max Grav 4=544 (LC 2), 6=580 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-7=-505/102, 2-7=-254/127, 2-8=-128/139, 8-9=-128/139, 3-9=-128/139, 3-4=-232/84, 1-6=-525/117

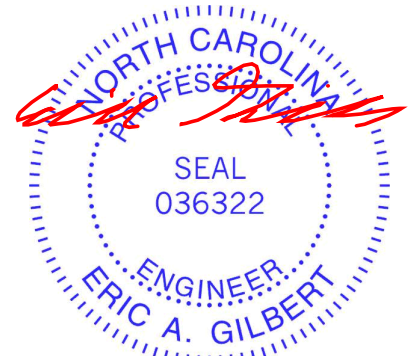
BOT CHORD 5-6=-297/279, 5-10=-136/260, 4-10=-136/260
WEBS 2-5=0/234, 2-4=-428/141, 1-5=-97/217

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 6.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

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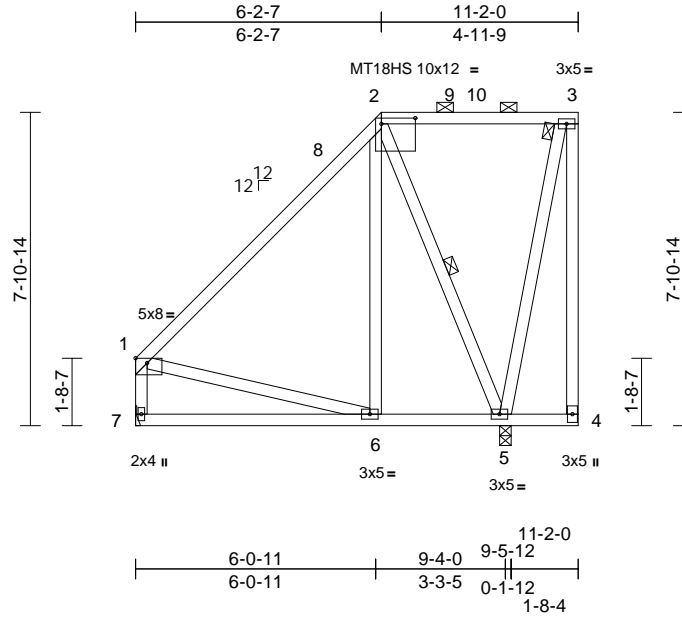
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss G03	Truss Type Piggyback Base	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512310
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:09
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Page: 1



Scale = 1:58.1

Plate Offsets (X, Y): [1:Edge,0-1-7], [2:0-10-4,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.07	6-7	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 92 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 5=0-3-8, 7= Mechanical
Max Horiz 7=285 (LC 13)
Max Uplift 5=-215 (LC 11), 7=-11 (LC 14)
Max Grav 5=646 (LC 2), 7=506 (LC 36)

FORCES

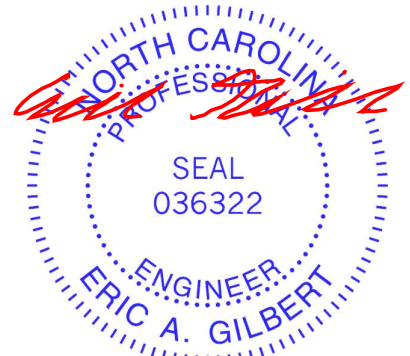
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-419/64, 2-8=-157/89, 2-9=-121/126, 9-10=-121/126, 3-10=-121/126, 3-4=-59/48, 1-7=-448/83
BOT CHORD 6-7=-295/283, 5-6=-117/172, 4-5=-129/140
WEBS 2-6=0/215, 2-5=-454/180, 3-5=-254/83, 1-6=-130/188

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 7.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



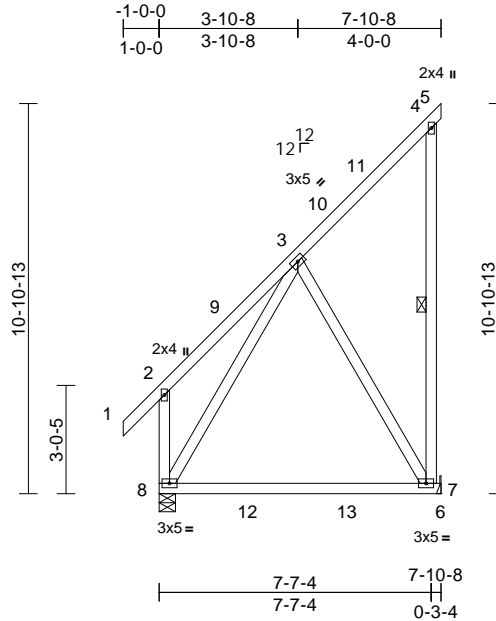
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss H01	Truss Type Monopitch	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512311
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:10
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Page: 1



Scale = 1:64.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.21	7-8	>431	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.39	7-8	>228	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 71 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-7

REACTIONS

(size) 7= Mechanical, 8=0-5-8
Max Horiz 8=407 (LC 11)
Max Uplift 7=-268 (LC 11), 8=-69 (LC 10)
Max Grav 7=537 (LC 28), 8=602 (LC 29)

FORCES

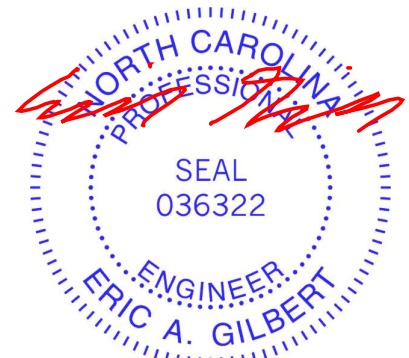
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/65, 2-9=-147/259, 3-9=-79/287, 3-10=-273/174, 10-11=-227/189, 4-11=-224/200, 4-5=-16/0, 4-7=-169/144, 2-8=-255/294
BOT CHORD 8-12=-195/176, 12-13=-195/176, 7-13=-195/176, 6-7=0/0
WEBS 3-7=-284/262, 3-8=-427/196

NOTES

- 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 4-10-8, Exterior (2) 4-10-8 to 7-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 268 lb uplift at joint 7.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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TRENCO
A MiTek Affiliate

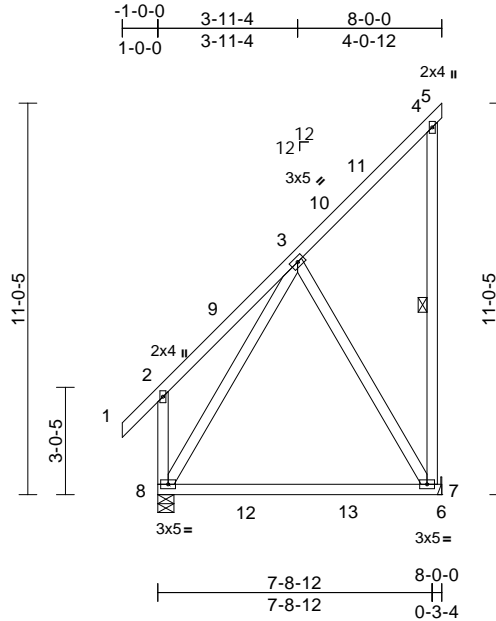
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss H03	Truss Type Monopitch	Qty 7	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512312
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:10
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.23	7-8	>404	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.42	7-8	>215	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 72 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 4-7:2x4 SP 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-12 oc bracing.
WEBS 1 Row at midpt 4-7

REACTIONS

(size) 7= Mechanical, 8=0-5-8
Max Horiz 8=411 (LC 11)
Max Uplift 7=-270 (LC 11), 8=-68 (LC 10)
Max Grav 7=545 (LC 28), 8=610 (LC 29)

FORCES

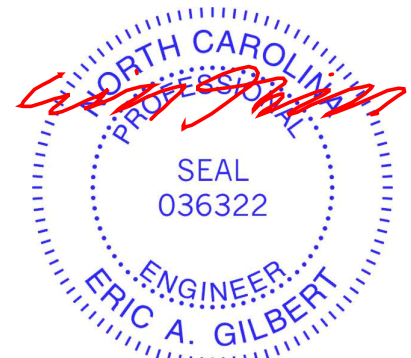
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/65, 2-9=-149/259, 3-9=-80/288, 3-10=-277/176, 10-11=-230/190, 4-11=-227/201, 4-5=-16/0, 4-7=-171/146, 2-8=-256/295
BOT CHORD 8-12=-197/179, 12-13=-197/179, 7-13=-197/179, 6-7=0/0
WEBS 3-7=-288/265, 3-8=-433/197

NOTES

- 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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 5-0-0, Exterior (2) 5-0-0 to 8-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 7.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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A MiTek Affiliate

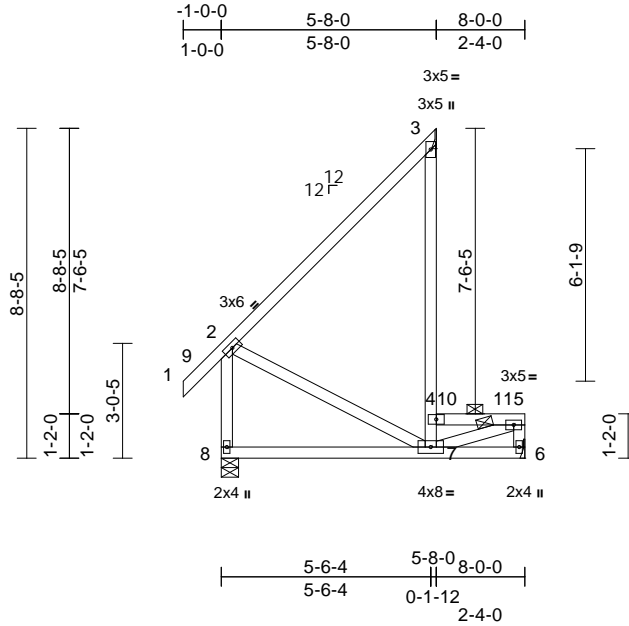
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss H04	Truss Type Half Hip	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512313
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.02	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 58 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 7-8-4 oc bracing.

REACTIONS (size) 3= Mechanical, 6= Mechanical, 8=0-5-8
Max Horiz 8=475 (LC 14)
Max Uplift 3=-183 (LC 14), 6=-79 (LC 14), 8=-46 (LC 12)
Max Grav 3=507 (LC 28), 6=262 (LC 37), 8=459 (LC 42)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-9=0/28, 2-9=0/67, 2-3=-321/296, 4-7=-17/217, 3-4=-4/302, 4-10=-390/430, 10-11=-390/430, 5-11=-390/430, 5-6=-270/111, 2-8=-415/210
BOT CHORD 7-8=-584/416, 6-7=-15/17
WEBS 5-7=-450/400, 2-7=-329/506

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) -1-0-0 to 7-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 3 and 79 lb uplift at joint 6.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
 - Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 4-10=-60, 5-10=-140, 6-8=-20



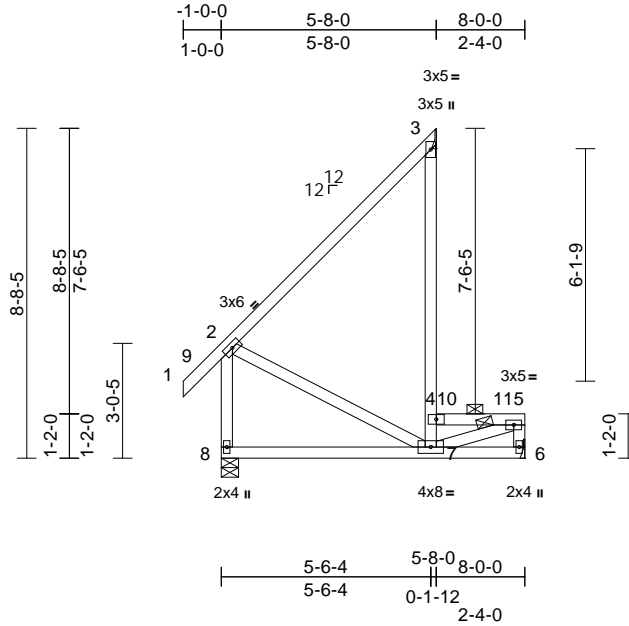
March 18, 2021

Job 21020141-A	Truss H05	Truss Type Half Hip	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512314
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:60.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.03	7-8	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	7-8	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	-0.02	3	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 58 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.1 *Except* 4-5:2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.
 BOT CHORD Rigid ceiling directly applied or 7-8-4 oc bracing.

REACTIONS (size) 3= Mechanical, 6= Mechanical, 8=0-5-8
 Max Horiz 8=475 (LC 14)
 Max Uplift 3=-242 (LC 14), 6=-136 (LC 14), 8=-47 (LC 12)
 Max Grav 3=663 (LC 28), 6=273 (LC 37), 8=459 (LC 42)

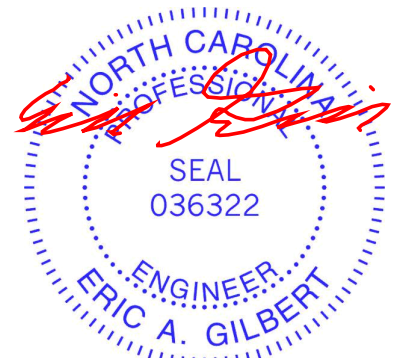
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-9=0/28, 2-9=0/67, 2-3=-321/296, 4-7=-16/217, 3-4=-42/270, 4-10=-389/430, 10-11=-389/430, 5-11=-389/430, 5-6=-272/168, 2-8=-415/210
 BOT CHORD 7-8=-584/416, 6-7=-15/17
 WEBS 5-7=-451/399, 2-7=-329/506

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) exterior zone and C-C Exterior (2) -1-0-0 to 7-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 3 and 136 lb uplift at joint 6.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
- Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 148 lb down and 42 lb up at 5-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-2=-60, 2-3=-60, 4-10=-60, 5-10=-90, 6-8=-20
 Concentrated Loads (lb)
 Vert: 3=-112
- Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor:
 Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-2=-65, 2-3=-65, 4-10=-65, 5-10=-155, 6-8=-20
 Concentrated Loads (lb)
 Vert: 3=-119



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



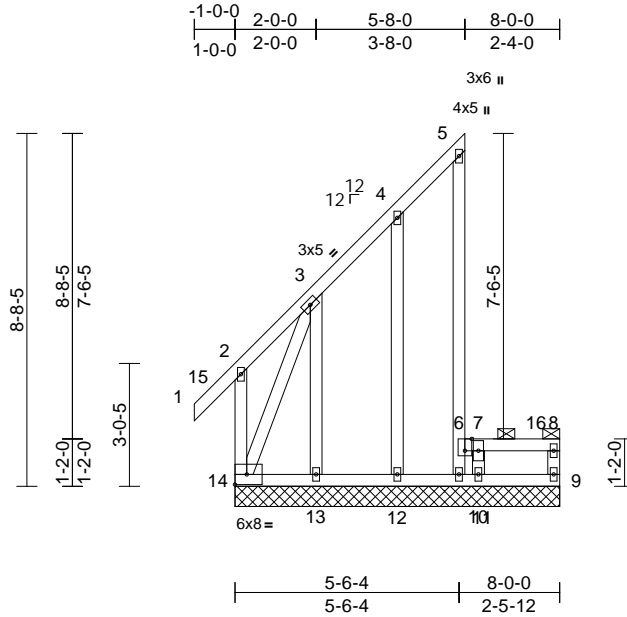
818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss H06	Truss Type Half Hip Supported Gable	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512315
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:56.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 70 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-11, 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	9=8-0-0, 10=8-0-0, 11=8-0-0, 12=8-0-0, 13=8-0-0, 14=8-0-0
Max Horiz	14=475 (LC 14)
Max Uplift	9=-44 (LC 14), 10=-439 (LC 14), 11=-252 (LC 12), 12=-153 (LC 14), 13=-612 (LC 14), 14=-379 (LC 12)
Max Grav	9=101 (LC 37), 10=387 (LC 37), 11=375 (LC 14), 12=254 (LC 38), 13=463 (LC 38), 14=775 (LC 14)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-14=-212/250, 1-15=0/28, 2-15=0/67, 2-3=-109/228, 3-4=-370/291, 4-5=-195/154, 6-11=-358/249, 5-6=-108/114, 6-7=-89/116, 7-16=-89/116, 8-16=-89/116, 8-9=-84/79
BOT CHORD	13-14=-148/119, 12-13=-148/119, 11-12=-148/119, 10-11=-76/63, 9-10=-76/63
WEBS	4-12=-232/227, 3-13=-625/799, 7-10=-388/540, 3-14=-1270/806

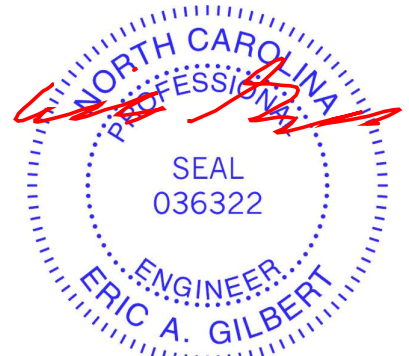
NOTES

- 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) exterior zone and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 2-6-4, Corner (3) 2-6-4 to 7-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9, 11, 12, 10, and 14. This connection is for uplift only and does not consider lateral forces.

- 15) One RT8A 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.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



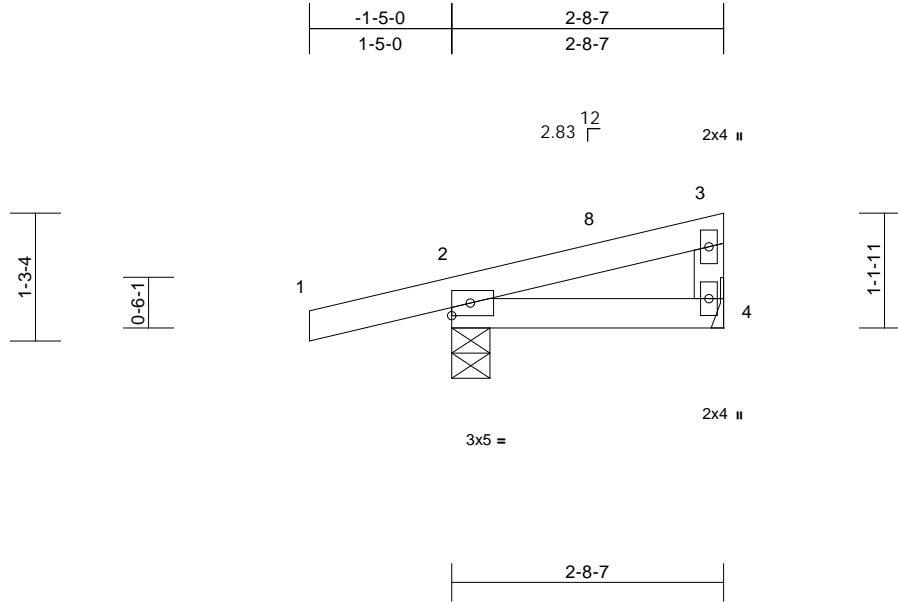
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss HJ1	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512316
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:12
ID:CuSnCjesYpF3wuahOsGO3BzaT8C-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 11 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 4= Mechanical
Max Horiz 2=36 (LC 11)
Max Uplift 2=-88 (LC 8), 4=-13 (LC 12)
Max Grav 2=272 (LC 2), 4=97 (LC 2)

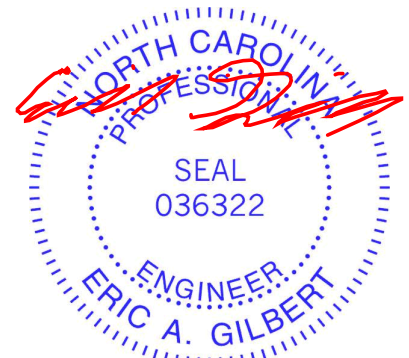
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/26, 2-8=-77/128, 3-8=-14/13,
3-4=-73/23
BOT CHORD 2-4=-68/37

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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 4.
 - 9) 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.
- LOAD CASE(S)** Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

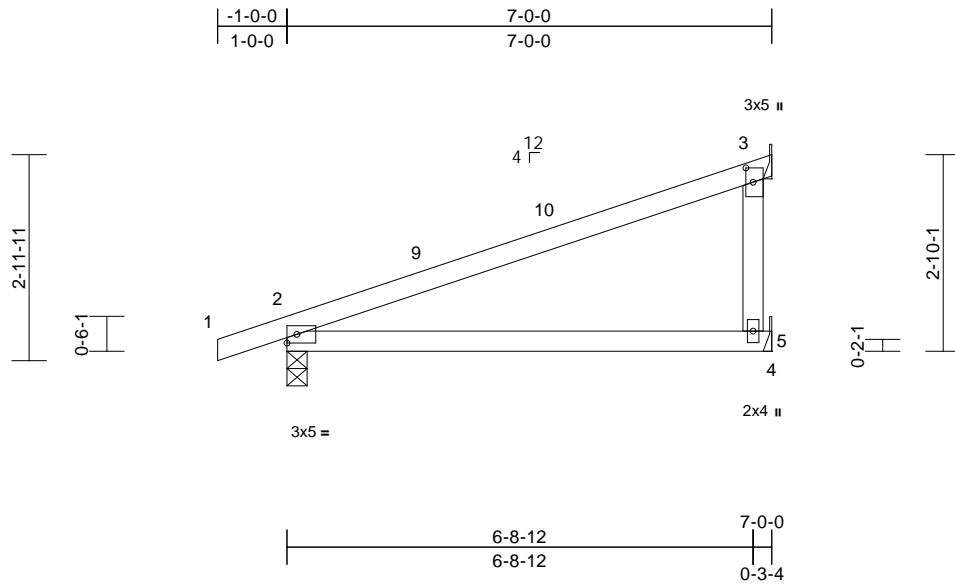
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss I01	Truss Type Monopitch	Qty 6	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512317
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:33.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.11	5-8	>732	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.22	5-8	>359	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	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.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

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

REACTIONS

(size) 2=0-3-8, 3= Mechanical, 5= Mechanical
Max Horiz 2=107 (LC 13)
Max Uplift 2=-84 (LC 10), 3=-77 (LC 14)
Max Grav 2=422 (LC 2), 3=240 (LC 2), 5=135 (LC 7)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-9=-173/144, 9-10=-59/0, 3-10=-47/60, 3-5=0/0
BOT CHORD 2-5=-104/123, 4-5=0/0

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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-8-12, Exterior (2) 3-8-12 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 3.
- 9) 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.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



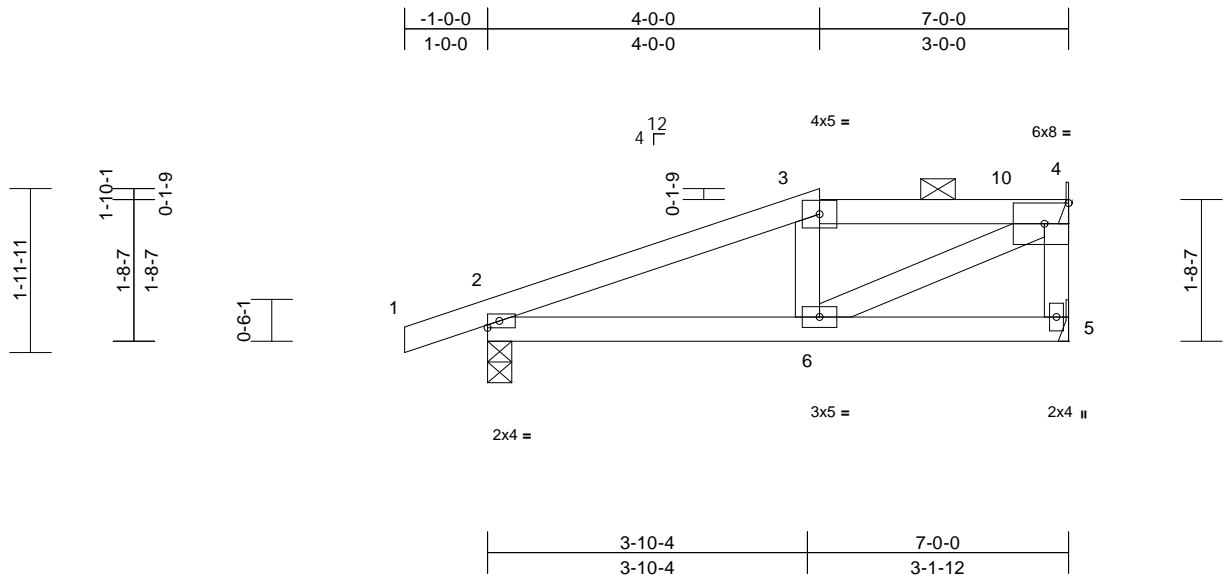
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss I02	Truss Type Half Hip	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512318
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Carter Components, Chesapeake, VA - 23323,

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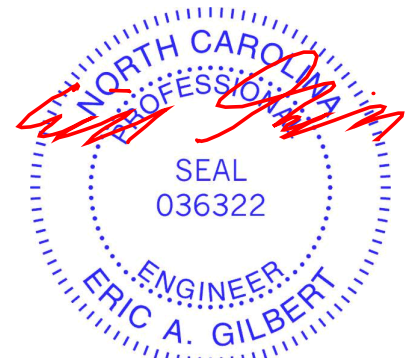
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 31 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz	2=63 (LC 13)
Max Uplift	2=-90 (LC 10), 4=-65 (LC 10)
Max Grav	2=429 (LC 2), 4=316 (LC 2), 5=46 (LC 7)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/26, 2-3=-471/126, 3-10=-410/150, 4-10=-412/149, 4-5=0/0
BOT CHORD	2-6=-85/400, 5-6=-25/27
WEBS	3-6=-104/90, 4-6=-133/453

- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 4.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



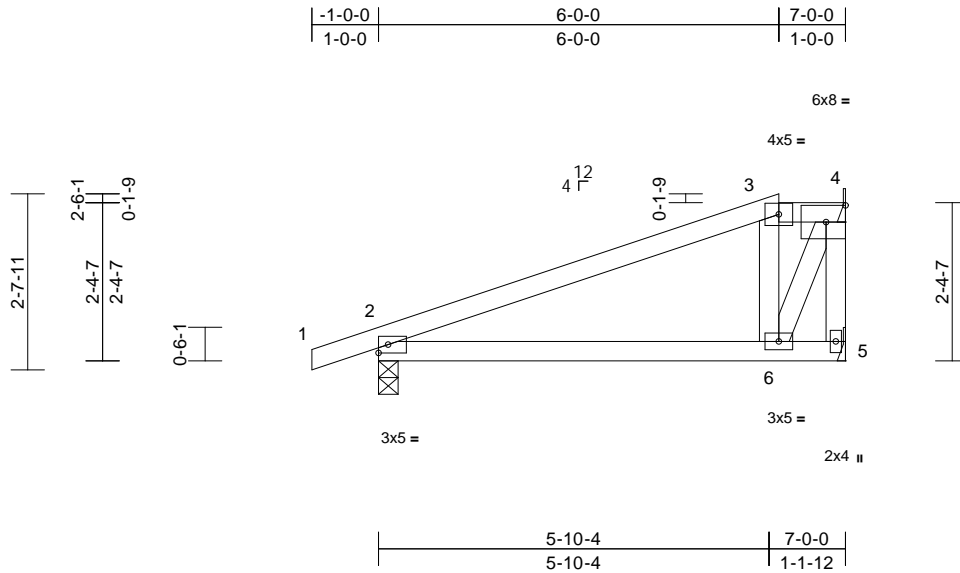
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss 103	Truss Type Half Hip	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512319
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:34.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.05	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.08	6-9	>974	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 31 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=91 (LC 13)
Max Uplift 2=-87 (LC 10), 4=-61 (LC 10), 5=-142 (LC 34)
Max Grav 2=440 (LC 34), 4=474 (LC 2), 5=11 (LC 14)

FORCES

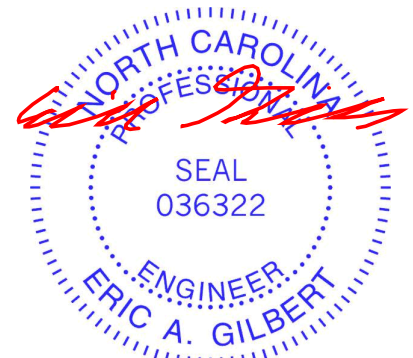
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/26, 2-3=-284/149, 3-4=-207/96, 4-5=0/0
BOT CHORD 2-6=-95/194, 5-6=-37/40
WEBS 3-6=-158/101, 4-6=-124/473

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 5 and 61 lb uplift at joint 4.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



March 18, 2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



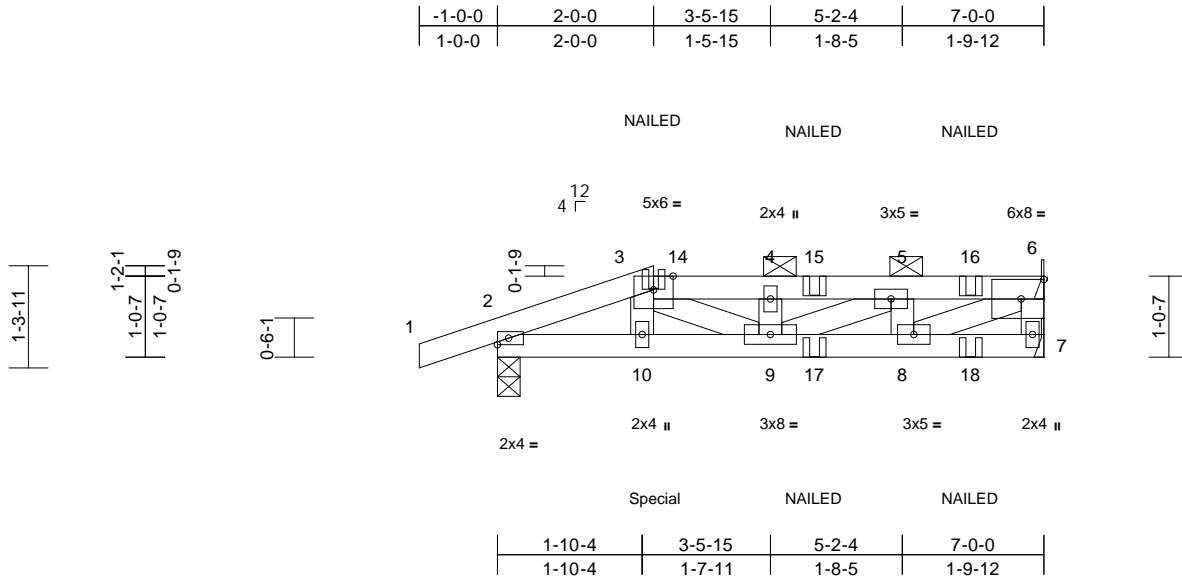
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss I04	Truss Type Roof Special Girder	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512320
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.02	9-10	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.03	9-10	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	7	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0										
Weight: 32 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size)	
	2=0-3-8, 6= Mechanical, 7= Mechanical
Max Horiz	2=35 (LC 11)
Max Uplift	2=-114 (LC 8), 6=-62 (LC 8)
Max Grav	2=482 (LC 2), 6=334 (LC 2), 7=34 (LC 7)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/26, 2-3=-698/120, 3-14=-824/145, 4-14=-828/145, 4-15=-825/144, 5-15=-825/144, 5-16=-604/103, 6-16=-604/103, 6-7=0/0
BOT CHORD	2-10=-116/642, 9-10=-117/639, 9-17=-100/604, 8-17=-100/604, 8-18=-10/8, 7-18=-10/8
WEBS	3-9=-28/241, 3-10=-3/42, 4-9=-150/47, 5-9=-44/242, 5-8=-244/68, 6-8=-105/662

- 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 6.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 30 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) 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: 1-3=-60, 3-6=-60, 7-11=-20
Concentrated Loads (lb)
Vert: 10=-55 (F), 17=-2 (F), 18=-3 (F)



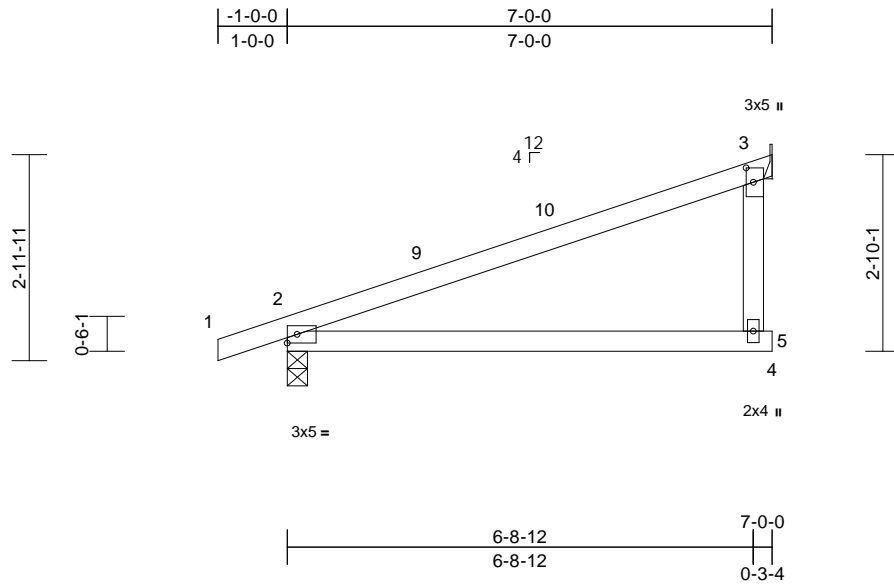
March 18, 2021

Job 21020141-A	Truss J01	Truss Type Monopitch	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512321
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:14
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Page: 1



Scale = 1:33.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.12	5-8	>684	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.24	5-8	>339	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	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

BRACING

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

REACTIONS (size) 2=0-3-8, 3= Mechanical
Max Horiz 2=107 (LC 13)
Max Uplift 2=-84 (LC 10), 3=-53 (LC 14)
Max Grav 2=422 (LC 2), 3=336 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-9=-178/166, 9-10=-59/1,
3-10=-48/59, 3-5=0/136
BOT CHORD 2-5=-103/131, 4-5=0/0

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) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-8-12, Exterior (2) 3-8-12 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 3.
- 9) 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.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



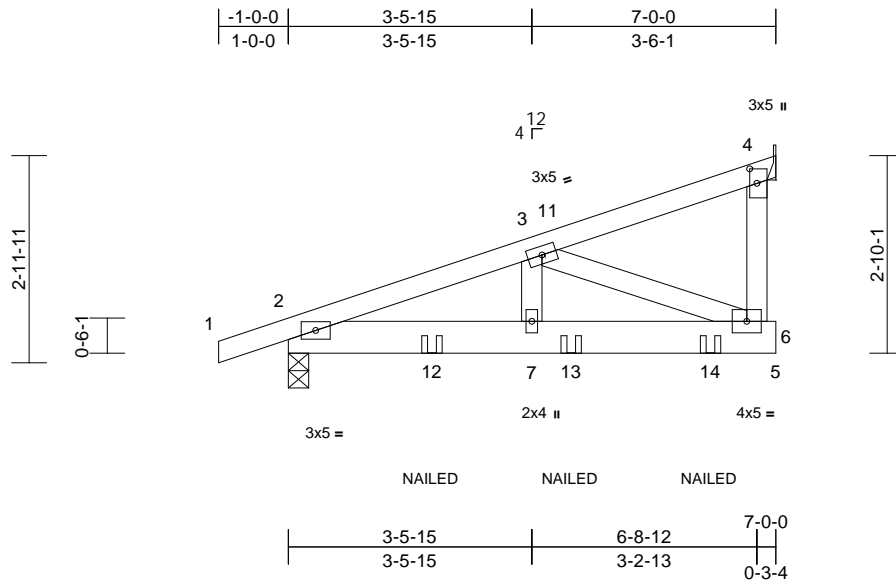
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss J03	Truss Type Monopitch Girder	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512322
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:33.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	7-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 38 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING

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

REACTIONS

(size) 2=0-3-8, 4= Mechanical
Max Horiz 2=105 (LC 11)
Max Uplift 2=-91 (LC 8), 4=-118 (LC 12)
Max Grav 2=421 (LC 2), 4=261 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-3=-501/87, 3-11=-70/2, 4-11=-41/25, 4-6=-85/155
BOT CHORD 2-12=-94/450, 7-12=-94/450, 7-13=-94/450, 13-14=-94/450, 6-14=-94/450, 5-6=0/0
WEBS 3-7=0/118, 3-6=-484/125

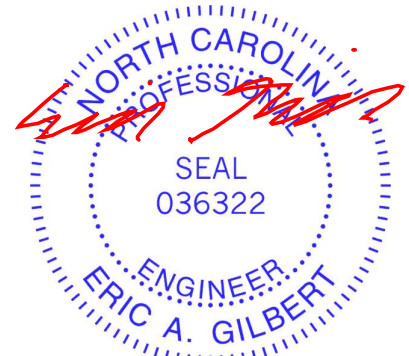
NOTES

- 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 4.
- 9) 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.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 12=-8 (B), 13=-4 (B), 14=90 (B)



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



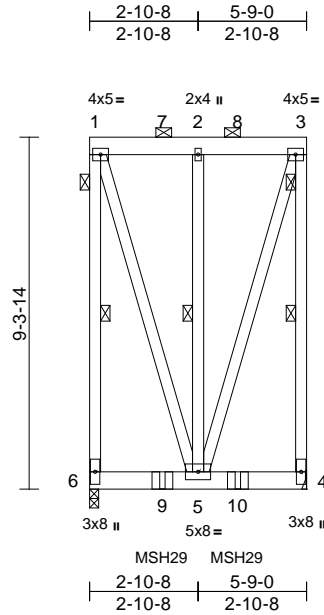
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss K01	Truss Type Flat Girder	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512323
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.04	5	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 90 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 6-1,3-4:2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins: 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4, 2-5

REACTIONS (size) 4= Mechanical, 6=0-2-14
Max Horiz 6=311 (LC 9)
Max Uplift 4=642 (LC 9), 6=631 (LC 8)
Max Grav 4=1551 (LC 25), 6=1643 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-1455/575, 1-7=-322/96, 2-7=-322/96, 2-8=-322/96, 3-8=-322/96, 3-4=-1343/575
BOT CHORD 6-9=-271/243, 5-9=-271/243, 5-10=-115/88, 4-10=-115/88
WEBS 1-5=-543/1196, 2-5=-1396/160, 3-5=-543/1196

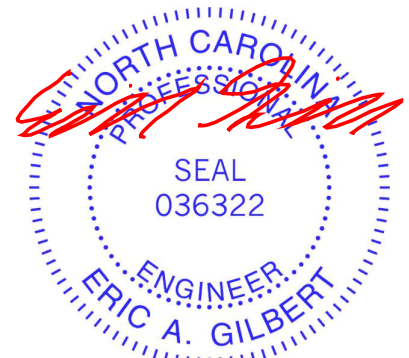
NOTES

- 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) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 642 lb uplift at joint 4.
- 10) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use USP MSH29 (With 10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-2 from the left end to 3-11-2 to connect truss(es) to back face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1023 lb down and 81 lb up at 1-11-2, and 645 lb down and 73 lb up at 3-11-2 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 1-3=-58, 4-6=-19
Concentrated Loads (lb)
Vert: 7=-932, 8=-606, 9=-341 (B), 10=-341 (B)



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



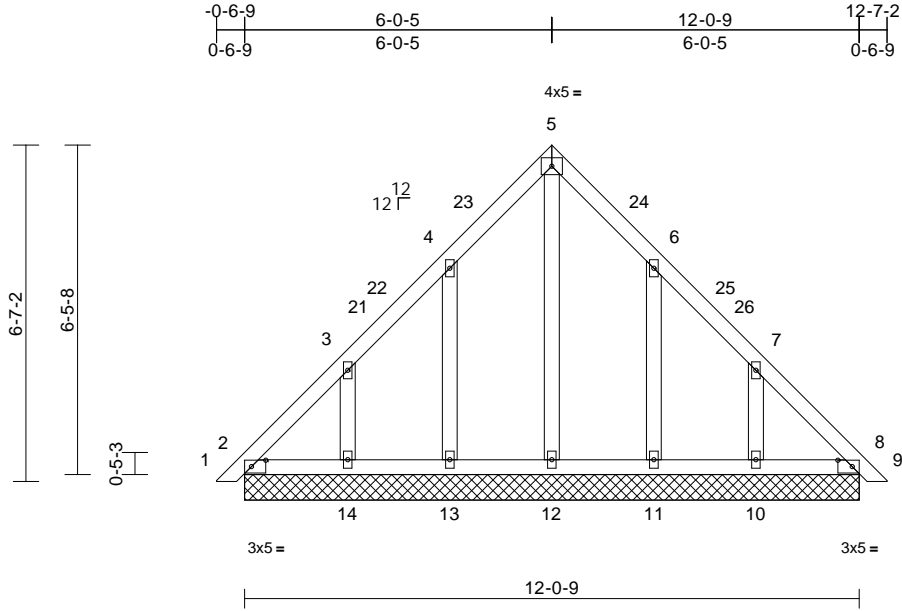
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB01	Truss Type Piggyback	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512324
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:45.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 71 lb	FT = 20%

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

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

REACTIONS (size)
2=12-0-9, 8=12-0-9, 10=12-0-9,
11=12-0-9, 12=12-0-9, 13=12-0-9,
14=12-0-9, 15=12-0-9, 18=12-0-9
Max Horiz 2=158 (LC 13), 15=158 (LC 13)
Max Uplift 2=34 (LC 10), 8=8 (LC 11),
10=128 (LC 15), 11=104 (LC 15),
13=105 (LC 14), 14=129 (LC 14),
15=34 (LC 10), 18=8 (LC 11)
Max Grav 2=167 (LC 29), 8=151 (LC 31),
10=238 (LC 29), 11=214 (LC 29),
12=161 (LC 31), 13=215 (LC 28),
14=239 (LC 28), 15=167 (LC 29),
18=151 (LC 31)

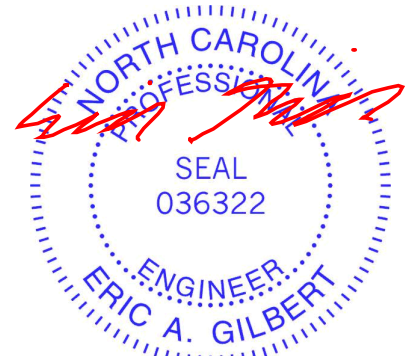
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-162/116, 3-21=-135/60,
21-22=-89/67, 4-22=-88/76, 4-23=-122/112,
5-23=-108/124, 5-24=-108/124,
6-24=-122/112, 6-25=-38/40, 25-26=-61/31,
7-26=-107/25, 7-8=-138/90, 8-9=0/20
BOT CHORD 2-14=73/143, 13-14=73/143,
12-13=-73/143, 11-12=-73/143,
10-11=-73/143, 8-10=73/143
WEBS 5-12=-120/54, 4-13=-181/134,
3-14=-176/135, 6-11=-180/133,
7-10=-176/135

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-10 to 3-2-10, Interior (1) 3-2-10 to 3-7-2, Exterior (2) 3-7-2 to 9-7-2, Interior (1) 9-7-2 to 9-11-10, Exterior (2) 9-11-10 to 12-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 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.

- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



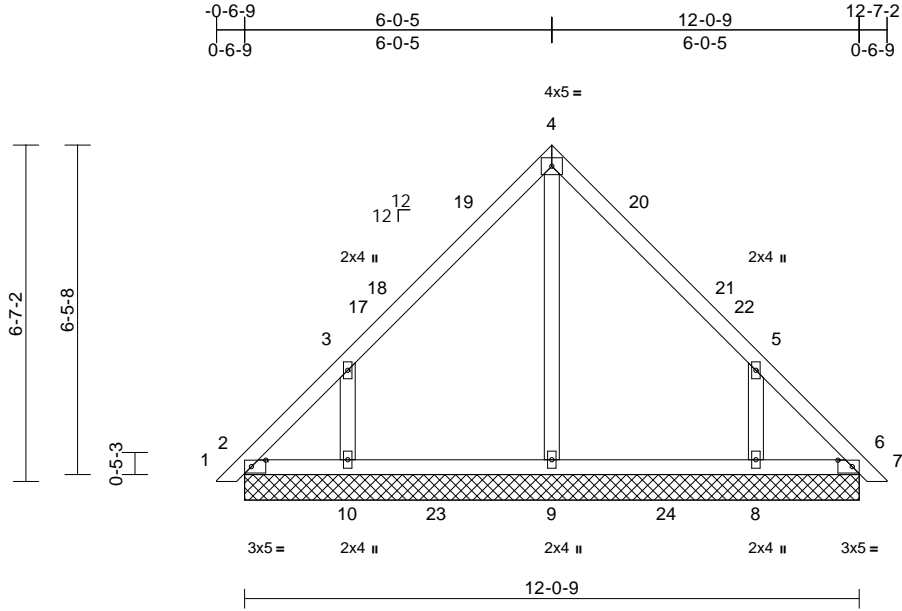
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB02	Truss Type Piggyback	Qty 8	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512325
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:17
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Page: 1



Scale = 1:45.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 60 lb	FT = 20%	

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

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

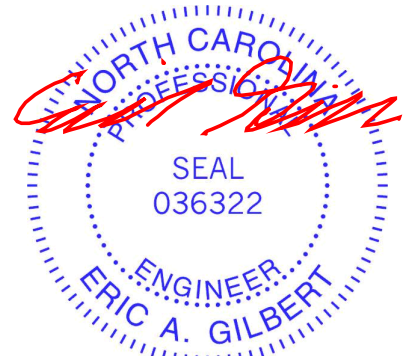
REACTIONS (size)
2=12-0-9, 6=12-0-9, 8=12-0-9,
9=12-0-9, 10=12-0-9, 11=12-0-9,
14=12-0-9
Max Horiz 2=-158 (LC 12), 11=-158 (LC 12)
Max Uplift 2=-50 (LC 10), 6=-24 (LC 11),
8=-212 (LC 15), 10=-213 (LC 14),
11=-50 (LC 10), 14=-24 (LC 11)
Max Grav 2=161 (LC 29), 6=144 (LC 31),
8=410 (LC 29), 9=369 (LC 28),
10=411 (LC 28), 11=161 (LC 29),
14=144 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-172/129, 3-17=-200/89,
17-18=-153/94, 18-19=-107/102,
4-19=-95/120, 4-20=-95/112, 20-21=-104/96,
21-22=-143/86, 5-22=-200/81, 5-6=-150/92,
6-7=0/20
BOT CHORD 2-10=-54/127, 10-23=-54/127, 9-23=-54/127,
9-24=-54/127, 8-24=-54/127, 6-8=-54/127
WEBS 4-9=-189/0, 3-10=-330/255, 5-8=-329/254

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

- 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) exterior zone and C-C Exterior (2) 0-2-10 to 3-2-10, Interior (1) 3-2-10 to 3-7-2, Exterior (2) 3-7-2 to 9-7-2, Interior (1) 9-7-2 to 9-11-10, Exterior (2) 9-11-10 to 12-11-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



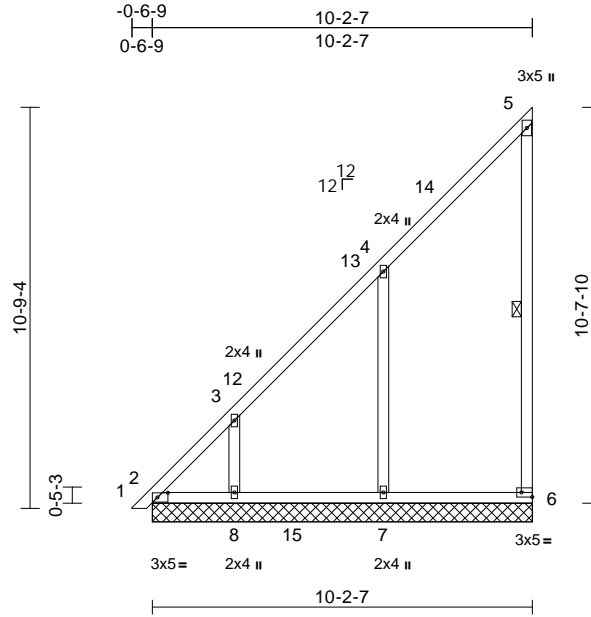
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB03	Truss Type Piggyback	Qty 5	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512326
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:18
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Page: 1



Scale = 1:61.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 65 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-6

REACTIONS

(size)	2=10-2-7, 6=10-2-7, 7=10-2-7, 8=10-2-7, 9=10-2-7
Max Horiz	2=387 (LC 13), 9=387 (LC 13)
Max Uplift	2=-138 (LC 12), 6=-114 (LC 11), 7=-172 (LC 14), 8=-201 (LC 14), 9=-138 (LC 12)
Max Grav	2=298 (LC 11), 6=248 (LC 28), 7=594 (LC 28), 8=381 (LC 28), 9=298 (LC 11)

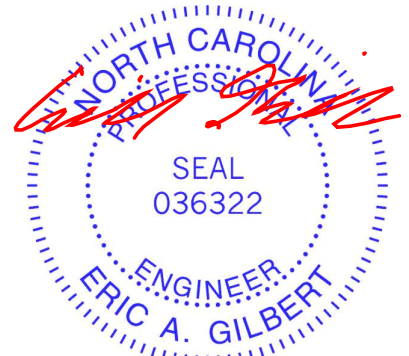
FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/20, 2-3=-403/269, 3-12=-317/163, 12-13=-286/216, 4-13=-283/234, 4-14=-250/125, 5-14=-173/152, 5-6=-157/108
BOT CHORD	2-8=-169/186, 8-15=-169/186, 7-15=-169/186, 6-7=-169/186
WEBS	4-7=-393/213, 3-8=-304/242

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) exterior zone and C-C Exterior (2) 0-2-10 to 3-2-10, Interior (1) 3-2-10 to 6-4-9, Exterior (2) 6-4-9 to 10-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6, 2, 7, and 8. This connection is for uplift only and does not consider lateral forces.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



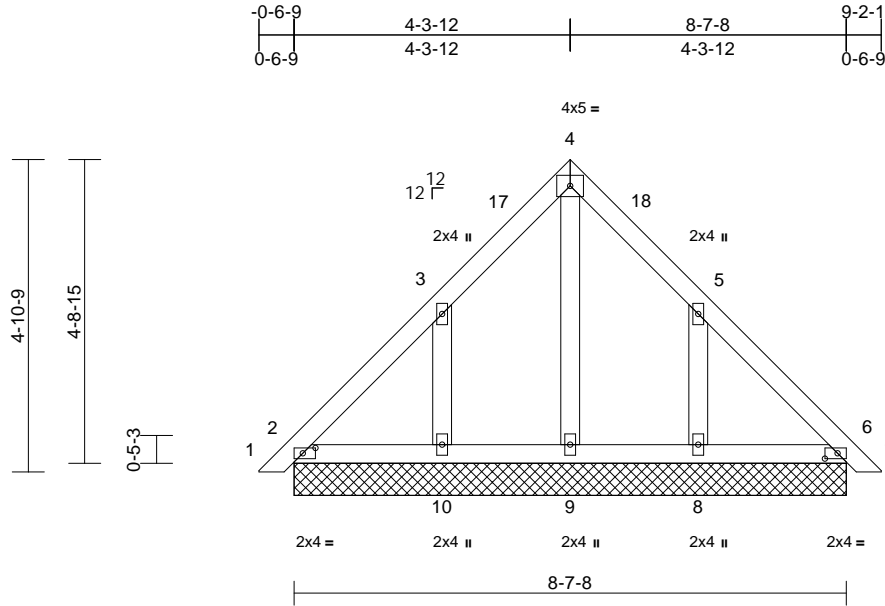
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB04	Truss Type Piggyback	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512327
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:18
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Page: 1



Scale = 1:36
Plate Offsets (X, Y): [2:0-2-6,0-1-0], [6:0-2-6,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 46 lb	FT = 20%

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

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

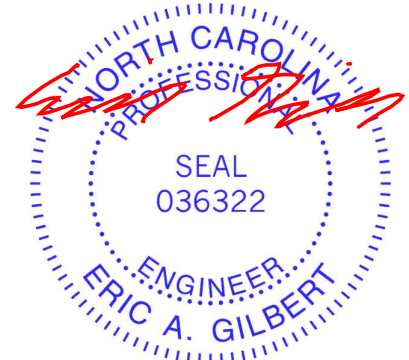
REACTIONS (size) 2=8-7-8, 6=8-7-8, 8=8-7-8, 9=8-7-8, 10=8-7-8, 11=8-7-8, 14=8-7-8
Max Horiz 2=115 (LC 13), 11=115 (LC 13)
Max Uplift 2=-14 (LC 10), 8=-150 (LC 15), 10=-151 (LC 14), 11=-14 (LC 10)
Max Grav 2=153 (LC 29), 6=151 (LC 2), 8=281 (LC 29), 9=119 (LC 31), 10=282 (LC 28), 11=153 (LC 29), 14=151 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-112/79, 3-17=-112/89, 4-17=-84/94, 4-18=-84/94, 5-18=-110/89, 5-6=-98/58, 6-7=0/20
BOT CHORD 2-10=-46/103, 9-10=-46/103, 8-9=-46/103, 6-8=-46/103
WEBS 4-9=-87/40, 3-10=-213/164, 5-8=-212/164

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

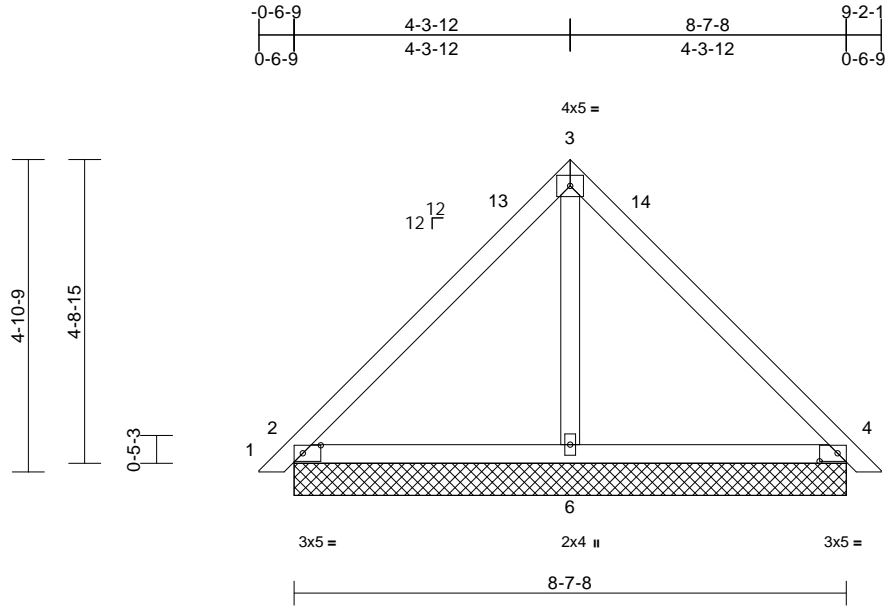


Job 21020141-A	Truss PB05	Truss Type Piggyback	Qty 12	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512328
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:19
ID: XtahaOwxMOCPCe?r7DgXyzaVG6-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDOI7J4zJC?f

Page: 1



Scale = 1:36

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 39 lb	FT = 20%	

LUMBER

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

BRACING

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

REACTIONS

(size) 2=8-7-8, 4=8-7-8, 6=8-7-8, 7=8-7-8, 10=8-7-8
Max Horiz 2=-115 (LC 12), 7=-115 (LC 12)
Max Uplift 2=-60 (LC 15), 4=-65 (LC 15), 7=-60 (LC 15), 10=-65 (LC 15)
Max Grav 2=332 (LC 2), 4=332 (LC 2), 6=254 (LC 2), 7=332 (LC 2), 10=332 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

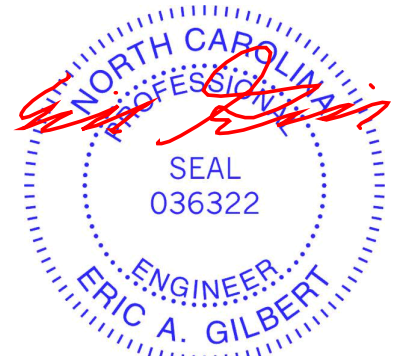
TOP CHORD 1-2=0/20, 2-13=-285/116, 3-13=-148/127, 3-14=-148/127, 4-14=-285/116, 4-5=0/20
BOT CHORD 2-6=-84/149, 4-6=-19/129
WEBS 3-6=-80/43

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 4-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



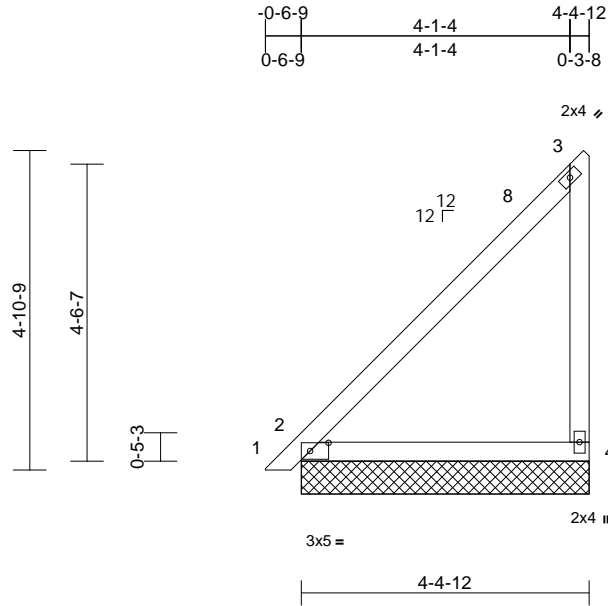
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette	E15512329
21020141-A	PB06	Piggyback	5	1	Job Reference (optional)	

Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:19
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Page: 1



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

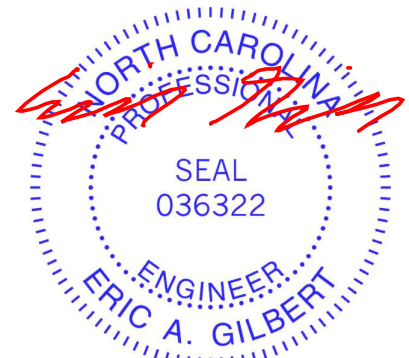
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 23 lb	FT = 20%

- LUMBER**
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
- BRACING**
 TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (size) 2=4-4-12, 4=4-4-12, 5=4-4-12
 Max Horiz 2=168 (LC 13), 5=168 (LC 13)
 Max Uplift 4=-79 (LC 11)
 Max Grav 2=245 (LC 29), 4=240 (LC 28), 5=245 (LC 29)
- FORCES** (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-8=-181/70, 3-8=-93/114, 3-4=-172/88
 BOT CHORD 2-4=-79/101

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

- NOTES**
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
 - Unbalanced snow loads have been considered for this design.



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



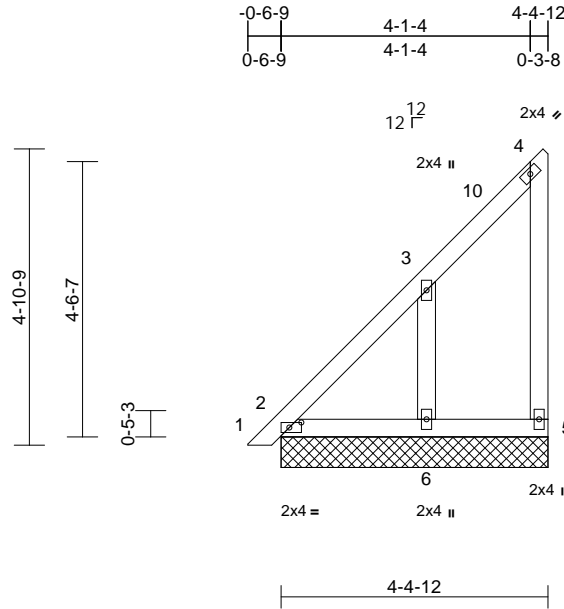
818 Soundside Road
 Edenton, NC 27932

Job 21020141-A	Truss PB07	Truss Type Piggyback	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512330
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:19
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Page: 1



Scale = 1:37.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=4-4-12, 5=4-4-12, 6=4-4-12, 7=4-4-12
Max Horiz 2=168 (LC 13), 7=168 (LC 13)
Max Uplift 2=-30 (LC 10), 5=-46 (LC 13), 6=-147 (LC 14), 7=-30 (LC 10)
Max Grav 2=167 (LC 29), 5=80 (LC 28), 6=283 (LC 28), 7=167 (LC 29)

FORCES

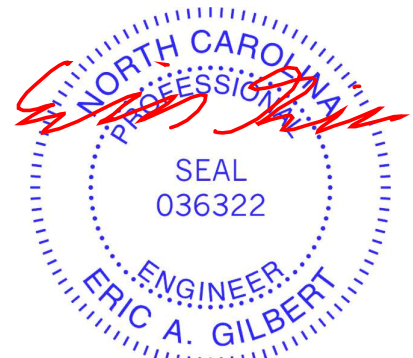
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-152/125, 3-10=-124/107, 4-10=-93/112, 4-5=-72/59
BOT CHORD 2-6=-79/106, 5-6=-79/106
WEBS 3-6=-212/172

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) exterior zone and C-C Corner (3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) 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.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



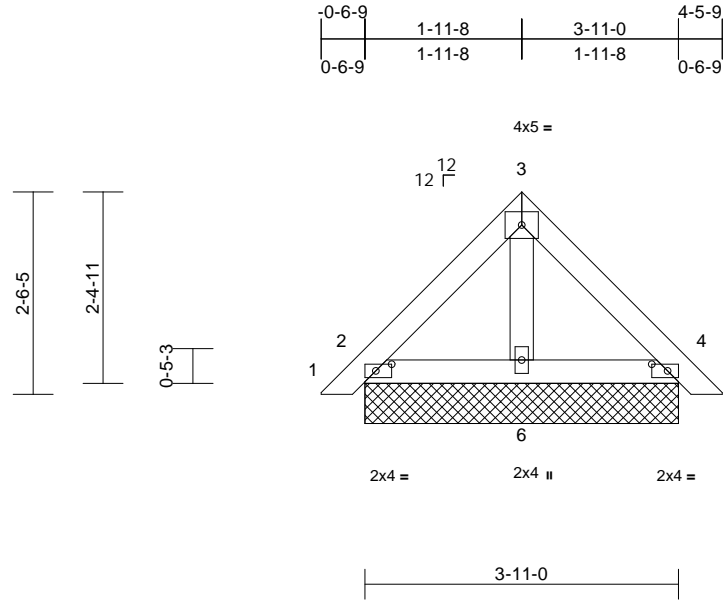
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB08	Truss Type Piggyback	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512331
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:28.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 19 lb	FT = 20%	

LUMBER

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

BRACING

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

REACTIONS

(size) 2=3-11-0, 4=3-11-0, 6=3-11-0, 7=3-11-0, 10=3-11-0
Max Horiz 2=-57 (LC 12), 7=-57 (LC 12)
Max Uplift 2=-20 (LC 15), 4=-25 (LC 15), 6=-1 (LC 14), 7=-20 (LC 15), 10=-25 (LC 15)
Max Grav 2=151 (LC 2), 4=151 (LC 2), 6=147 (LC 2), 7=151 (LC 2), 10=151 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

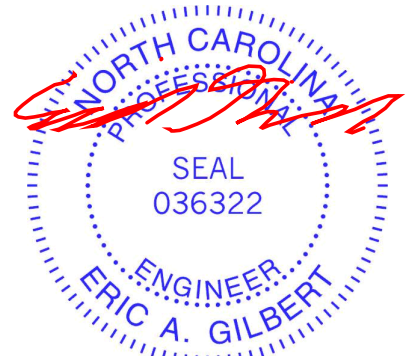
TOP CHORD 1-2=0/20, 2-3=-98/46, 3-4=-98/46, 4-5=0/20
BOT CHORD 2-6=-19/51, 4-6=-14/51
WEBS 3-6=-57/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



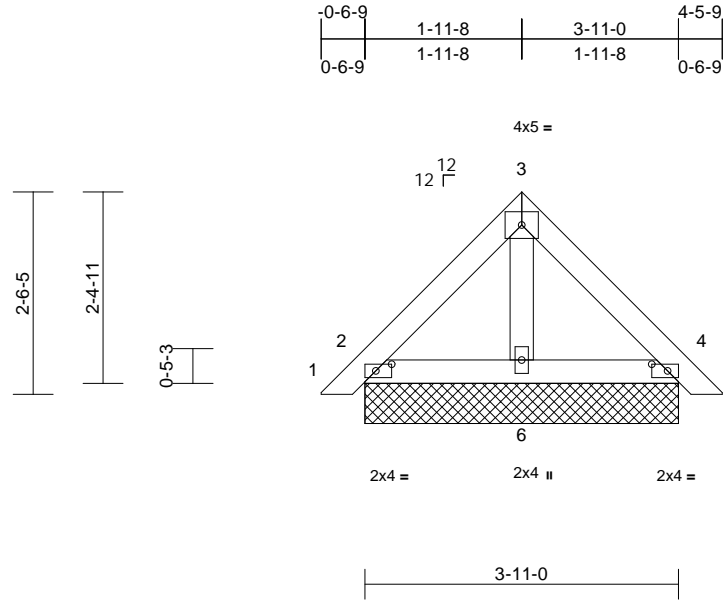
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB09	Truss Type Piggyback	Qty 9	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512332
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:20
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Page: 1



Scale = 1:28.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 19 lb	FT = 20%	

LUMBER

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

BRACING

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

REACTIONS

(size) 2=3-11-0, 4=3-11-0, 6=3-11-0, 7=3-11-0, 10=3-11-0
Max Horiz 2=-57 (LC 12), 7=-57 (LC 12)
Max Uplift 2=-20 (LC 15), 4=-25 (LC 15), 6=-1 (LC 14), 7=-20 (LC 15), 10=-25 (LC 15)
Max Grav 2=151 (LC 2), 4=151 (LC 2), 6=147 (LC 2), 7=151 (LC 2), 10=151 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

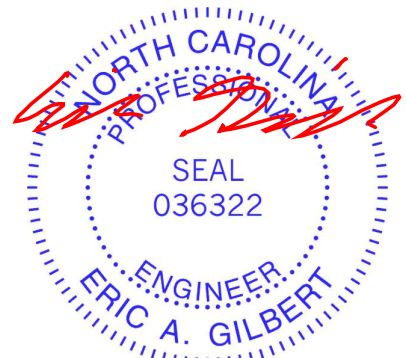
TOP CHORD 1-2=0/20, 2-3=-98/46, 3-4=-98/46, 4-5=0/20
BOT CHORD 2-6=-19/51, 4-6=-14/51
WEBS 3-6=-57/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



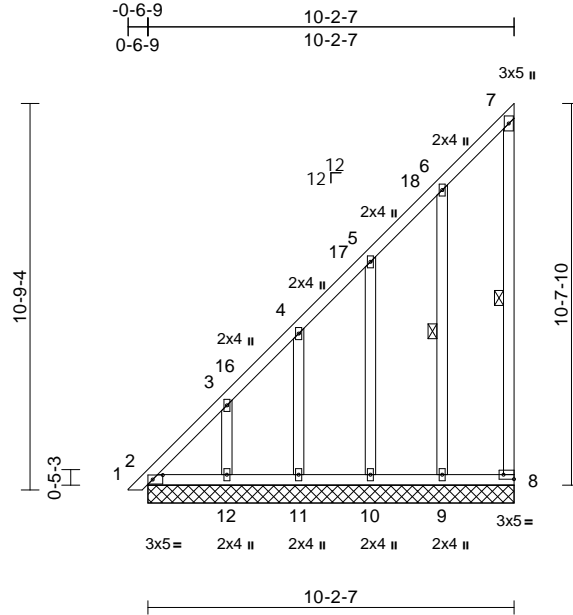
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss PB10	Truss Type Piggyback	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512333
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:20
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Page: 1



Scale = 1:64.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 83 lb	FT = 20%	

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

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

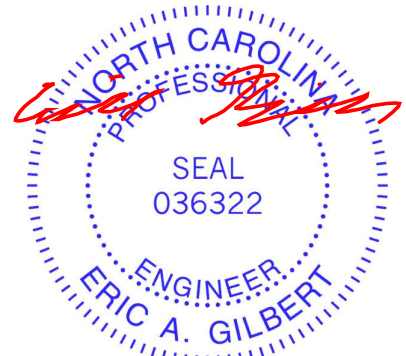
WEBS 1 Row at midpt 7-8, 6-9
REACTIONS (size) 2=10-2-7, 8=10-2-7, 9=10-2-7, 10=10-2-7, 11=10-2-7, 12=10-2-7, 13=10-2-7
Max Horiz 2=387 (LC 13), 13=387 (LC 13)
Max Uplift 2=-124 (LC 12), 8=-132 (LC 13), 9=-68 (LC 16), 10=-73 (LC 14), 11=-100 (LC 14), 12=-142 (LC 14), 13=-124 (LC 12)
Max Grav 2=294 (LC 11), 8=133 (LC 10), 9=216 (LC 28), 10=217 (LC 28), 11=197 (LC 28), 12=261 (LC 28), 13=294 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-398/261, 3-16=-332/187, 4-16=-317/212, 4-17=-278/164, 5-17=-255/175, 5-18=-261/170, 6-18=-236/174, 6-7=-159/144, 7-8=-79/55
BOT CHORD 2-12=-171/187, 11-12=-171/187, 10-11=-171/187, 9-10=-171/187, 8-9=-171/187
WEBS 6-9=-205/125, 5-10=-193/154, 4-11=-168/127, 3-12=-189/143

NOTES

- 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) exterior zone and C-C Exterior (2) 0-2-10 to 3-2-10, Interior (1) 3-2-10 to 6-4-9, Exterior (2) 6-4-9 to 10-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 2, 9, 10, 11, and 12. This connection is for uplift only and does not consider lateral forces.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



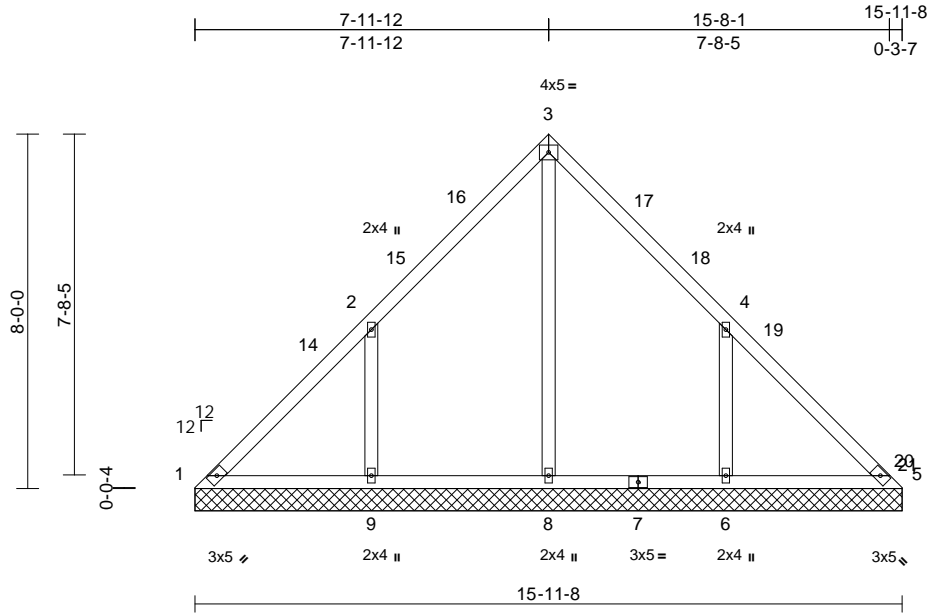
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL01	Truss Type Valley	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512334
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:21
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Page: 1



Scale = 1:52

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 77 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=15-11-8, 5=15-11-8, 6=15-11-8, 8=15-11-8, 9=15-11-8
Max Horiz 1=192 (LC 11)
Max Uplift 1=-41 (LC 10), 5=-1 (LC 11), 6=-236 (LC 15), 9=-241 (LC 14)
Max Grav 1=170 (LC 28), 5=129 (LC 30), 6=549 (LC 28), 8=489 (LC 27), 9=555 (LC 27)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-194/165, 2-14=-166/225, 2-15=-125/108, 15-16=-50/121, 3-16=-48/165, 3-17=-49/138, 17-18=-50/95, 4-18=-103/79, 4-19=-128/182, 5-19=-153/134, 5-20=-148/42, 5-20=-159/37
BOT CHORD 1-9=-140/162, 8-9=-140/162, 7-8=-140/162, 6-7=-140/162, 5-6=-140/162, 5-21=-24/118, 5-21=-27/116
WEBS 3-8=-329/0, 2-9=-377/274, 4-6=-375/271

NOTES

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

- 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) exterior zone and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-0-0, Exterior (2) 5-0-0 to 11-0-0, Interior (1) 11-0-0 to 12-7-12, Exterior (2) 12-7-12 to 15-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 1 lb uplift at joint 5, 241 lb uplift at joint 9 and 236 lb uplift at joint 6.

LOAD CASE(S) Standard



March 18, 2021

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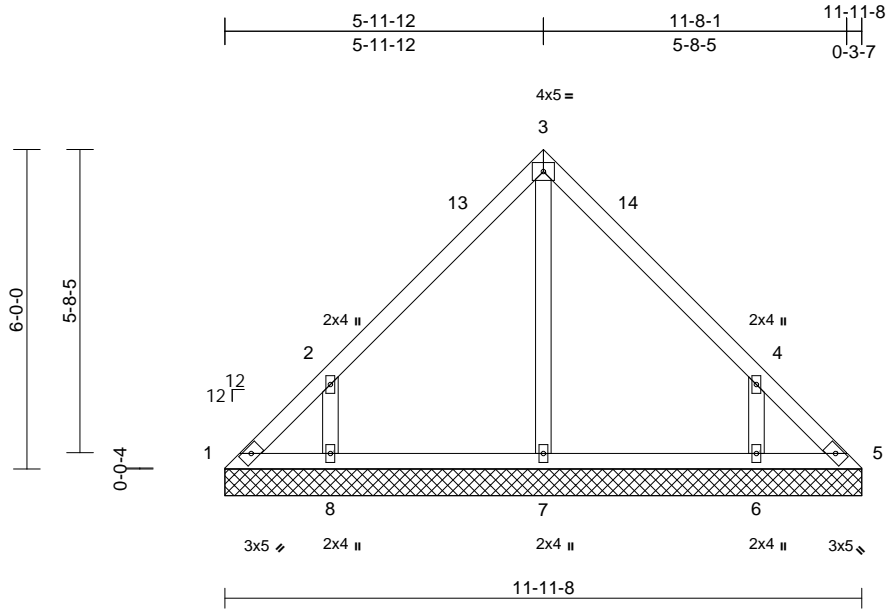
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL02	Truss Type Valley	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512335
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 54 lb	FT = 20%	

LUMBER

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

BRACING

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

REACTIONS

(size) 1=11-11-8, 5=11-11-8, 6=11-11-8, 7=11-11-8, 8=11-11-8
Max Horiz 1=143 (LC 11)
Max Uplift 1=-52 (LC 10), 5=-17 (LC 11), 6=-185 (LC 15), 8=-191 (LC 14)
Max Grav 1=129 (LC 28), 5=106 (LC 30), 6=394 (LC 28), 7=270 (LC 2), 8=400 (LC 27)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-163/131, 2-13=-203/108, 3-13=-105/126, 3-14=-105/118, 4-14=-202/102, 4-5=-136/90
BOT CHORD 1-8=-49/104, 7-8=-46/102, 6-7=-46/102, 5-6=-46/102
WEBS 3-7=-184/0, 2-8=-345/254, 4-6=-342/252

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 1, 17 lb uplift at joint 5, 191 lb uplift at joint 8 and 185 lb uplift at joint 6.

LOAD CASE(S) Standard



March 18, 2021

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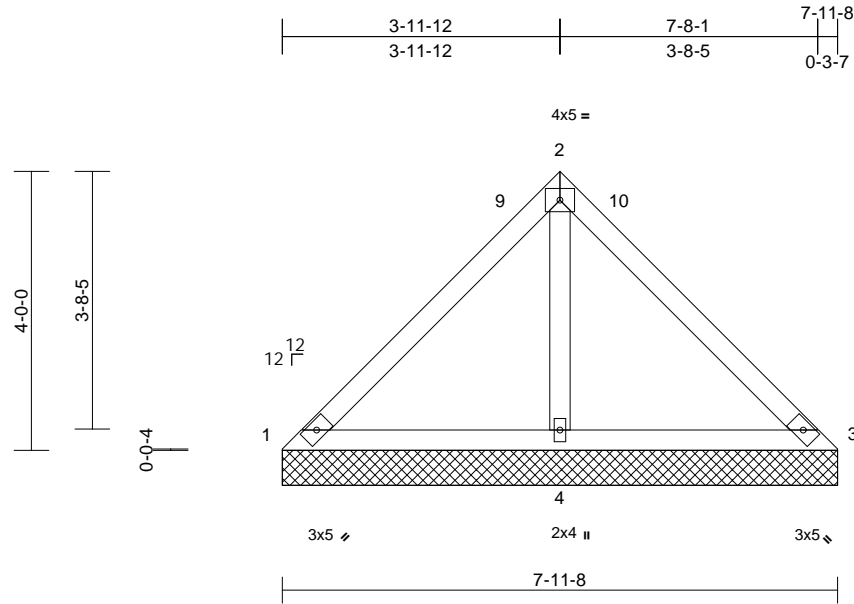
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL03	Truss Type Valley	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512336
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 32 lb	FT = 20%	

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 7-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=7-11-8, 3=7-11-8, 4=7-11-8
Max Horiz 1=94 (LC 11)
Max Uplift 1=-29 (LC 32), 3=-29 (LC 31), 4=-135 (LC 14)
Max Grav 1=90 (LC 31), 3=90 (LC 32), 4=707 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

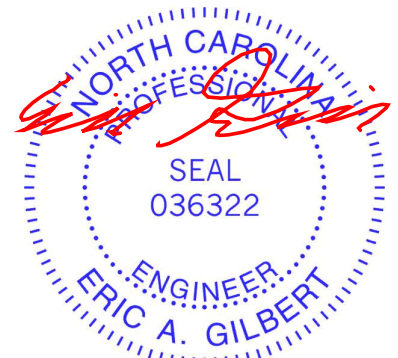
TOP CHORD 1-9=-99/206, 2-9=-74/267, 2-10=-74/267, 3-10=-98/202
BOT CHORD 1-4=-206/155, 3-4=-206/155
WEBS 2-4=-523/196

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 29 lb uplift at joint 3 and 135 lb uplift at joint 4.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

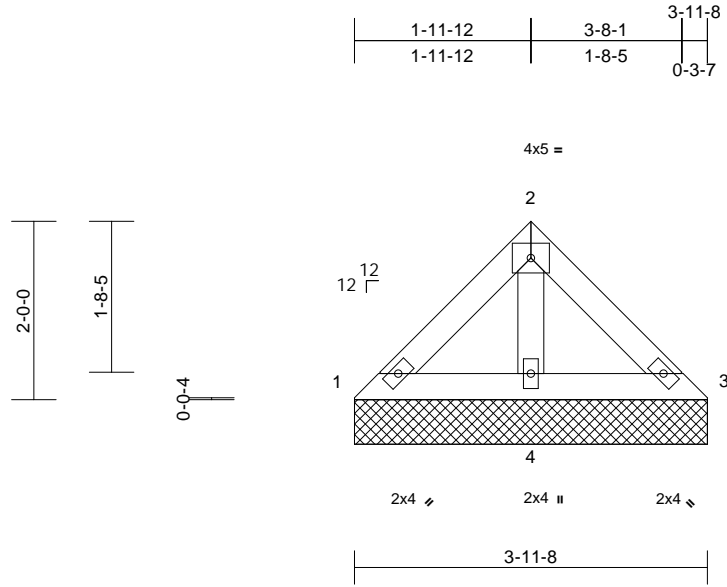
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette	E15512337
21020141-A	VL04	Valley	2	1	Job Reference (optional)	

Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:23
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Page: 1



Scale = 1:25.8

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 15 lb	FT = 20%

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

BRACING
 TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=3-11-8, 3=3-11-8, 4=3-11-8
 Max Horiz 1=-43 (LC 10)
 Max Uplift 1=-2 (LC 15), 3=-4 (LC 15), 4=-34 (LC 14)
 Max Grav 1=70 (LC 31), 3=70 (LC 32), 4=264 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-61/69, 2-3=-7/65
 BOT CHORD 1-4=-57/51, 3-4=-57/51
 WEBS 2-4=-152/37

- Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1, 4 lb uplift at joint 3 and 34 lb uplift at joint 4.
- LOAD CASE(S)** Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10



March 18, 2021

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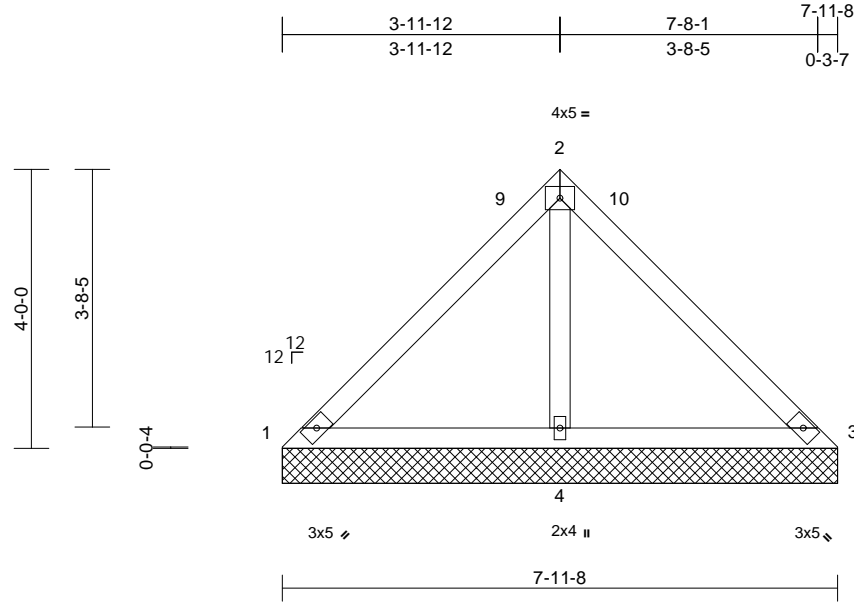


Job 21020141-A	Truss VL05	Truss Type Valley	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512338
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:23
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Page: 1



Scale = 1:33

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 7-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=7-11-8, 3=7-11-8, 4=7-11-8
Max Horiz 1=-94 (LC 10)
Max Uplift 1=-29 (LC 32), 3=-29 (LC 31), 4=-135 (LC 14)
Max Grav 1=90 (LC 31), 3=90 (LC 32), 4=707 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-9=-99/206, 2-9=-74/267, 2-10=-74/267, 3-10=-98/202
BOT CHORD 1-4=-206/155, 3-4=-206/155
WEBS 2-4=-522/196

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 29 lb uplift at joint 3 and 135 lb uplift at joint 4.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



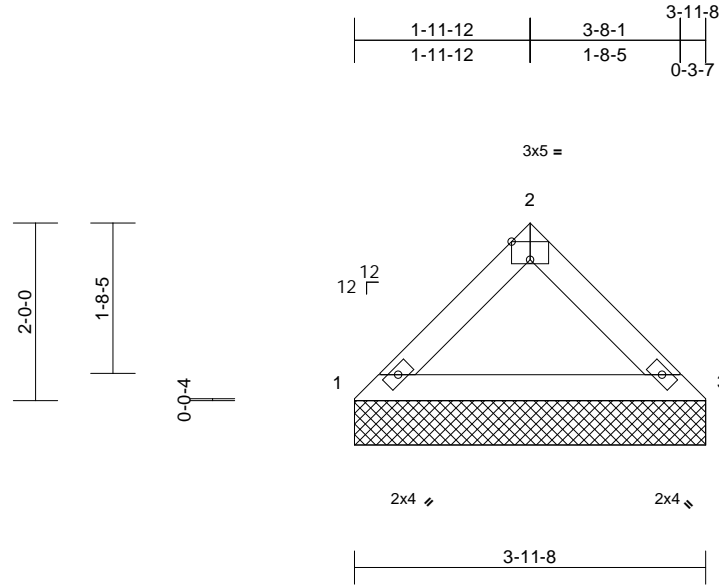
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2854 Norrington-Roof-Marinette	E15512339
21020141-A	VL06	Valley	1	1	Job Reference (optional)	

Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:26

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 13 lb	FT = 20%	

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-11-8, 3=3-11-8
Max Horiz 1=-44 (LC 10)
Max Uplift 1=-14 (LC 14), 3=-14 (LC 15)
Max Grav 1=198 (LC 2), 3=198 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-246/41, 2-3=-136/37
BOT CHORD 1-3=-29/173

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pf=20.0 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at joint 3.

LOAD CASE(S) Standard



March 18, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

ENGINEERING BY
TRENCO
A MiTek Affiliate

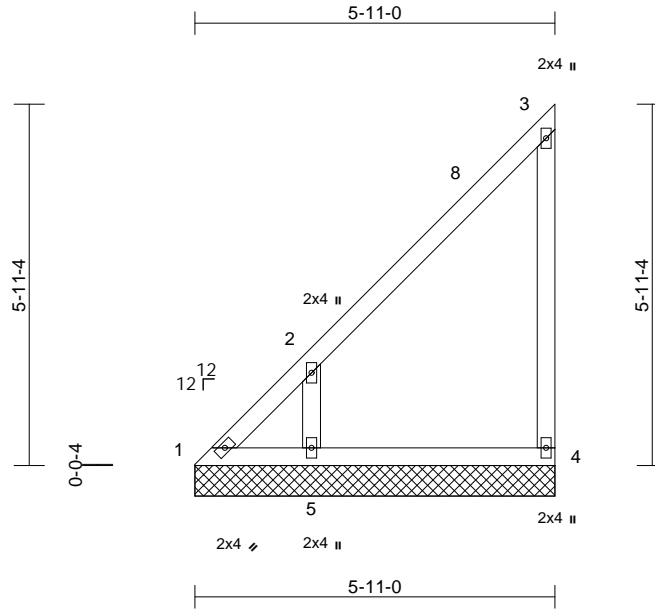
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL07	Truss Type Valley	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512340
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:37.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 30 lb	FT = 20%

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

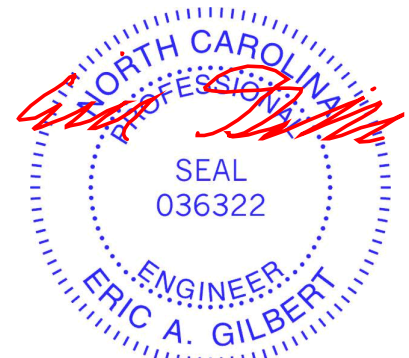
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-11-0, 4=5-11-0, 5=5-11-0
Max Horiz 1=208 (LC 11)
Max Uplift 1=-80 (LC 12), 4=-75 (LC 11), 5=-186 (LC 14)
Max Grav 1=150 (LC 11), 4=185 (LC 27), 5=412 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-232/196, 2-8=-201/85, 3-8=-121/104, 3-4=-153/93
BOT CHORD 1-5=-98/107, 4-5=-98/107
WEBS 2-5=-356/298

- 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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 4-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 4, 80 lb uplift at joint 1 and 186 lb uplift at joint 5.
- LOAD CASE(S)** Standard



March 18, 2021

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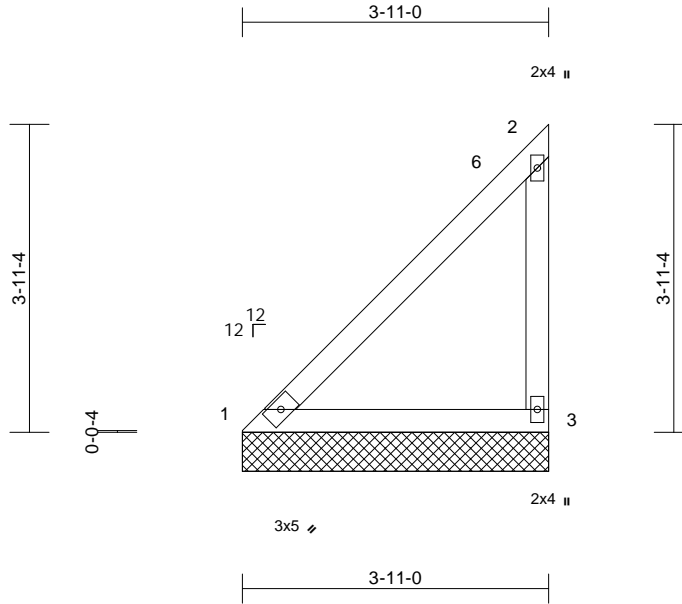
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL08	Truss Type Valley	Qty 1	Ply 1	2854 Norrrington-Roof-Marinette Job Reference (optional)	E15512341
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:29.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=3-11-0, 3=3-11-0
Max Horiz 1=133 (LC 11)
Max Uplift 3=61 (LC 14)
Max Grav 1=193 (LC 28), 3=210 (LC 27)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-6=-218/56, 2-6=-72/96, 2-3=-144/69
BOT CHORD 1-3=-63/161

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 3.

LOAD CASE(S) Standard



March 18, 2021

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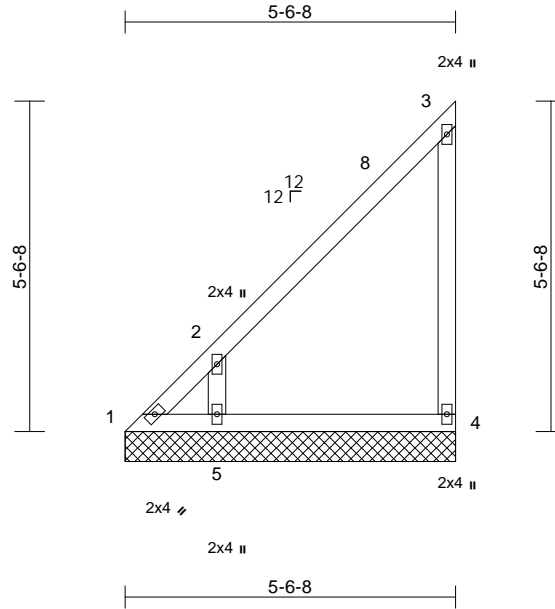
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL09	Truss Type Valley	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512342
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Carter Components, Chesapeake, VA - 23323,

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Thu Mar 18 08:45:24
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Page: 1



Scale = 1:38.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 28 lb	FT = 20%	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-6-8, 4=5-6-8, 5=5-6-8
Max Horiz 1=193 (LC 11)
Max Uplift 1=-96 (LC 12), 4=-72 (LC 11), 5=-182 (LC 14)
Max Grav 1=142 (LC 11), 4=183 (LC 27), 5=412 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-250/211, 2-8=-196/80, 3-8=-112/101, 3-4=-150/89
BOT CHORD 1-5=-117/128, 4-5=-91/122
WEBS 2-5=-381/328

- 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) exterior zone and C-C Corner (3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 4-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 1, 72 lb uplift at joint 4 and 182 lb uplift at joint 5.
- LOAD CASE(S)** Standard



March 18, 2021

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ENGINEERING BY
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A MiTek Affiliate

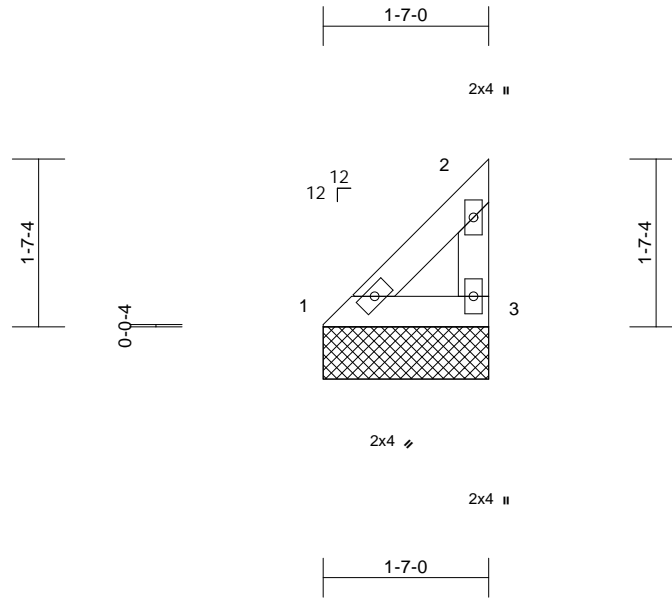
818 Soundside Road
Edenton, NC 27932

Job 21020141-A	Truss VL11	Truss Type Valley	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)	E15512344
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Carter Components, Chesapeake, VA - 23323,

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Page: 1



Scale = 1:22

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 6 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-7-0, 3=1-7-0
Max Horiz 1=45 (LC 11)
Max Uplift 3=-21 (LC 14)
Max Grav 1=72 (LC 2), 3=78 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-72/32, 2-3=-46/20
BOT CHORD 1-3=-20/50

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) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. 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=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=20.0 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) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 3.

LOAD CASE(S) Standard



March 18, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

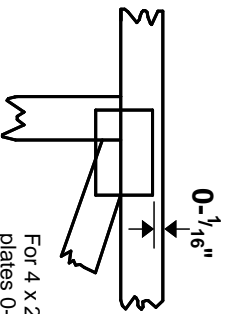
818 Soundside Road
Edenton, NC 27932

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.

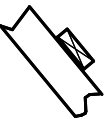
* Plate location details available in **MITek 20/20 software** or upon request.

PLATE SIZE

4 X 4

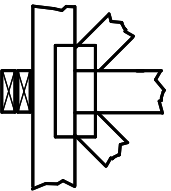
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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