ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 21020056-A
186 Crossings at AC-Braxton A-Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Capitol City Homes Project Name: 21020056-A
Lot/Block: 186 Model: Braxton A
Address: TBD Subdivision: Crossing at AC
City: Spring Lake State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 32 individual, dated Truss Design Drawings and 0 Additional Drawings.

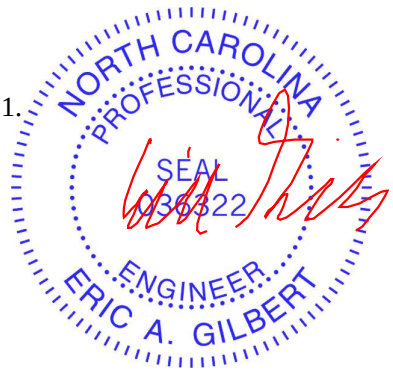
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14785816	J1	2/9/2021	21	E14785836	T7A	2/9/2021
2	E14785817	J2	2/9/2021	22	E14785837	T7GE	2/9/2021
3	E14785818	PB1	2/9/2021	23	E14785838	T8	2/9/2021
4	E14785819	T1	2/9/2021	24	E14785839	T8GR	2/9/2021
5	E14785820	T1A	2/9/2021	25	E14785840	V1	2/9/2021
6	E14785821	T1AGE	2/9/2021	26	E14785841	V2	2/9/2021
7	E14785822	T1B	2/9/2021	27	E14785842	V3	2/9/2021
8	E14785823	T1GE	2/9/2021	28	E14785843	V4	2/9/2021
9	E14785824	T2GE	2/9/2021	29	E14785844	V5	2/9/2021
10	E14785825	T2GR	2/9/2021	30	E14785845	V6	2/9/2021
11	E14785826	T3GE	2/9/2021	31	E14785846	V7	2/9/2021
12	E14785827	T3GR	2/9/2021	32	E14785847	V8	2/9/2021
13	E14785828	T3SE	2/9/2021				
14	E14785829	T4GR	2/9/2021				
15	E14785830	T5	2/9/2021				
16	E14785831	T6	2/9/2021				
17	E14785832	T6A	2/9/2021				
18	E14785833	T6GR	2/9/2021				
19	E14785834	T6SE	2/9/2021				
20	E14785835	T7	2/9/2021				

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

February 09, 2021

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	J1	Jack-Open	2	1	E14785816 Job Reference (optional)

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

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:36 ID:ZONWJwbGp9yOcO44S3A?eiyqD6W-HiuCOF6CuNd6mZ5ppKytbaIsi6UCq83DTCw59xykG4V

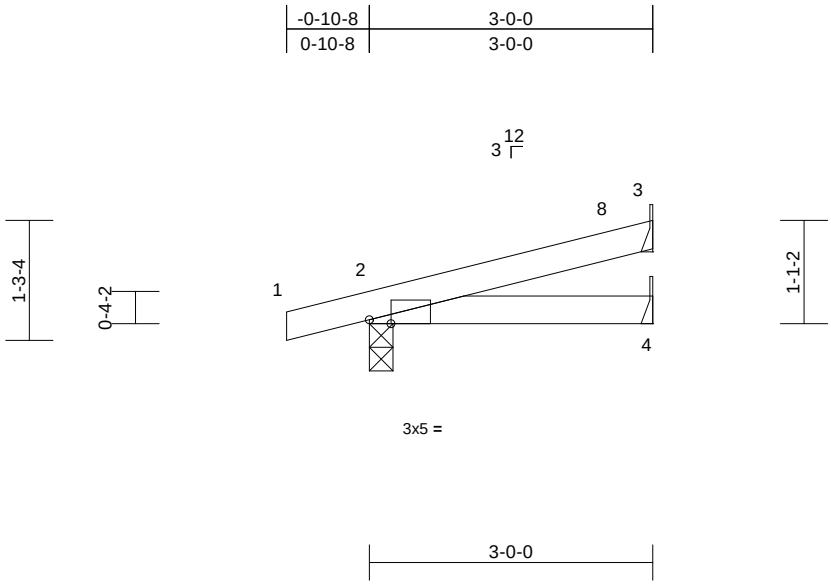


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Plate Offsets (X, Y): [2:0-2-12,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz 2=28 (LC 11)
Max Uplift 2=-30 (LC 11), 3=-14 (LC 15)
Max Grav 2=178 (LC 2), 3=69 (LC 2), 4=40 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-8=-56/7, 3-8=-13/14
BOT CHORD 2-4=-21/57

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 3.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	J2	Half Hip	1	1	E14785817 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:38 Page: 1
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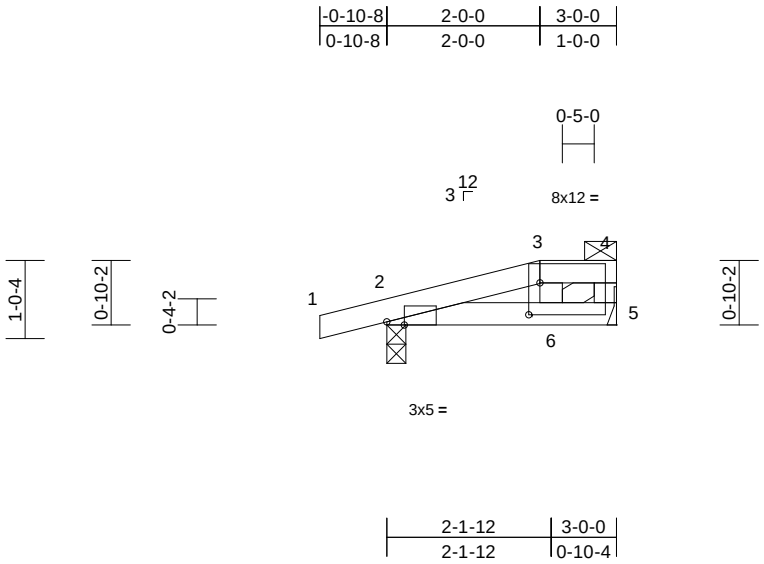

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Plate Offsets (X, Y): [2:0-2-12,Edge], [3:0-1-12,0-5-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	9	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	6-9	>999	180		
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: 12 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 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 5= Mechanical
Max Horiz 2=20 (LC 14)
Max Uplift 2=-32 (LC 11), 5=-1 (LC 11)
Max Grav 2=202 (LC 35), 5=106 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-115/47, 3-4=-99/43, 4-5=-102/53
BOT CHORD 2-6=-57/109, 5-6=-10/11
WEBS 3-6=-42/38, 4-6=-51/125

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) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 5.
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) 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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof	
21020056-A	PB1	Piggyback	19	1	Job Reference (optional)	E14785818

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

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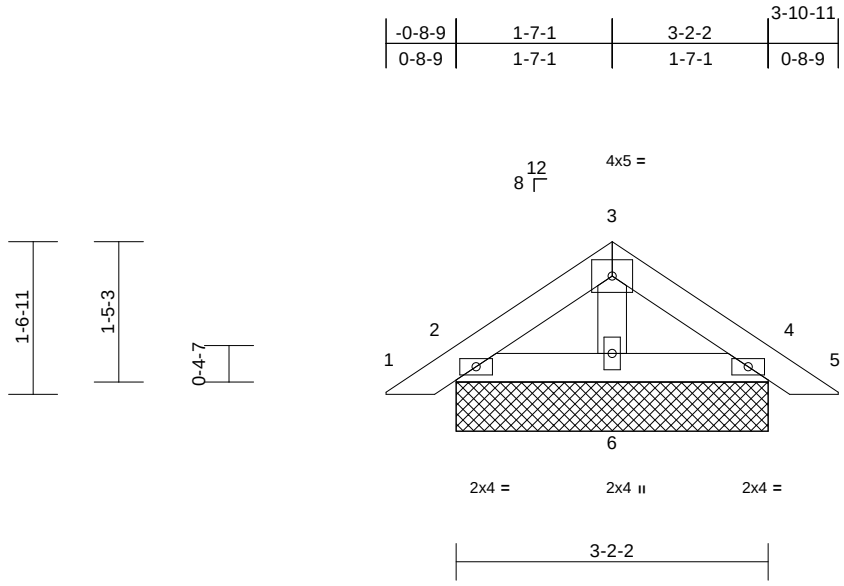

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	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: 14 lb	FT = 20%

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

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

REACTIONS (size) 2=3-2-2, 4=3-2-2, 6=3-2-2, 7=3-2-2, 11=3-2-2
Max Horiz 2=-27 (LC 11), 7=-27 (LC 11)
Max Uplift 2=-8 (LC 13), 4=-10 (LC 14), 7=-8 (LC 13), 11=-10 (LC 14)
Max Grav 2=98 (LC 2), 4=98 (LC 2), 6=115 (LC 2), 7=98 (LC 2), 11=98 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-36/29, 3-4=-34/30, 4-5=0/20
BOT CHORD 2-6=-7/27, 4-6=-7/27
WEBS 3-6=-49/6

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T1	Piggyback Base	5	1	E14785819 Job Reference (optional)

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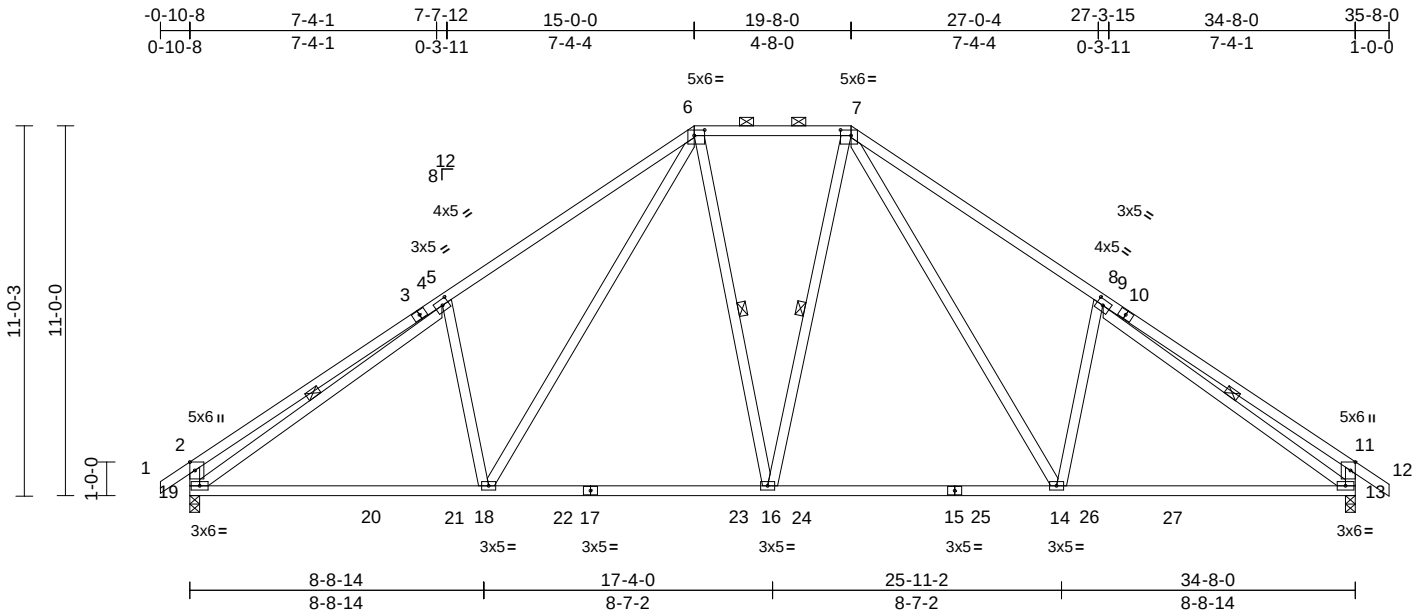

Scale = 1:68.5

Plate Offsets (X, Y): [2:0-3-0,Edge], [4:0-2-5,0-2-0], [6:0-3-12,0-2-0], [7:0-3-12,0-2-0], [9:0-2-5,0-2-0], [11:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.18	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.31	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.08	13	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 229 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 19-2,13-11:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-1-14 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-19, 9-13, 6-16, 7-16

REACTIONS (size) 13=0-3-8, 19=0-3-8
Max Horiz 19=-233 (LC 11)
Max Grav 13=1533 (LC 29), 19=1526 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-653/297, 3-4=-540/301, 4-5=-1857/350, 5-6=-1985/514, 6-7=-1233/371, 7-8=-1985/514, 8-9=-1858/350, 9-10=-533/298, 10-11=-643/295, 11-12=0/48, 2-19=-574/270, 11-13=-575/272
BOT CHORD 19-20=-154/1711, 20-21=-154/1711, 18-21=-154/1711, 18-22=0/1266, 17-22=0/1266, 17-23=0/1266, 16-23=0/1266, 16-24=0/1231, 15-24=0/1231, 15-25=0/1231, 14-25=0/1231, 14-26=-151/1557, 26-27=-151/1557, 13-27=-151/1557
WEBS 4-19=-1505/70, 9-13=-1513/75, 5-18=-397/299, 6-18=-210/746, 6-16=-58/299, 7-16=-59/298, 7-14=-209/748, 8-14=-397/299

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) 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

August 25,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T1A	Piggyback Base	5	1	E14785820 Job Reference (optional)

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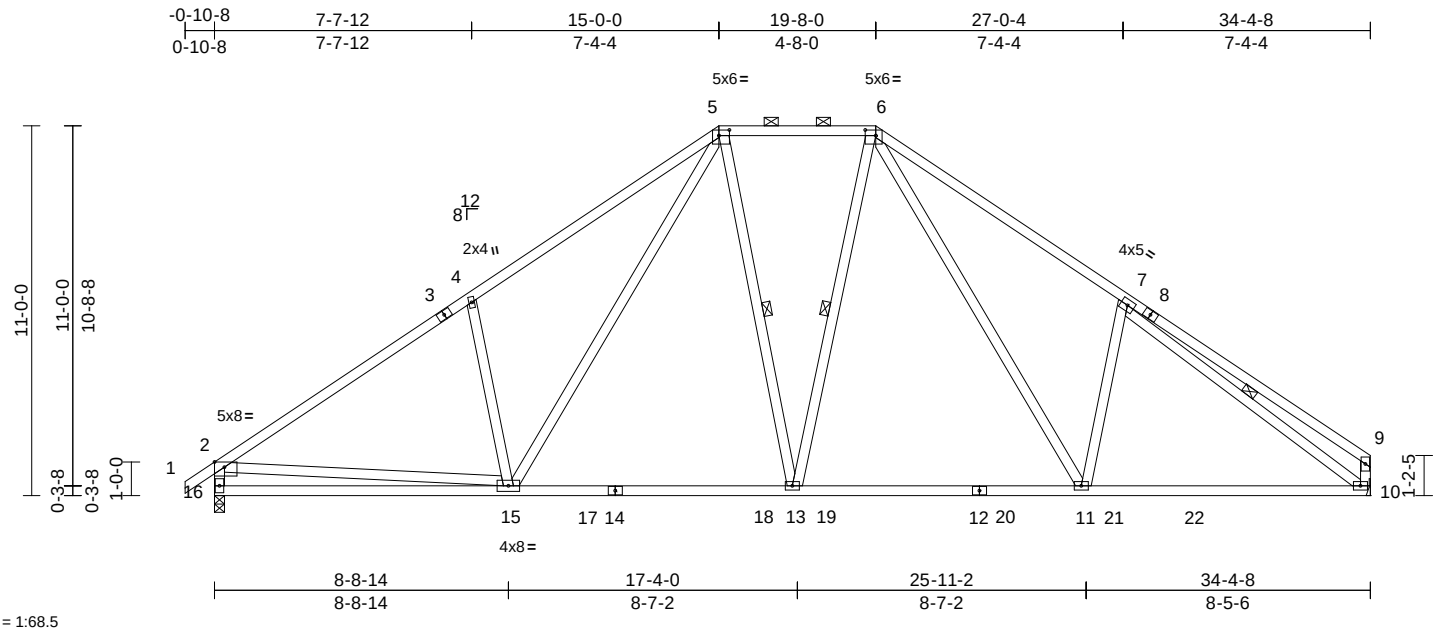

Scale = 1:68.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.20	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.32	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 225 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 16-2,10-9:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-3-1 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-10, 5-13, 6-13

REACTIONS (size) 10= Mechanical, 16=0-3-8
Max Horiz 16=230 (LC 12)
Max Grav 10=1442 (LC 29), 16=1454 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-1927/341, 3-4=-1741/347, 4-5=-1892/508, 5-6=-1193/368, 6-7=-1908/502, 7-8=-294/181, 8-9=-396/177, 2-16=-1381/311, 9-10=-353/158
BOT CHORD 15-16=-218/536, 15-17=-39/1217, 14-17=-39/1217, 14-18=-39/1217, 13-18=-39/1217, 13-19=-39/1183, 12-19=-39/1183, 12-20=-39/1183, 11-20=-39/1183, 11-21=-200/1491, 21-22=-200/1491, 10-22=-200/1491
WEBS 7-10=-1640/191, 4-15=-469/301, 5-15=-208/678, 5-13=-66/309, 6-13=-56/295, 6-11=-198/697, 7-11=-364/289, 2-15=-44/1187

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 3x5 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
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

August 25,2020

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Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T1AGE	Piggyback Base Supported Gable	1	1	E14785821 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:40 Page: 1
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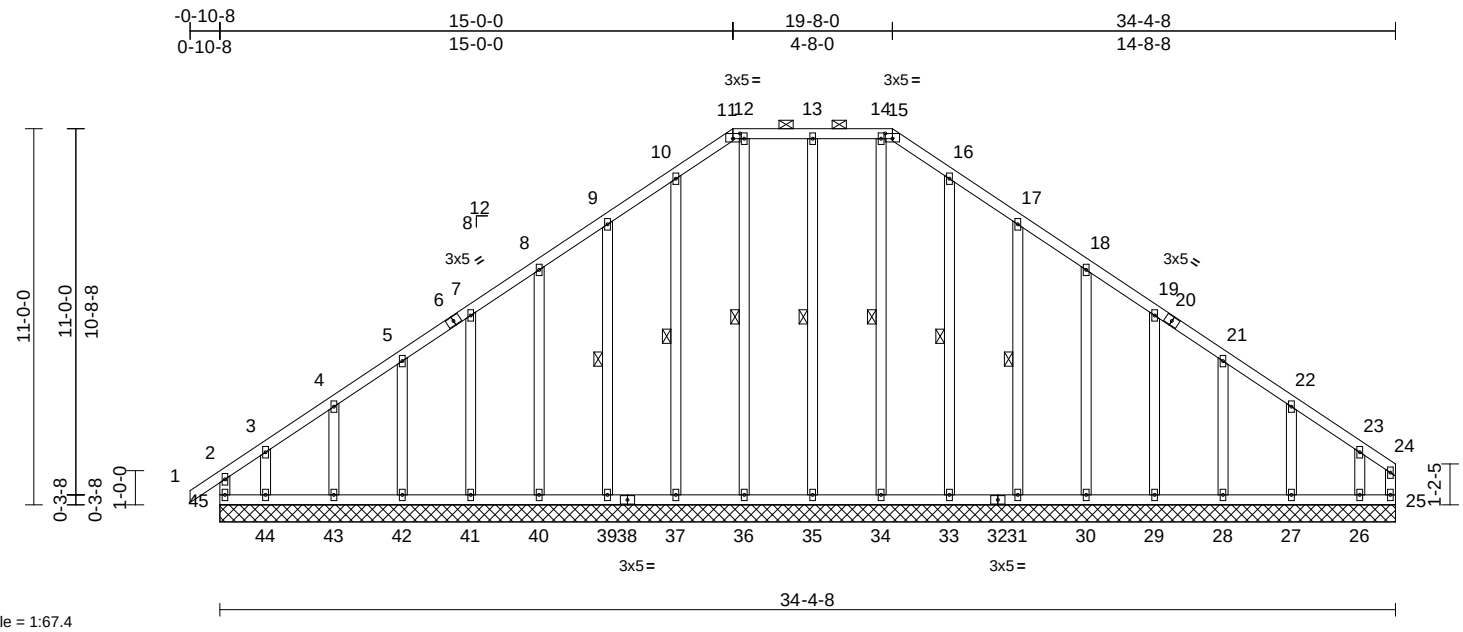

Scale = 1:67.4

Plate Offsets (X, Y): [11:0-2-8,0-1-13], [15:0-2-8,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	25	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 273 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.2 *Except* 42-5,43-4,44-3,28-21,27-22,26-23:2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-15.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 13-35, 12-36, 10-37, 9-39, 14-34, 16-33, 17-31

REACTIONS (size) 25=34-4-8, 26=34-4-8, 27=34-4-8, 28=34-4-8, 29=34-4-8, 30=34-4-8, 31=34-4-8, 33=34-4-8, 34=34-4-8, 35=34-4-8, 36=34-4-8, 37=34-4-8, 39=34-4-8, 40=34-4-8, 41=34-4-8, 42=34-4-8, 43=34-4-8, 44=34-4-8, 45=34-4-8

Max Horiz 45=230 (LC 10)

Max Uplift 25=-128 (LC 12), 26=-123 (LC 9), 27=-23 (LC 14), 28=-31 (LC 14), 29=-30 (LC 14), 30=-29 (LC 14), 31=-37 (LC 14), 33=-10 (LC 14), 35=-18 (LC 9), 37=-12 (LC 13), 39=-36 (LC 13), 40=-29 (LC 13), 41=-29 (LC 13), 42=-32 (LC 13), 43=-19 (LC 13), 44=-142 (LC 10), 45=-153 (LC 9)

Max Grav 25=162 (LC 9), 26=211 (LC 29), 27=166 (LC 33), 28=166 (LC 29), 29=166 (LC 29), 30=166 (LC 29), 31=168 (LC 29), 33=163 (LC 29), 34=163 (LC 31), 35=166 (LC 33), 36=171 (LC 31), 37=168 (LC 28), 39=166 (LC 28), 40=166 (LC 28), 41=166 (LC 28), 42=167 (LC 28), 43=169 (LC 2), 44=209 (LC 11), 45=232 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-45=-182/117, 1-2=0/43, 2-3=-208/187, 3-4=-147/144, 4-5=-141/140, 5-6=-128/126, 6-7=-108/138, 7-8=-146/169, 8-9=-194/226, 9-10=-248/290, 10-11=-282/329, 11-12=-248/298, 12-13=-248/298, 13-14=-248/298, 14-15=-248/298, 15-16=-282/329, 16-17=-248/290, 17-18=-194/226, 18-19=-146/169, 19-20=-78/110, 20-21=-98/104, 21-22=-73/64, 22-23=-79/71, 23-24=-122/108, 24-25=-100/79

BOT CHORD 44-45=-87/97, 43-44=-87/97, 42-43=-87/97, 41-42=-87/97, 40-41=-87/97, 39-40=-87/97, 38-39=-87/97, 37-38=-87/97, 36-37=-87/97, 35-36=-87/97, 34-35=-87/97, 33-34=-87/97, 32-33=-87/97, 31-32=-87/97, 30-31=-87/97, 29-30=-87/97, 28-29=-87/97, 27-28=-87/97, 26-27=-87/97, 25-26=-87/97

WEBS 13-35=-126/78, 12-36=-131/69, 10-37=-128/50, 9-39=-137/92, 8-40=-126/79, 7-41=-128/82, 5-42=-127/82, 4-43=-129/82, 3-44=-133/106, 14-34=-123/69, 16-33=-123/50, 17-31=-137/92, 18-30=-126/79, 19-29=-128/82, 21-28=-127/81, 22-27=-130/82, 23-26=-141/110

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

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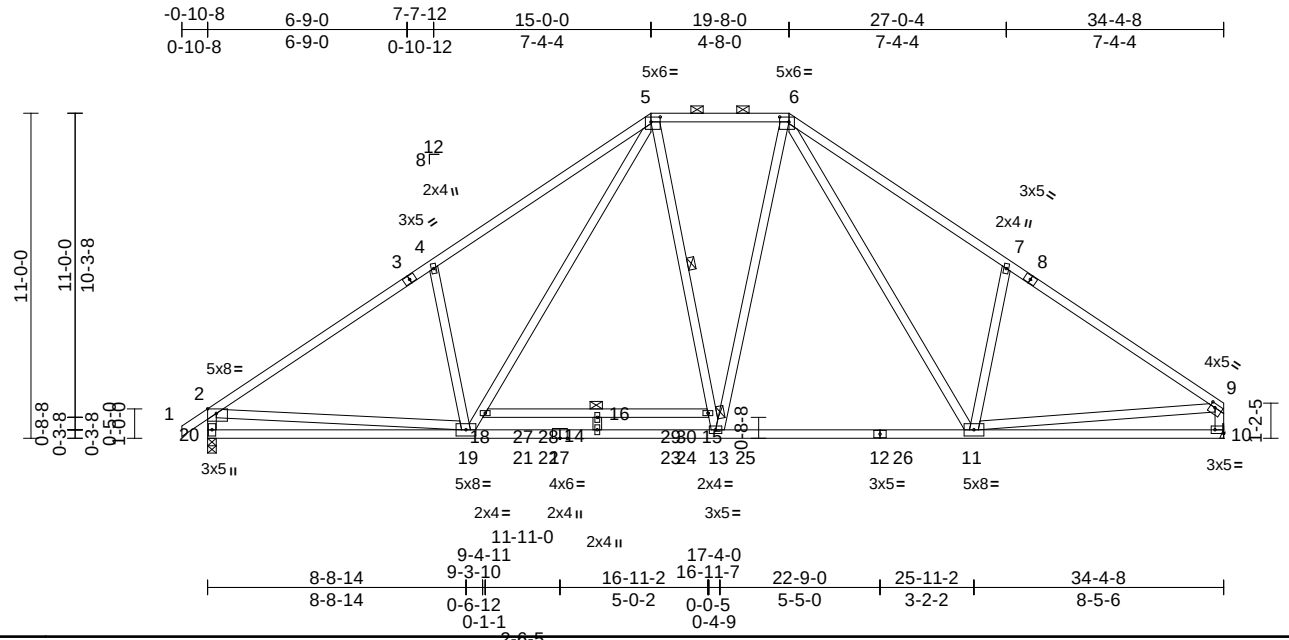
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 45, 25, 35, 37, 39, 40, 41, 42, 43, 44, 33, 31, 30, 29, 28, 27, and 26. 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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T1B	Piggyback Base	7	1	E14785822 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:41 Page: 1

ID:VOlqD_N2oXjLV5n?4Wld8?yqD0L-a2prsfCbEXV76e79jIaWN34r4xg0z9iF4n7zv1ykG4O



Scale = 1:78

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.24	14-19	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.53	14-19	>769	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 236 lb	FT = 20%

LUMBER

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

BOT CHORD 2x4 SP No.2 *Except* 12-17,17-20:2x4 SP No.1

WEBS 2x4 SP No.2 *Except* 20-2,10-9:2x4 SP No.3

BRACING

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 13-14.
6-0-0 oc bracing: 15-18

WEBS 1 Row at midpt 5-15

REACTIONS (size) 10= Mechanical, 20=0-3-8
Max Horiz 20=230 (LC 12)
Max Grav 10=1571 (LC 29), 20=1735 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/43, 2-3=-2392/39, 3-4=-2205/44, 4-5=-2356/207, 5-6=-1480/182, 6-7=-2121/337, 7-8=-1964/173, 8-9=-2143/167, 2-20=-1675/118, 9-10=-1495/155

BOT CHORD 19-20=-228/530, 19-21=0/1549, 21-22=0/1549, 17-22=0/1549, 14-17=0/1549, 14-23=0/1486, 23-24=0/1486, 13-24=0/1486, 13-25=0/1420, 12-25=0/1420, 12-26=0/1420, 11-26=0/1420, 10-11=-46/227, 18-27=-62/0, 27-28=-62/0, 16-28=-62/0, 16-29=-8/21, 29-30=-8/21, 15-30=-8/21, 14-16=-76/9

WEBS 9-11=-15/1517, 4-19=-469/303, 18-19=-117/777, 5-18=-61/898, 5-15=-18/376, 13-15=-88/254, 6-13=0/525, 6-11=-239/580, 7-11=-481/308, 2-19=0/1581

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) 200.0lb AC unit load placed on the bottom chord, 13-2-3 from left end, supported at two points, 5-0-0 apart.
6) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
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

August 25,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T1GE	Piggyback Base Supported Gable	1	1	E14785823 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:41 Page: 1
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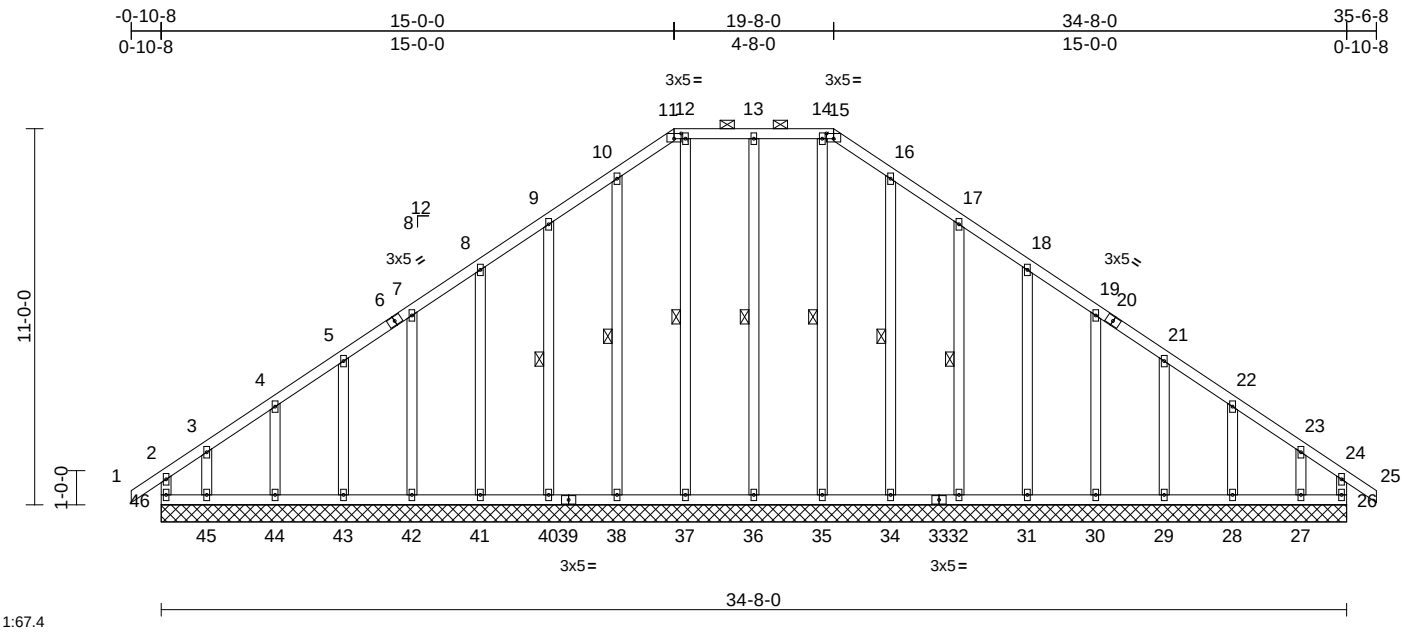

Scale = 1:67.4

Plate Offsets (X, Y): [11:0-2-8,0-1-13], [15:0-2-8,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	26	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 275 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.2 *Except* 43-5,44-4,45-3,29-21,28-22,27-23:2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-15.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 13-36, 12-37, 10-38, 9-40, 14-35, 16-34, 17-32

REACTIONS (size) 26=34-8-0, 27=34-8-0, 28=34-8-0, 29=34-8-0, 30=34-8-0, 31=34-8-0, 32=34-8-0, 34=34-8-0, 35=34-8-0, 36=34-8-0, 37=34-8-0, 38=34-8-0, 40=34-8-0, 41=34-8-0, 42=34-8-0, 43=34-8-0, 44=34-8-0, 45=34-8-0, 46=34-8-0

Max Horiz 46=232 (LC 12)

Max Uplift 26=-80 (LC 10), 27=-100 (LC 14), 28=-21 (LC 14), 29=-32 (LC 14), 30=-29 (LC 14), 31=-29 (LC 14), 32=-36 (LC 14), 34=-10 (LC 14), 36=-17 (LC 9), 38=-12 (LC 13), 40=-36 (LC 13), 41=-29 (LC 13), 42=-29 (LC 13), 43=-32 (LC 13), 44=-19 (LC 13), 45=-132 (LC 10), 46=-139 (LC 9)

Max Grav 26=169 (LC 28), 27=175 (LC 29), 28=169 (LC 33), 29=166 (LC 29), 30=166 (LC 29), 31=166 (LC 29), 32=167 (LC 29), 34=164 (LC 29), 35=164 (LC 30), 36=166 (LC 33), 37=172 (LC 31), 38=168 (LC 28), 40=166 (LC 28), 41=166 (LC 28), 42=166 (LC 28), 43=167 (LC 28), 44=169 (LC 32), 45=203 (LC 11), 46=216 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-46=-170/106, 1-2=0/43, 2-3=-191/177, 3-4=-132/136, 4-5=-126/128, 5-6=-113/114, 6-7=-93/126, 7-8=-140/164, 8-9=-187/222, 9-10=-241/285, 10-11=-275/325, 11-12=-242/294, 12-13=-242/294, 13-14=-242/294, 14-15=-242/294, 15-16=-275/325, 16-17=-241/285, 17-18=-187/222, 18-19=-140/164, 19-20=-71/106, 20-21=-91/99, 21-22=-76/78, 22-23=-84/85, 23-24=-132/115, 24-25=0/43, 24-26=-135/62

BOT CHORD 45-46=-102/116, 44-45=-102/116, 43-44=-102/116, 42-43=-102/116, 41-42=-102/116, 40-41=-102/116, 39-40=-102/116, 38-39=-102/116, 37-38=-102/116, 36-37=-102/116, 35-36=-102/116, 34-35=-102/116, 33-34=-102/116, 32-33=-102/116, 31-32=-102/116, 30-31=-102/116, 29-30=-102/116, 28-29=-102/116, 27-28=-102/116, 26-27=-102/116

WEBS 13-36=-126/77, 12-37=-132/65, 10-38=-128/50, 9-40=-137/92, 8-41=-126/79, 7-42=-128/82, 5-43=-127/82, 4-44=-129/82, 3-45=-135/104, 14-35=-124/65, 16-34=-124/50, 17-32=-137/92, 18-31=-126/79, 19-30=-128/82, 21-29=-127/81, 22-28=-129/82, 23-27=-141/102

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

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3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 46, 26, 36, 38, 40, 41, 42, 43, 44, 45, 34, 32, 31, 30, 29, 28, and 27. 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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T2GE	Common Supported Gable	1	1	E14785824 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:42 Page: 1

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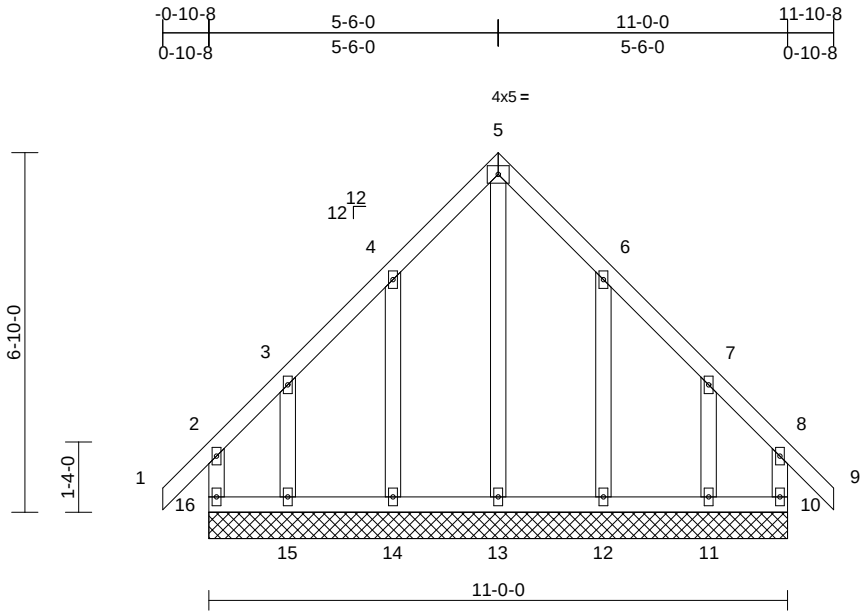

Scale = 1:43.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 75 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3 *Except* 13-5:2x4 SP No.2

BRACING

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

REACTIONS (size) 10=11-0-0, 11=11-0-0, 12=11-0-0, 13=11-0-0, 14=11-0-0, 15=11-0-0, 16=11-0-0

Max Horiz 16=-159 (LC 11)

Max Uplift 10=-93 (LC 10), 11=-99 (LC 9), 12=-54 (LC 14), 14=-54 (LC 13), 15=-105 (LC 10), 16=-103 (LC 9)

Max Grav 10=165 (LC 25), 11=193 (LC 26), 12=184 (LC 26), 13=189 (LC 14), 14=183 (LC 25), 15=198 (LC 25), 16=174 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-16=-137/97, 1-2=0/54, 2-3=-105/110, 3-4=-100/143, 4-5=-192/253, 5-6=-192/252, 6-7=-100/145, 7-8=-95/101, 8-9=0/54, 8-10=-130/95
BOT CHORD	15-16=-82/81, 14-15=-82/81, 13-14=-82/81, 12-13=-82/81, 11-12=-82/81, 10-11=-82/81
WEBS	5-13=-290/150, 4-14=-170/131, 3-15=-160/131, 6-12=-170/131, 7-11=-157/130

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T2GR	Common Girder	1	**2**	E14785825 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:42 Page: 1
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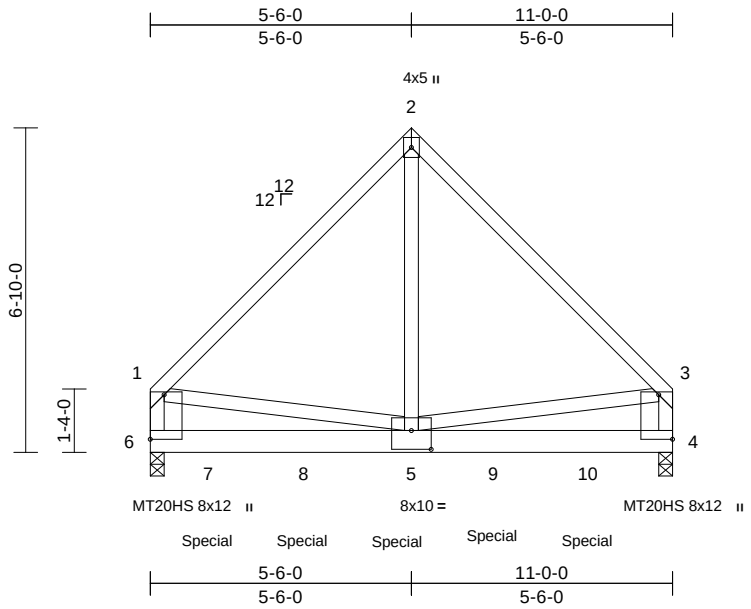

Scale = 1:48.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.05	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09	4-5	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 152 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 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) 4=0-3-8, 6=0-3-8
Max Horiz 6=136 (LC 31)
Max Grav 4=3710 (LC 3), 6=3991 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3018/0, 2-3=-3018/0, 1-6=-2500/0, 3-4=-2498/0
BOT CHORD 6-7=-32/614, 7-8=-32/614, 5-8=-32/614, 5-9=0/553, 9-10=0/553, 4-10=0/553
WEBS 2-5=0/3877, 1-5=0/1573, 3-5=0/1563

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
6) All plates are MT20 plates unless otherwise indicated.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1390 lb down at 1-2-12, 1390 lb down at 3-2-12, 1390 lb down at 5-2-12, and 1390 lb down at 7-2-12, and 1390 lb down at 9-2-12 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-48, 2-3=-48, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-1157 (B), 7=-1157 (B), 8=-1157 (B), 9=-1157 (B), 10=-1157 (B)

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T3GE	Common Supported Gable	1	1	E14785826 Job Reference (optional)

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

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:43 Page: 1
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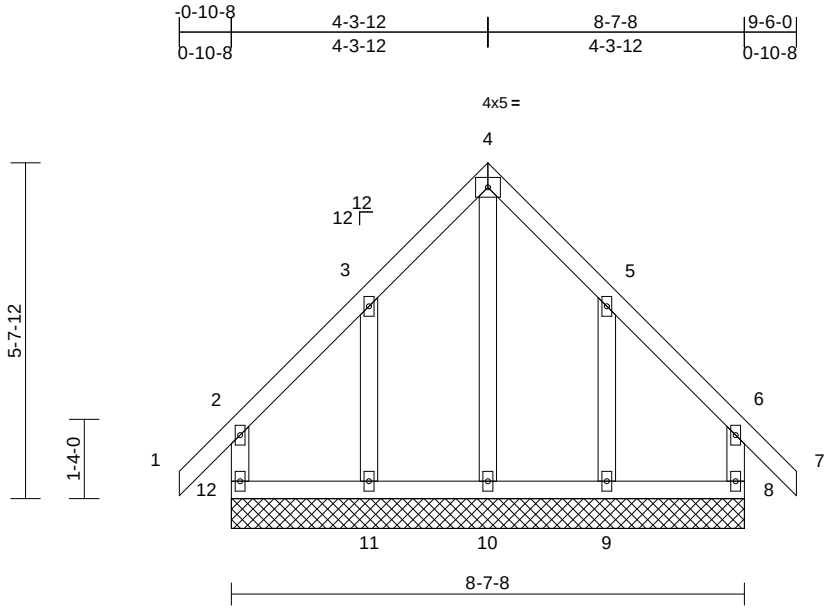

Scale = 1:38.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 55 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) 8=8-7-8, 9=8-7-8, 10=8-7-8, 11=8-7-8, 12=8-7-8
Max Horiz 12=-135 (LC 11)
Max Uplift 8=-53 (LC 10), 9=-84 (LC 14), 11=-84 (LC 13), 12=-58 (LC 9)
Max Grav 8=164 (LC 25), 9=227 (LC 26), 10=166 (LC 28), 11=230 (LC 25), 12=169 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-12=-135/154, 1-2=0/54, 2-3=-93/110, 3-4=-175/224, 4-5=-175/225, 5-6=-88/108, 6-7=0/54, 6-8=-138/153
BOT CHORD	11-12=-67/67, 10-11=-67/67, 9-10=-67/67, 8-9=-67/67
WEBS	4-10=-250/130, 3-11=-194/152, 5-9=-192/152

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12, 8, 11, and 9. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T3GR	Common Girder	1	2	E14785827 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:43 Page: 1
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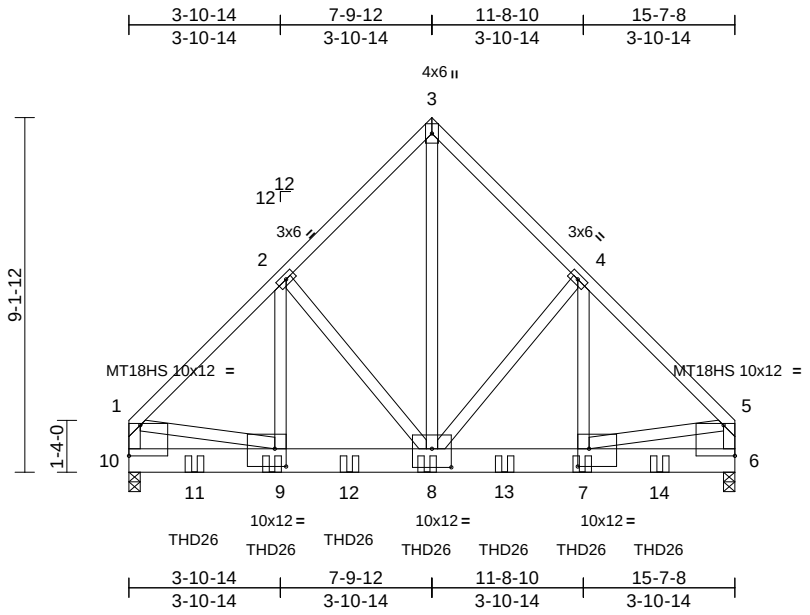

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Plate Offsets (X, Y): [1:Edge,0-9-8], [5:Edge,0-9-8], [7:0-3-8,0-5-8], [8:0-6-0,0-5-12], [9:0-3-8,0-5-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.05	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.10	7-8	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 272 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 10-1,6-5:2x4 SP No.1, 8-3,2-8,4-8:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-11 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=180 (LC 6)
Max Grav 6=5803 (LC 3), 10=5902 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5575/0, 2-3=-4224/0, 3-4=-4224/0, 4-5=-5582/0, 1-10=-4889/0, 5-6=-4896/0
BOT CHORD 10-11=-45/533, 9-11=-45/533, 9-12=0/3886, 8-12=0/3886, 8-13=0/3891, 7-13=0/3891, 7-14=0/433, 6-14=0/433
WEBS 3-8=0/5682, 1-9=0/3564, 2-9=0/1929, 2-8=-1473/0, 4-8=-1480/0, 4-7=0/1940, 5-7=0/3572

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
6) All plates are MT20 plates unless otherwise indicated.
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) 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 1-8-4 from the left end to 13-8-4 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-48, 3-5=-48, 6-10=-20
Concentrated Loads (lb)
Vert: 8=-1293 (B), 9=-1293 (B), 7=-1293 (B), 11=-1293 (B), 12=-1293 (B), 13=-1293 (B), 14=-1293 (B)

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T3SE	Common Structural Gable	1	1	E14785828 Job Reference (optional)

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

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:44 Page: 1
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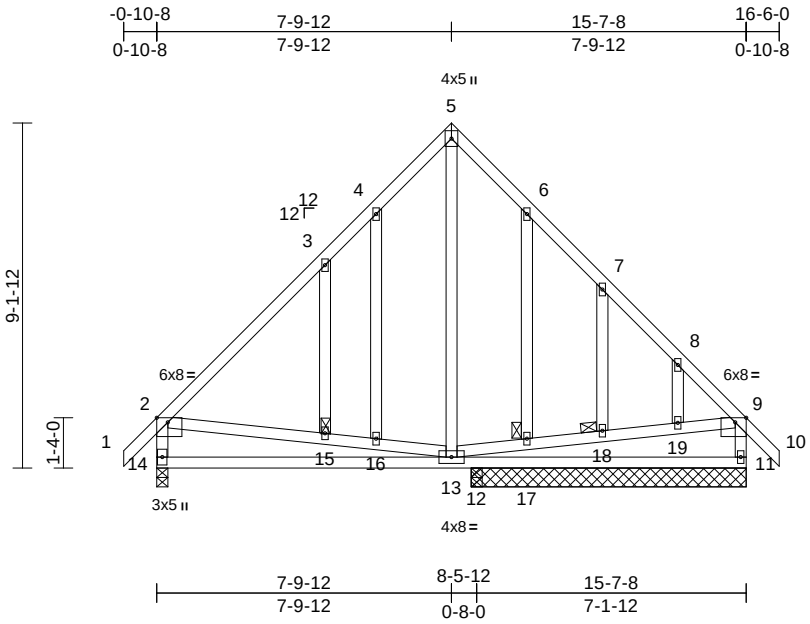

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Plate Offsets (X, Y): [2:0-3-8,Edge], [9:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.03	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.11	13-14	>881	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 131 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2 *Except* 14-2,11-9:2x4 SP No.3
OTHERS	2x4 SP No.3 *Except* 16-4,17-6:2x4 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.
JOINTS	1 Brace at Jt(s): 15, 17, 18

REACTIONS (size) 11=7-3-8, 12=0-3-8, 14=0-3-8
Max Horiz 14=204 (LC 12)
Max Uplift 12=-9 (LC 13)
Max Grav 11=549 (LC 2), 12=232 (LC 2), 14=569 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/54, 2-3=-420/41, 3-4=-318/130, 4-5=-281/140, 5-6=-281/142, 6-7=-315/115, 7-8=-329/17, 8-9=-435/36, 9-10=0/54, 2-14=-488/153, 9-11=-493/155
BOT CHORD	13-14=-229/404, 12-13=-146/314, 11-12=-146/314
WEBS	5-13=-19/110, 2-15=-257/298, 15-16=-272/309, 13-16=-276/314, 13-17=-256/312, 17-18=-249/305, 18-19=-233/293, 9-19=-239/297, 3-15=-144/109, 4-16=-26/48, 6-17=-29/38, 7-18=-151/114, 8-19=-48/64

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T4GR	Half Hip Girder	1	1	E14785829 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:44 Page: 1
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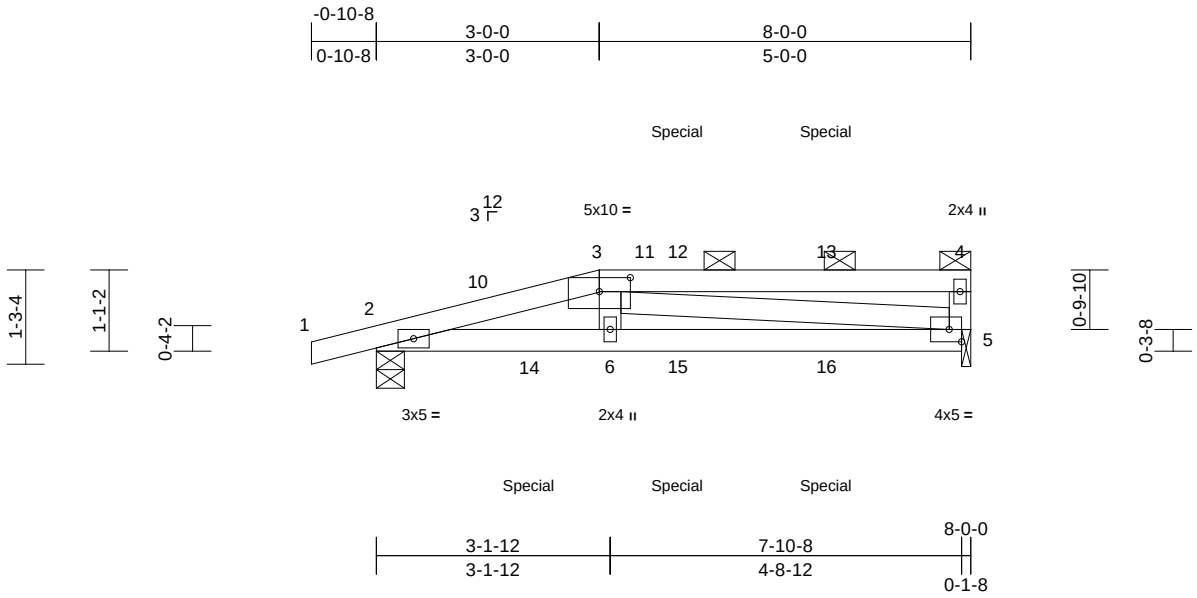

Scale = 1:31

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.03	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.07	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 33 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-14 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 5=0-1-8
Max Horiz 2=27 (LC 10)
Max Uplift 2=-42 (LC 7), 5=-6 (LC 7)
Max Grav 2=475 (LC 31), 5=399 (LC 30)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-10=-982/0, 3-10=-974/0, 3-11=-9/7, 11-12=-9/7, 12-13=-9/7, 4-13=-9/7, 4-5=-185/35
BOT CHORD 2-14=-5/945, 6-14=0/945, 6-15=0/975, 15-16=0/975, 5-16=0/975
WEBS 3-6=0/177, 3-5=-988/0

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 41 lb down and 24 lb up at 4-0-12, and 41 lb down and 24 lb up at 6-0-12 on top chord, and 86 lb down and 21 lb up at 2-0-12, and 20 lb down at 4-0-12, and 20 lb down at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) 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=-48, 3-4=-58, 5-7=-20
Concentrated Loads (lb)
Vert: 12=-12 (F), 13=-12 (F), 14=-86 (F), 15=-20 (F), 16=-20 (F)

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T5	Half Hip	1	1	E14785830 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:44 Page: 1
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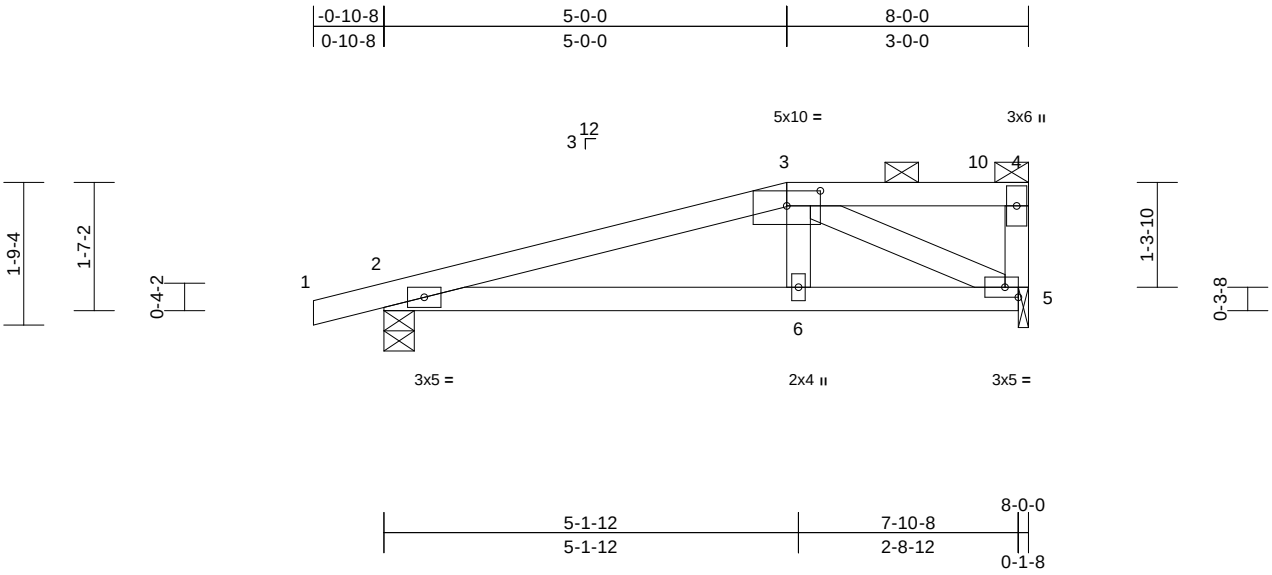

Scale = 1:28.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.07	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	5	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: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 5=0-1-8
Max Horiz 2=43 (LC 14)
Max Uplift 2=-36 (LC 11), 5=-11 (LC 11)
Max Grav 2=412 (LC 35), 5=311 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-510/172, 3-10=-23/25, 4-10=-23/25, 4-5=-105/60
BOT CHORD 2-6=-195/473, 5-6=-193/488
WEBS 3-6=0/148, 3-5=-536/195

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5.
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.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T6	Half Hip	2	1	E14785831 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:45 Page: 1
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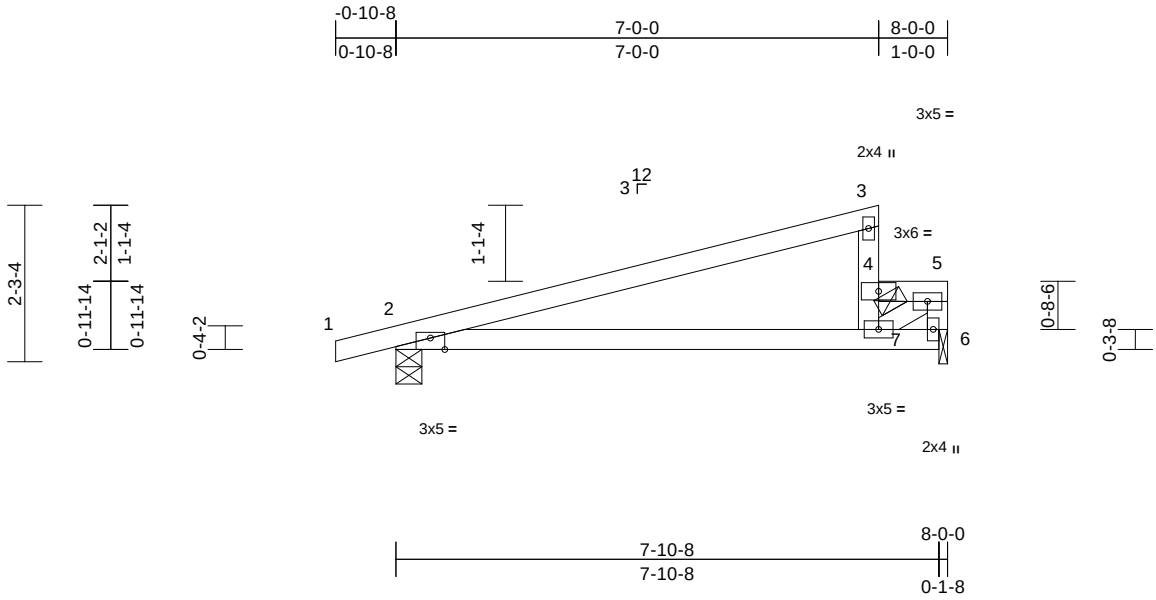

Scale = 1:33.4

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)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.11	7-10	>838	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.21	7-10	>457	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-1 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 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 6=0-1-8
Max Horiz 2=69 (LC 15)
Max Uplift 2=-34 (LC 11), 6=-11 (LC 15)
Max Grav 2=433 (LC 35), 6=322 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-315/66, 4-7=-156/124, 3-4=-142/103, 4-5=-664/195, 5-6=-478/163
BOT CHORD 2-7=-109/263, 6-7=-12/13
WEBS 5-7=-248/810

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
11) 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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof	E14785832
21020056-A	T6A	Half Hip	2	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:45 Page: 1
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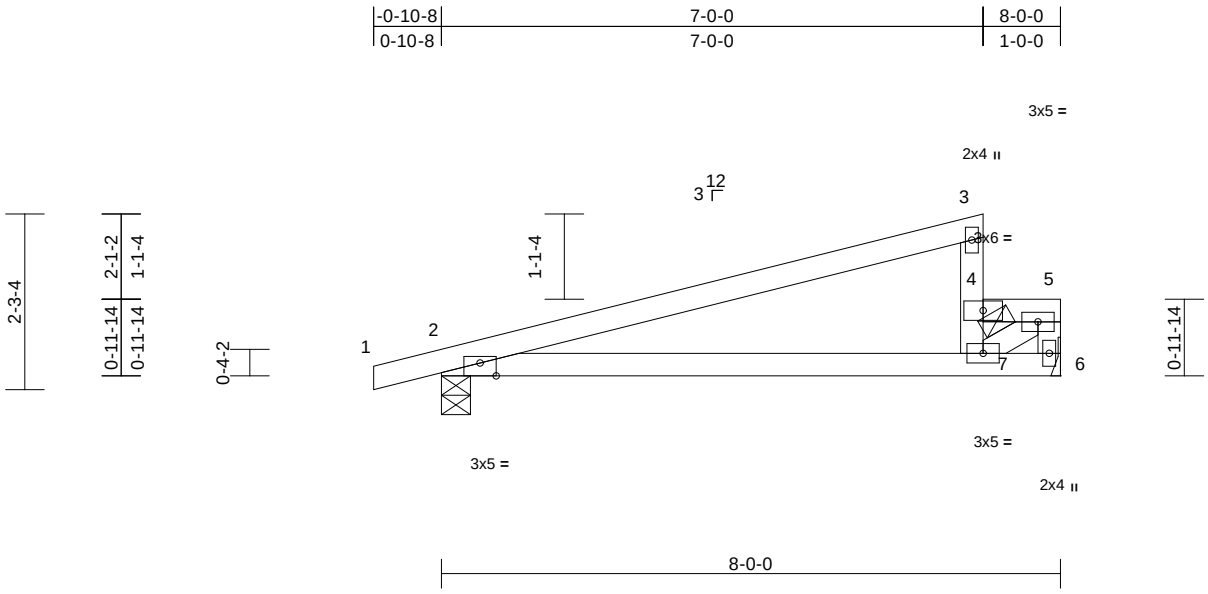

Scale = 1:29.8

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)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.11	7-10	>838	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.21	7-10	>457	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	2	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 *Except* 3-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-1 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 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 6= Mechanical
Max Horiz 2=69 (LC 15)
Max Uplift 2=-34 (LC 11), 6=-11 (LC 15)
Max Grav 2=433 (LC 35), 6=322 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-315/66, 4-7=-156/124, 3-4=-142/103, 4-5=-664/195, 5-6=-478/163
BOT CHORD 2-7=-109/263, 6-7=-12/13
WEBS 5-7=-248/810

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 6.
10) 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.
11) 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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T6GR	Half Hip Girder	1	2	E14785833 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:45 Page: 1
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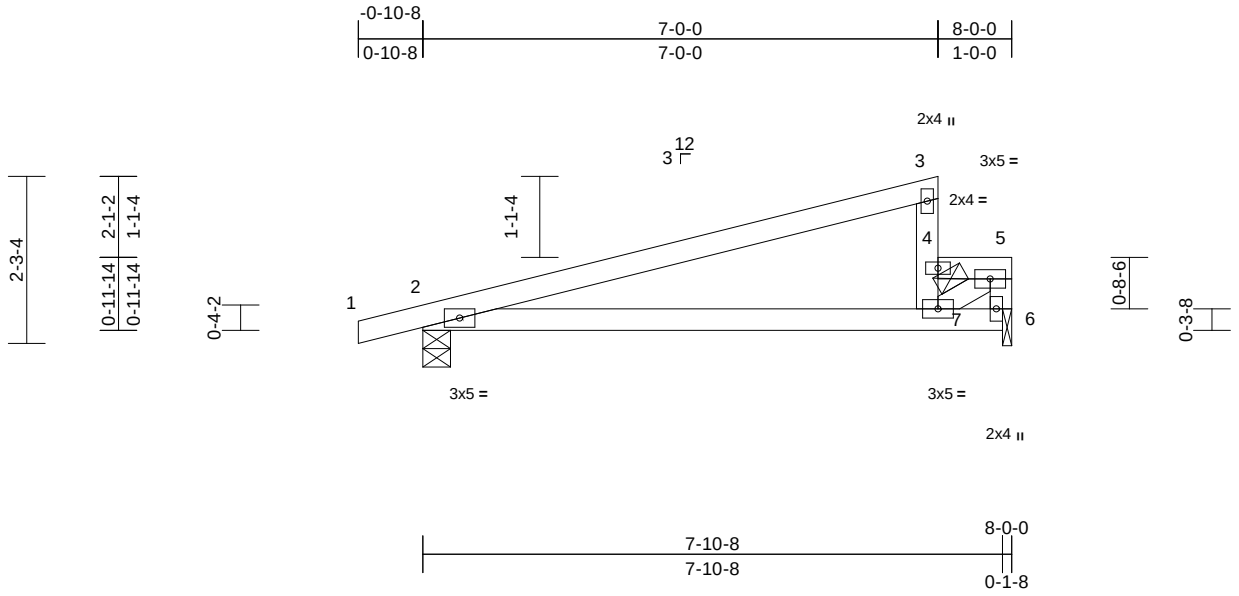

Scale = 1:31.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.06	7-10	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.10	7-10	>909	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 59 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.): 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 6=0-1-8
Max Horiz 2=69 (LC 11)
Max Uplift 2=-34 (LC 7), 6=-11 (LC 11)
Max Grav 2=433 (LC 31), 6=322 (LC 31)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-317/0, 4-7=-157/47, 3-4=-143/45, 4-5=-658/7, 5-6=-473/4
BOT CHORD 2-7=-21/304, 6-7=-8/6
WEBS 5-7=-2/802

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T6SE	Half Hip	1	1	E14785834 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:46 Page: 1
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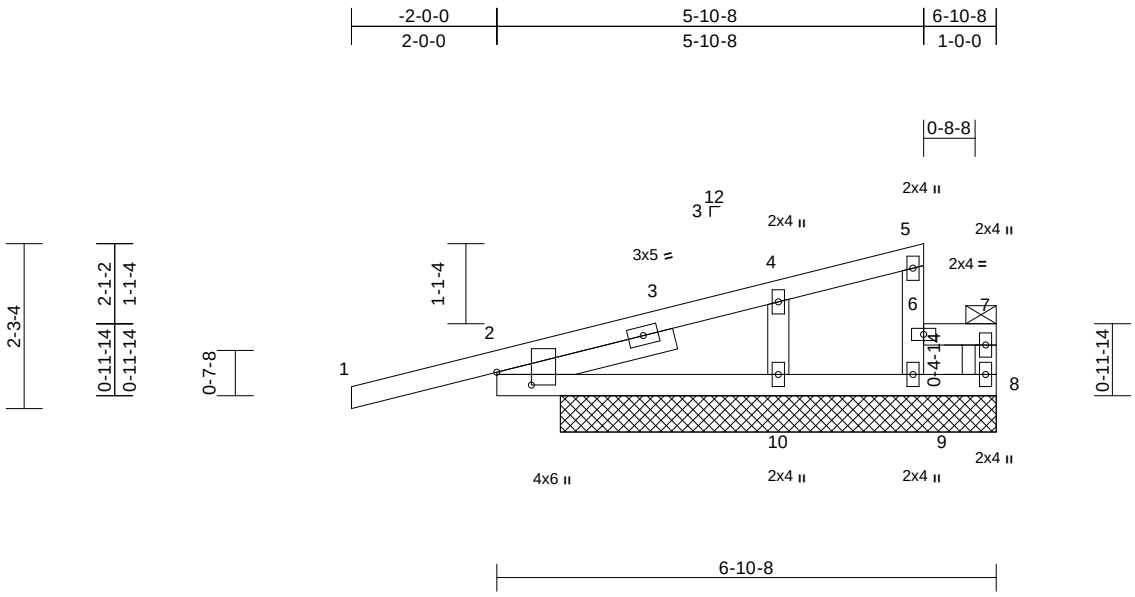

Scale = 1:31.7

Plate Offsets (X, Y): [2:0-2-2,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	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
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 2-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 6-9, 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=6-0-0, 8=6-0-0, 9=6-0-0, 10=6-0-0, 11=6-0-0
Max Horiz 2=68 (LC 15), 11=68 (LC 15)
Max Uplift 2=-70 (LC 11), 8=-3 (LC 12), 10=-19 (LC 15), 11=-70 (LC 11)
Max Grav 2=345 (LC 35), 8=47 (LC 34), 9=72 (LC 2), 10=299 (LC 35), 11=345 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/37, 2-3=-131/111, 3-4=-82/60, 4-5=-44/34, 6-9=-59/54, 5-6=-37/32, 6-7=-12/13, 7-8=-37/22
BOT CHORD	2-10=-29/29, 9-10=-29/29, 8-9=-12/13
WEBS	4-10=-221/139

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 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=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) Gable studs spaced at 2-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 2, and 10. This connection is for uplift only and does not consider lateral forces.
11) Non Standard bearing condition. Review required.
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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof	E14785835
21020056-A	T7	Monopitch	4	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:46 Page: 1
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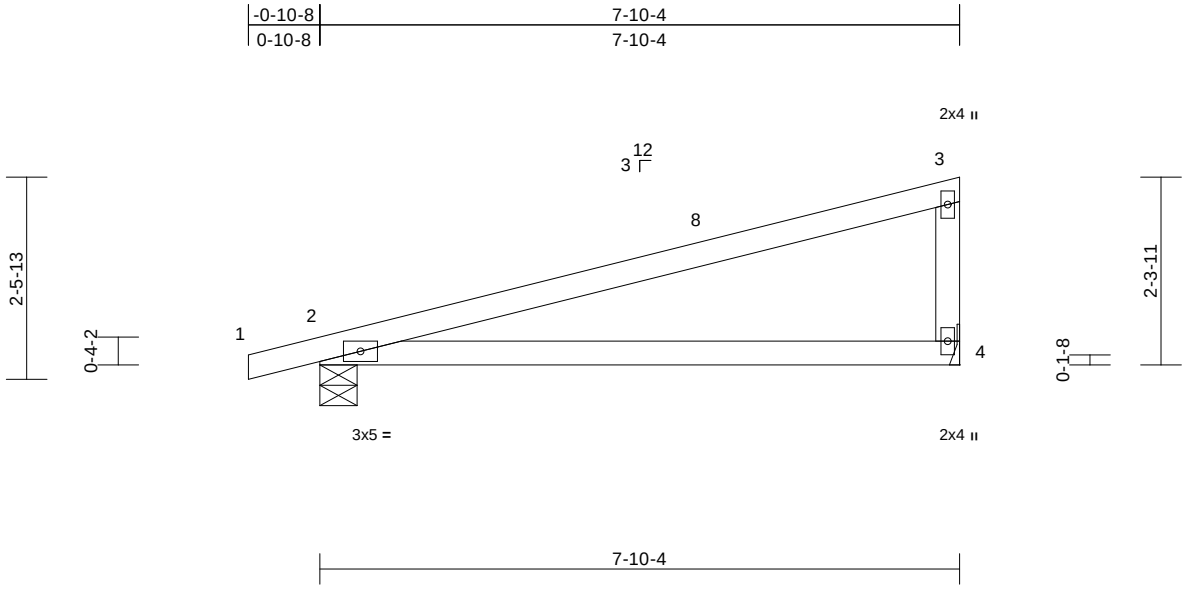

Scale = 1:28.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	0.16	4-7	>563	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.37	4-7	>250	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-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

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

REACTIONS (size) 2=0-5-8, 4= Mechanical
Max Horiz 2=63 (LC 14)
Max Uplift 2=-34 (LC 11), 4=-14 (LC 15)
Max Grav 2=364 (LC 2), 4=305 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-8=-205/44, 3-8=-65/58, 3-4=-203/140
BOT CHORD 2-4=-101/194

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 4.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T7A	Monopitch	1	1	E14785836 Job Reference (optional)

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

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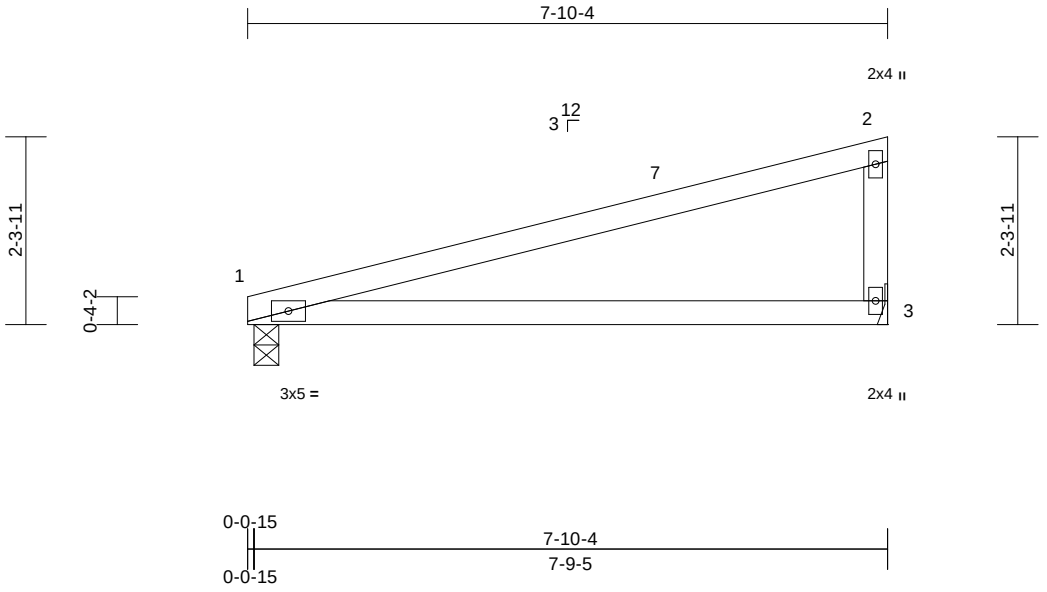

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	0.17	3-6	>544	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.38	3-6	>243	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	1	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 or 1-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-11, 3= Mechanical
Max Horiz 1=60 (LC 14)
Max Uplift 1=-9 (LC 11), 3=-14 (LC 15)
Max Grav 1=308 (LC 2), 3=308 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-239/70, 2-7=-64/58, 2-3=-204/141
BOT CHORD 1-3=-126/229

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 3.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T7GE	Monopitch Supported Gable	1	1	E14785837 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:47 Page: 1
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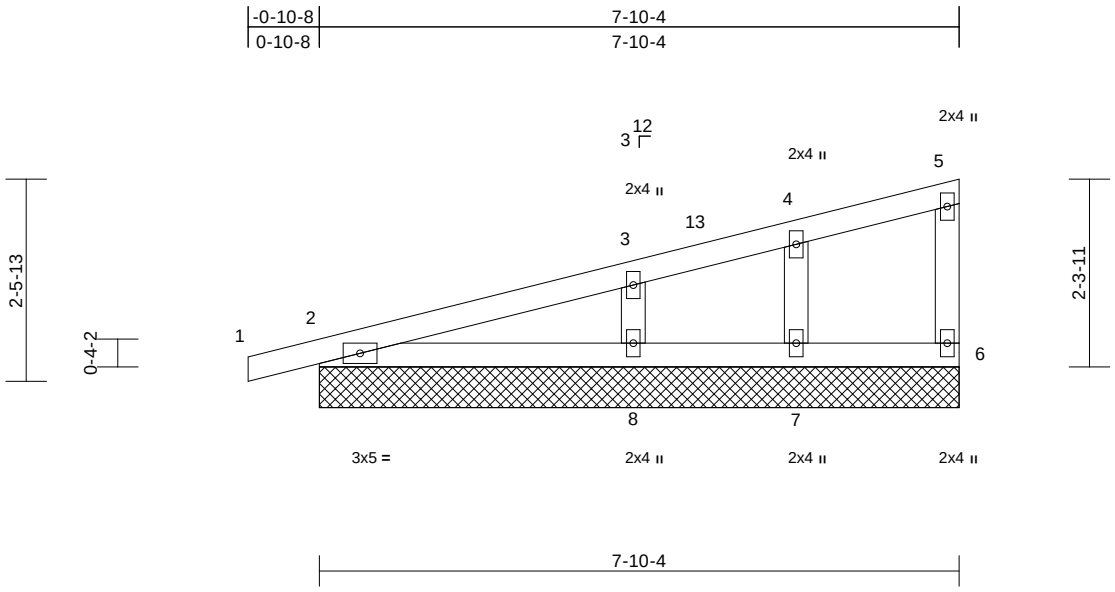

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	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
OTHERS	2x4 SP No.3

BRACING

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

REACTIONS (size) 2=7-10-4, 6=7-10-4, 7=7-10-4, 8=7-10-4, 9=7-10-4
Max Horiz 2=63 (LC 14), 9=63 (LC 14)
Max Uplift 2=-26 (LC 11), 7=-9 (LC 11), 8=-17 (LC 15), 9=-26 (LC 11)
Max Grav 2=187 (LC 2), 6=68 (LC 2), 7=118 (LC 22), 8=298 (LC 2), 9=187 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-102/66, 3-13=-63/33, 4-13=-58/42, 4-5=-38/34, 5-6=-49/41
BOT CHORD	2-8=-44/64, 7-8=-34/37, 6-7=-34/37
WEBS	4-7=-99/82, 3-8=-197/130

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 7, and 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T8	Half Hip	5	1	E14785838 Job Reference (optional)

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

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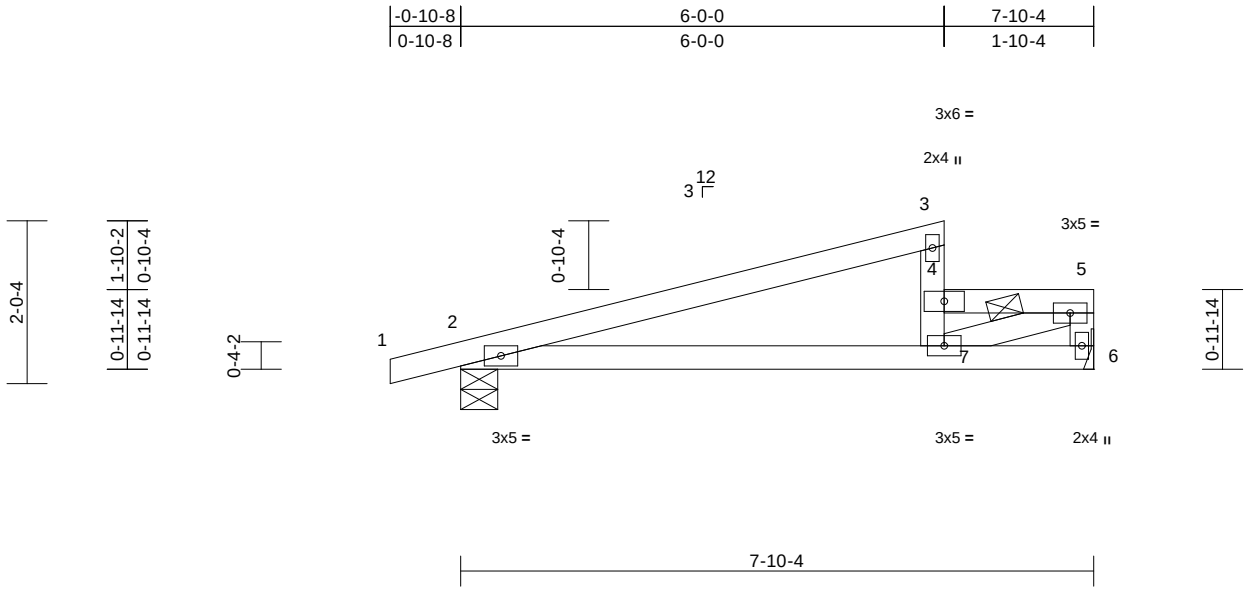

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.07	7-10	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.13	7-10	>707	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.00	2	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 *Except* 3-7:2x4 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.): 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 6= Mechanical
Max Horiz 2=56 (LC 15)
Max Uplift 2=-33 (LC 11), 6=-1 (LC 15)
Max Grav 2=419 (LC 35), 6=305 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-395/110, 4-7=-118/113, 3-4=-89/73, 4-5=-756/262, 5-6=-325/141
BOT CHORD 2-7=-146/349, 6-7=-12/13
WEBS 5-7=-289/808

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-10-8 to 7-8-8 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 6.
10) 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.
11) 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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	T8GR	Half Hip Girder	2	**2**	E14785839 Job Reference (optional)

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

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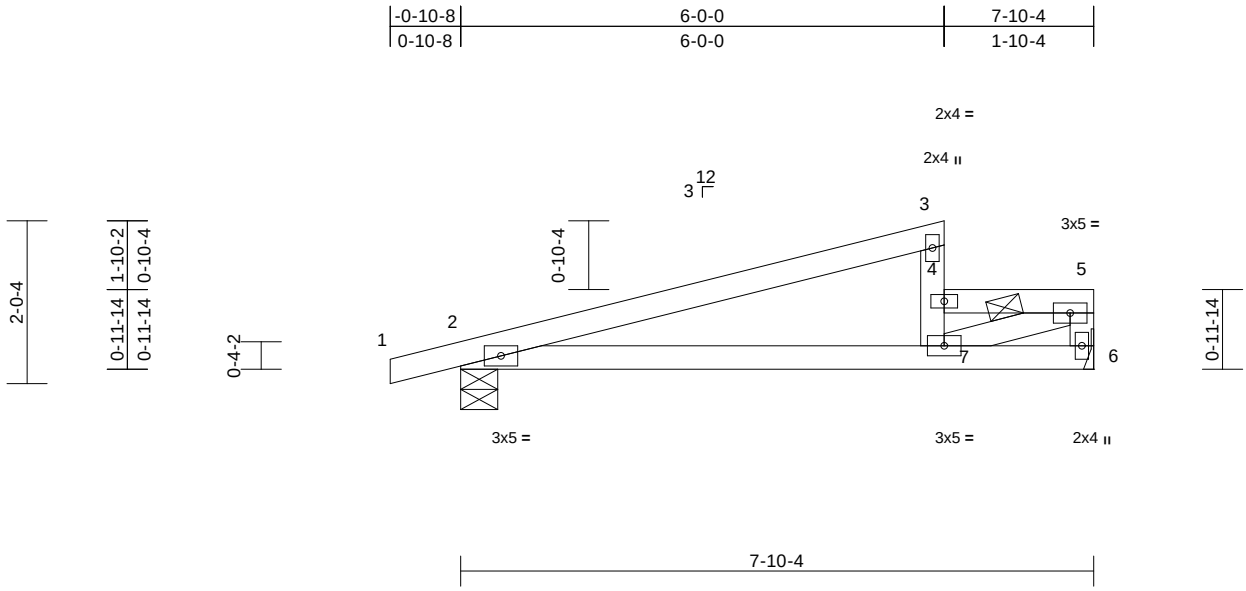

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.04	7-10	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.07	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 60 lb	FT = 20%

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

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 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 6= Mechanical
Max Horiz 2=56 (LC 11)
Max Uplift 2=-33 (LC 7), 6=-1 (LC 11)
Max Grav 2=419 (LC 31), 6=305 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-393/0, 4-7=-119/41, 3-4=-90/36, 4-5=-751/12, 5-6=-324/7
BOT CHORD 2-7=-17/347, 6-7=-8/6
WEBS 5-7=-8/803

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 6.
12) 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.
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

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V1	Valley	1	1	E14785840 Job Reference (optional)

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

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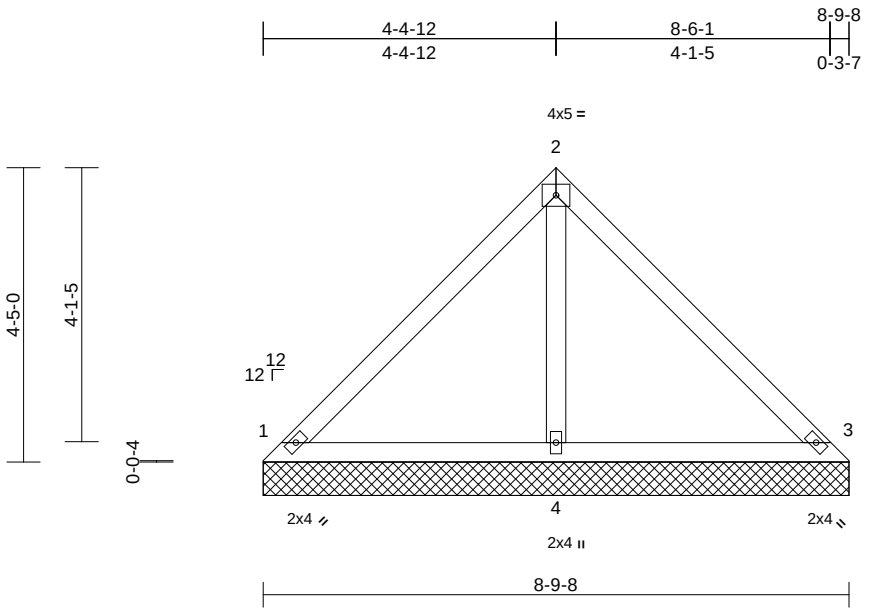

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 36 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=8-9-8, 3=8-9-8, 4=8-9-8
Max Horiz 1=-80 (LC 9)
Max Uplift 1=-20 (LC 14), 3=-20 (LC 14)
Max Grav 1=196 (LC 2), 3=196 (LC 2), 4=258 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-140/62, 2-3=-131/62
BOT CHORD 1-4=-21/60, 3-4=-21/60
WEBS 2-4=-156/46

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1 and 3. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof	E14785841
21020056-A	V2	Valley	1	1	Job Reference (optional)	

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

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:48 Page: 1
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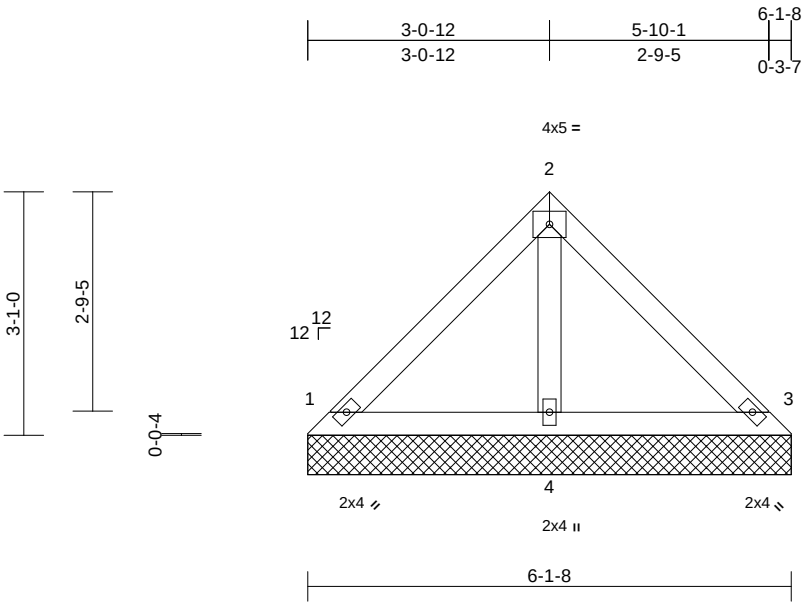

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 24 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=6-1-8, 3=6-1-8, 4=6-1-8
Max Horiz 1=54 (LC 10)
Max Uplift 1=-13 (LC 14), 3=-13 (LC 14)
Max Grav 1=132 (LC 2), 3=132 (LC 2), 4=173 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-94/44, 2-3=-88/44
BOT CHORD 1-4=-14/40, 3-4=-14/40
WEBS 2-4=-105/33

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1 and 3. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

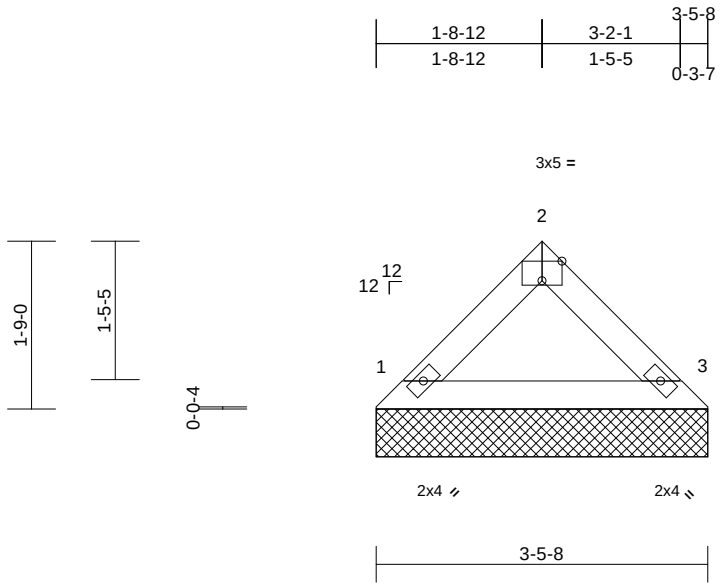
August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V3	Valley	1	1	E14785842 Job Reference (optional)

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

Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:48 ID:5p3ibzK9VcLndd2QPOCwXMyqD0O-sOkVK2H_bgO7SjAVeGC99XtG2mGv6TXHhNJqf7ykG4H



Scale = 1:24

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)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 11 lb	FT = 20%

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

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

REACTIONS (size) 1=3-5-8, 3=3-5-8
Max Horiz 1=28 (LC 12)
Max Grav 1=112 (LC 2), 3=112 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-83/35, 2-3=-83/35
BOT CHORD 1-3=-5/45

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V4	Valley	1	1	E14785843 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:48 Page: 1

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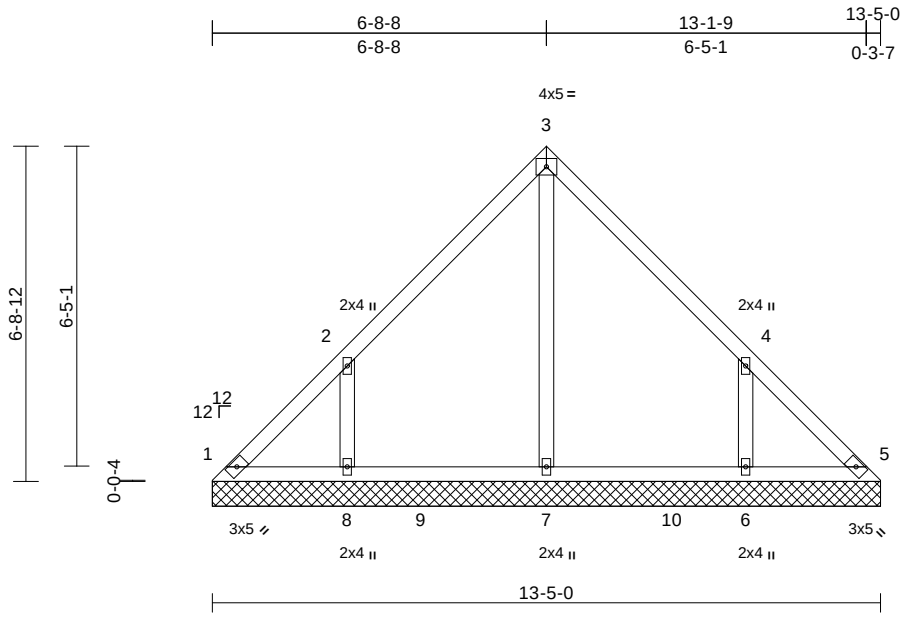

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 62 lb	FT = 20%

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

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=13-5-0, 5=13-5-0, 6=13-5-0, 7=13-5-0, 8=13-5-0
Max Horiz 1=126 (LC 10)
Max Uplift 1=-29 (LC 9), 5=-7 (LC 10), 6=-121 (LC 14), 8=-121 (LC 13)
Max Grav 1=122 (LC 25), 5=105 (LC 24), 6=359 (LC 25), 7=337 (LC 24), 8=360 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-141/107, 2-3=-156/117, 3-4=-147/117, 4-5=-118/79
BOT CHORD 1-8=-60/98, 8-9=-60/98, 7-9=-60/98, 7-10=-60/98, 6-10=-60/98, 5-6=-60/98
WEBS 3-7=-145/0, 2-8=-311/240, 4-6=-311/240

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V5	Valley	1	1	E14785844
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:48 Page: 1

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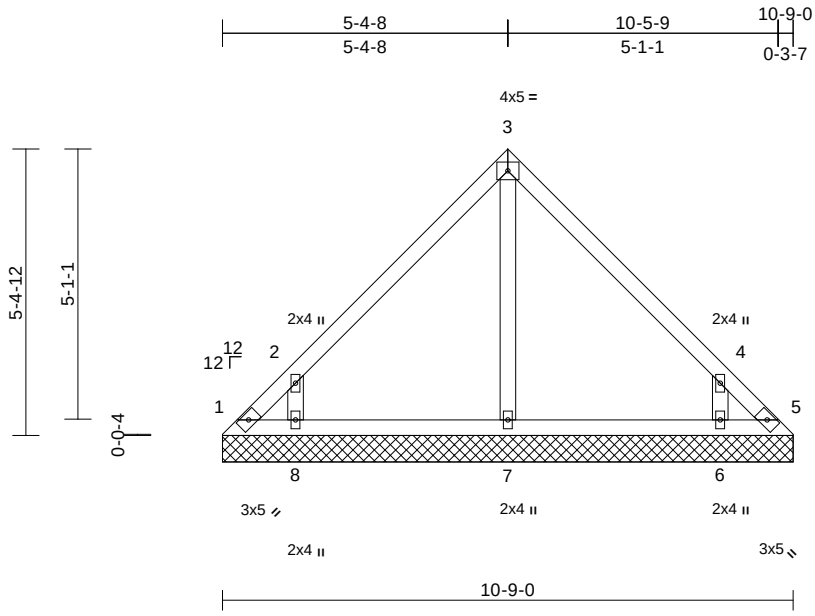

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 47 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=10-9-0, 5=10-9-0, 6=10-9-0, 7=10-9-0, 8=10-9-0
Max Horiz 1=100 (LC 10)
Max Uplift 1=-94 (LC 11), 5=-77 (LC 12), 6=-126 (LC 14), 8=-126 (LC 13)
Max Grav 1=99 (LC 10), 5=90 (LC 14), 6=341 (LC 25), 7=223 (LC 2), 8=341 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-146/120, 2-3=-156/93, 3-4=-152/93, 4-5=-146/120
BOT CHORD 1-8=-35/70, 7-8=-35/70, 6-7=-35/70, 5-6=-35/70
WEBS 3-7=-137/0, 2-8=-343/276, 4-6=-343/276

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V6	Valley	1	1	E14785845
					Job Reference (optional)

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

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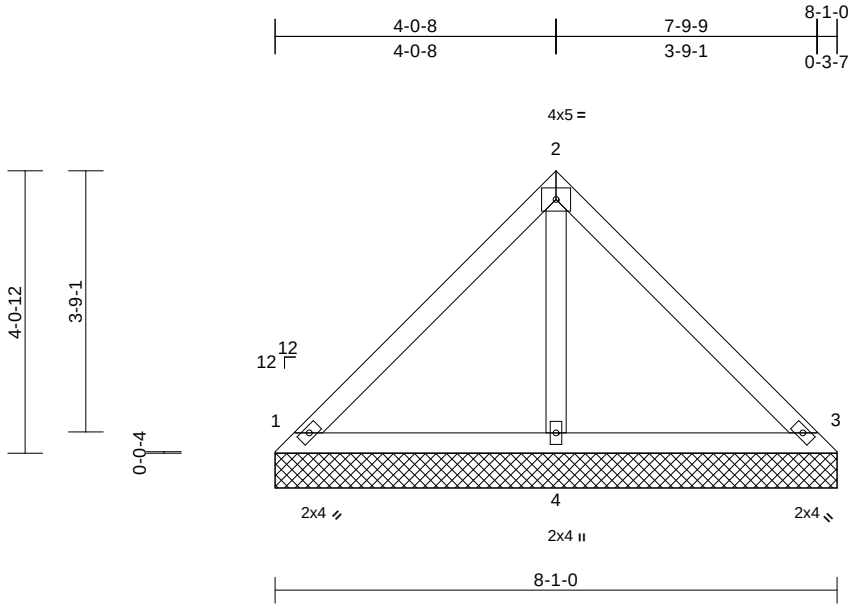

Scale = 1:33.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 33 lb	FT = 20%

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

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

REACTIONS (size) 1=8-1-0, 3=8-1-0, 4=8-1-0
Max Horiz 1=-73 (LC 9)
Max Uplift 1=-18 (LC 14), 3=-18 (LC 14)
Max Grav 1=179 (LC 2), 3=179 (LC 2), 4=235 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-128/57, 2-3=-120/57
BOT CHORD 1-4=-19/55, 3-4=-19/55
WEBS 2-4=-142/43

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) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1 and 3. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V7	Valley	1	1	E14785846
					Job Reference (optional)

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

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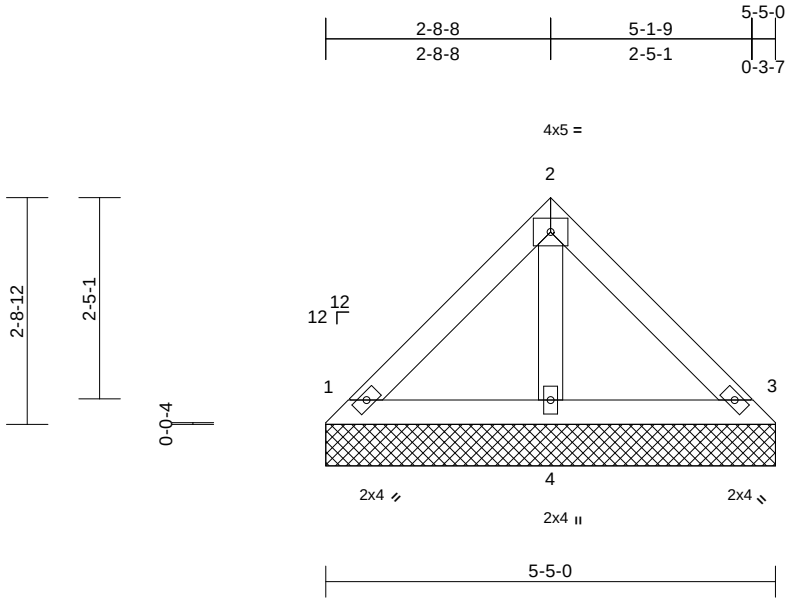

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 21 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 5-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-5-0, 3=5-5-0, 4=5-5-0
Max Horiz 1=-47 (LC 9)
Max Uplift 1=-12 (LC 14), 3=-12 (LC 14)
Max Grav 1=115 (LC 2), 3=115 (LC 2), 4=151 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-82/38, 2-3=-77/38
BOT CHORD 1-4=-12/35, 3-4=-12/35
WEBS 2-4=-91/29

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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) 1 and 3. This connection is for uplift only and does not consider lateral forces.

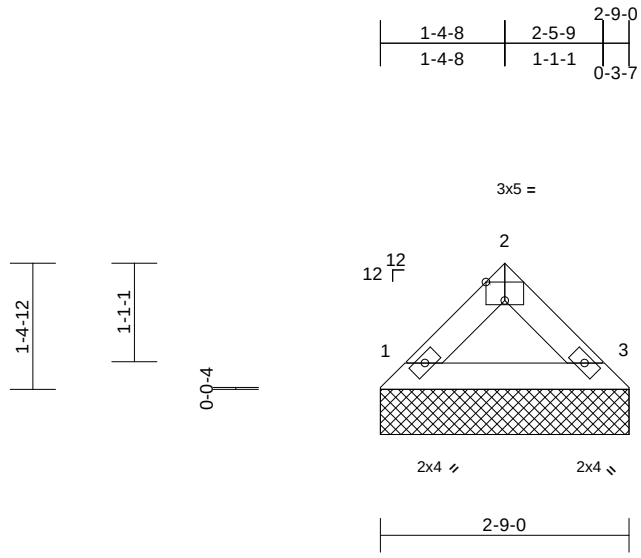
LOAD CASE(S) Standard

August 25,2020

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

Job	Truss	Truss Type	Qty	Ply	1115 Wendell Falls-Braxton A-Roof
21020056-A	V8	Valley	1	1	E14785847 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.41 S May 22 2020 Print: 8.410 S May 22 2020 MiTek Industries, Inc. Tue Aug 25 15:49:49 Page: 1
ID:Z?d4oILnGvTeFndcz5j93ayqD0N-LbItYOIcM_W_4tkiBzjOilQR19dcrwnQw13OBaykG4G



Scale = 1:25.5

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)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	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-P								
BCDL	10.0										Weight: 9 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-9-0, 3=2-9-0
Max Horiz 1=-21 (LC 9)
Max Grav 1=84 (LC 2), 3=84 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/26, 2-3=-62/26
BOT CHORD 1-3=-4/34

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
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.

LOAD CASE(S) Standard

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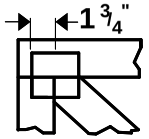
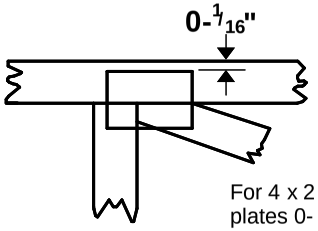
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

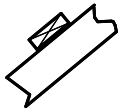
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

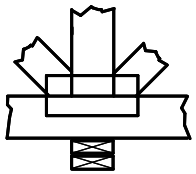
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

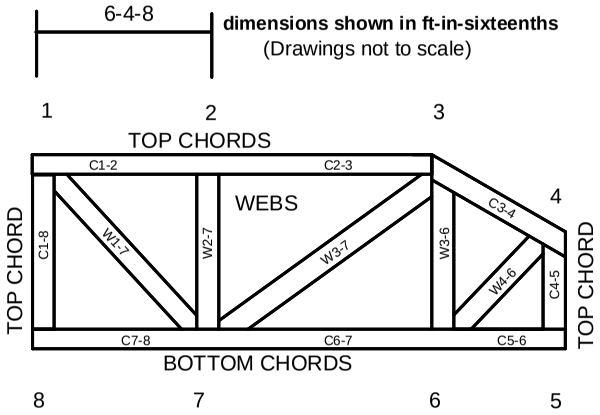


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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