

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20010112
MIKE SHEAN / FRANK RESIDENCE

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

Pages or sheets covered by this seal: E14115596 thru E14115648

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

North Carolina COA: C-0844



February 26, 2020

Gilbert, Eric

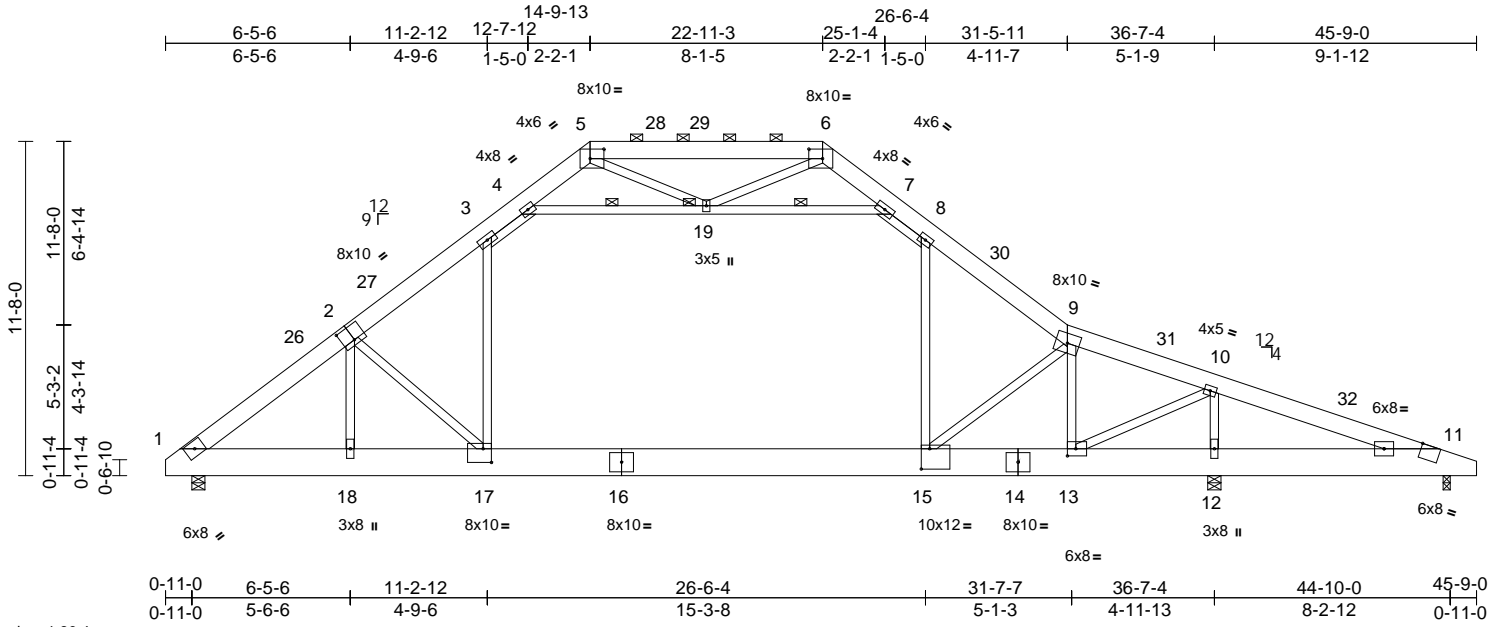
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job 20010112	Truss A1	Truss Type Attic	Qty 6	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115596
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:25:46
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Page: 1



Scale = 1:80.4

Plate Offsets (X, Y): [2:0-5-0,0-6-0], [5:0-5-12,0-4-0], [6:0-5-12,0-4-0], [11:1-2-10,Edge], [13:0-3-8,0-3-0], [15:0-3-8,0-8-8], [17:0-3-8,0-5-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.16	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.24	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.02	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	15-17	>999	360		
BCDL	10.0											
											Weight: 474 lb	FT = 20%

LUMBER	
TOP CHORD	2x8 SP 2400F 2.0E
BOT CHORD	2x12 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 17-2,3-17,8-15,15-9,13-10,4-7:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-19, 7-19
JOINTS	1 Brace at Jt(s): 19
REACTIONS	(size)
	1=0-5-8, 11=0-3-0, 12=0-5-8
	Max Horiz 1=220 (LC 11)
	Max Uplift 11=224 (LC 12)
	Max Grav 1=1959 (LC 50), 11=235 (LC 43), 12=2494 (LC 60)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-26=-2530/133, 2-26=-2408/153, 2-27=-2639/124, 3-27=-2447/155, 3-4=-1822/237, 4-5=-795/222, 5-28=-713/163, 28-29=-713/163, 6-29=-713/163, 6-7=-783/217, 7-8=-1839/240, 8-30=-2463/149, 9-30=-2625/122, 9-31=-1727/110, 10-31=-1743/93, 10-32=-324/569, 11-32=-372/491
BOT CHORD	1-18=-11/2110, 17-18=0/2106, 16-17=0/2031, 15-16=0/2031, 14-15=0/1702, 13-14=0/1702, 12-13=-485/333, 11-12=-485/333
WEBS	2-18=-503/24, 2-17=-248/277, 3-17=0/1090, 8-15=0/974, 9-15=0/581, 9-13=-1598/61, 10-13=0/2114, 10-12=-1865/189, 4-19=-1885/56, 7-19=-2015/65, 5-19=0/167, 6-19=0/240

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 8-9, 4-19, 7-19; Wall dead load (5.0psf) on member(s).3-17, 8-15
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 15-17
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 12, and 11. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



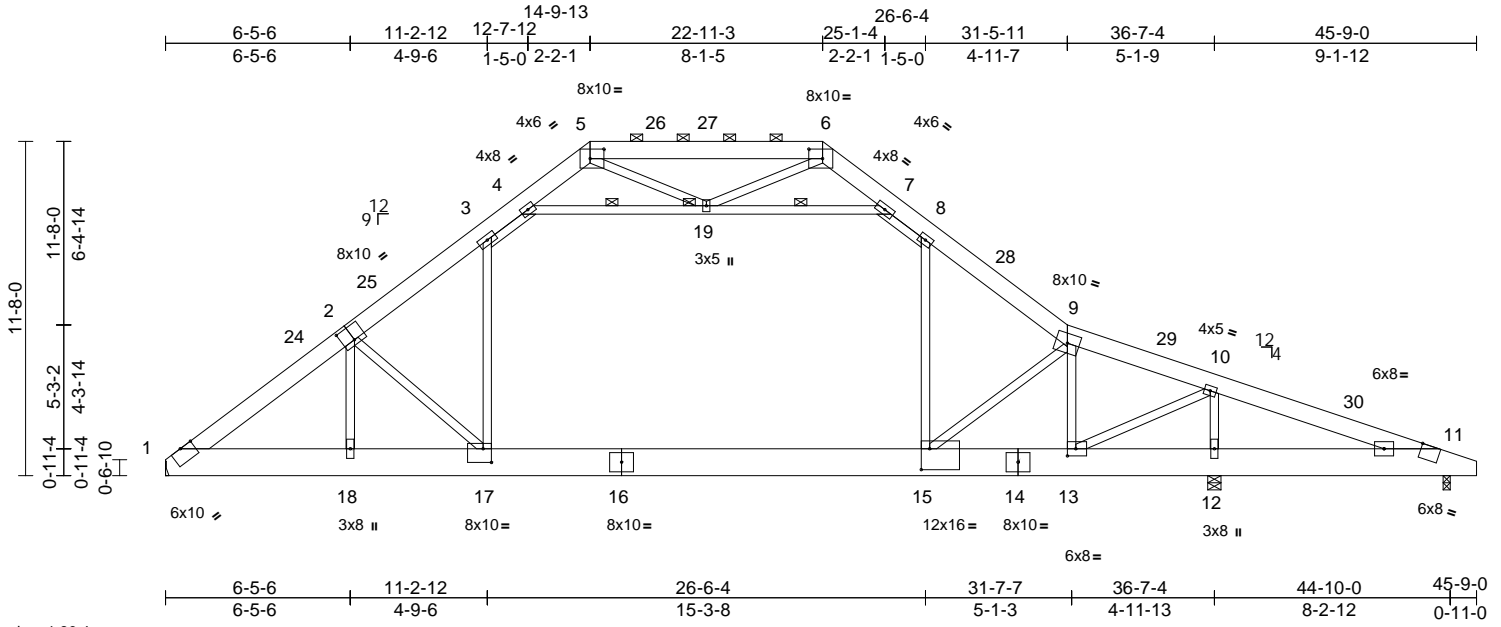
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss A2	Truss Type Attic	Qty 4	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115597
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



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Plate Offsets (X, Y): [1:0-5-5,Edge], [2:0-5-0,0-6-0], [5:0-5-12,0-4-0], [6:0-5-12,0-4-0], [11:1-2-10,Edge], [13:0-3-8,0-3-0], [15:0-3-8,0-8-12], [17:0-3-8,0-5-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.17	15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.26	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	15-17	>999	360		
BCDL	10.0											
											Weight: 474 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
17-2,3-17,8-15,15-9,13-10,4-7:2x4 SP No.2

WEBS
2-18=-175/244, 2-17=-650/223, 3-17=0/1230,
8-15=0/1045, 9-15=0/575, 9-13=-1647/64,
10-13=0/2088, 4-19=-2032/63,
7-19=-2215/76, 10-12=-1846/188,
5-19=0/156, 6-19=0/277

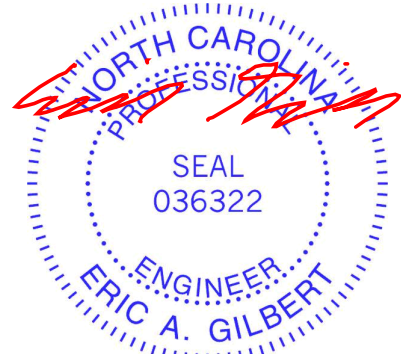
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.
LOAD CASE(S) Standard

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-19, 7-19
JOINTS 1 Brace at Jt(s): 19

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; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 8-9, 4-19, 7-19; Wall dead load (5.0psf) on member(s).3-17, 8-15
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 15-17
9) Refer to girder(s) for truss to truss connections.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 11. This connection is for uplift only and does not consider lateral forces.

REACTIONS (size) 1= Mechanical, 11=0-3-0, 12=0-5-8
Max Horiz 1=-224 (LC 13)
Max Uplift 11=-215 (LC 12)
Max Grav 1=-1977 (LC 50), 11=-283 (LC 43), 12=2476 (LC 60)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-3098/164, 2-24=-2988/184, 2-25=-2862/135, 3-25=-2670/166, 3-4=-1935/243, 4-5=-790/221, 5-26=-704/163, 26-27=-704/163, 6-27=-704/163, 6-7=-767/215, 7-8=-1966/246, 8-28=-2654/159, 9-28=-2814/131, 9-29=-1893/118, 10-29=-1908/100, 10-30=-461/421, 11-30=-509/364
BOT CHORD 1-18=-15/2627, 17-18=-15/2627, 16-17=0/2186, 15-16=0/2186, 14-15=0/1861, 13-14=0/1861, 12-13=-349/463, 11-12=-349/463



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



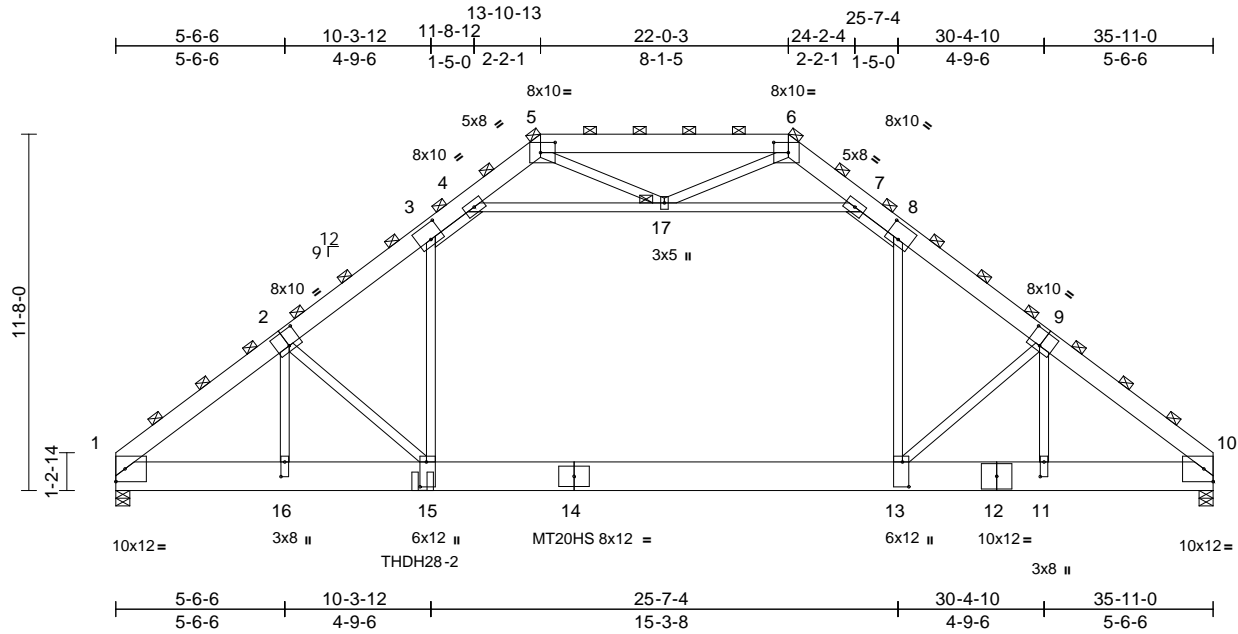
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss A3	Truss Type Attic Girder	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115598
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Carter Components (Sanford), Sanford, NC - 27332,

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Scale = 1:75.4

[2:0-5-0,0-6-0], [3:0-5-0,0-5-12], [5:0-5-12,0-4-0], [6:0-5-12,0-4-0], [8:0-5-0,0-5-12], [9:0-5-0,0-6-0], [11:0-5-12,0-1-8], [13:0-9-12,0-2-8], [15:0-9-12,0-2-8],
Plate Offsets (X, Y): [16:0-5-12,0-1-8]

Loading	(psf)	Spacing	9-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.27	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.43	13-15	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.16	13-15	>999	360		
BCDL	10.0											

Weight: 1185 lb FT = 20%

LUMBER	TOP CHORD	BOT CHORD	WEBS
	2x8 SP 2400F 2.0E	2x12 SP 2400F 2.0E	2x4 SP No.3 *Except*
			4-7,15-2,3-15,8-13,13-9:2x4 SP No.2
BRACING			
	2-0-0 oc purlins (6-0-0 max.)		
	(Switched from sheeted: Spacing > 2-8-0).		
		Rigid ceiling directly applied or 10-0-0 oc	
		bracing.	
JOINTS			
			1 Brace at Jt(s): 5, 6, 17
REACTIONS			
	(size) 1=0-5-8, 10=0-5-8		
	Max Horiz 1=935 (LC 7)		
	Max Grav 1=10785 (LC 3), 10=14183 (LC 3)		
FORCES			
	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD			
	1-2=-14703/0, 2-3=-15827/0, 3-4=-10921/0,		
	4-5=-2438/885, 5-6=-2000/444,		
	6-7=-2579/765, 7-8=-10831/0, 8-9=-15980/0,		
	9-10=-17602/0		
BOT CHORD			
	1-16=-415/11828, 15-16=0/11809,		
	14-15=0/12040, 13-14=0/12040,		
	12-13=0/13788, 11-12=0/13788,		
	10-11=0/13781		
WEBS			
	2-16=-3862/0, 4-17=-11910/0,		
	7-17=-11491/0, 2-15=-992/2344,		
	3-15=0/7105, 8-13=0/7572, 9-13=-4228/0,		
	5-17=0/1626, 6-17=-364/936, 9-11=-98/2843		
NOTES			

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x12 - 5 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; and vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-17, 7-17; Wall dead load (5.0psf) on member(s). 3-15, 8-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THDH28-2 (With 36-16d nails into Girder & 4-16d nails into Truss) or equivalent at 10-0-8 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



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Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	A3	Attic Girder	2	3	E14115598
					Job Reference (optional)

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:25:50

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17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-215, 3-4=-260, 4-5=-215, 5-6=-260, 6-7=-215, 7-8=-260, 8-10=-215, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1680 (B)

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

Uniform Loads (lb/ft)

Vert: 1-3=-270, 3-4=-315, 4-5=-270, 5-6=-270, 6-7=-270, 7-8=-315, 8-10=-270, 13-18=-90, 13-21=-602 (F=-512), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1853 (B)

3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-225, 3-4=-270, 4-5=-225, 5-6=-225, 6-7=-225, 7-8=-270, 8-10=-225, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-2090 (B)

4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-184, 3-4=-229, 4-5=-184, 5-6=-217, 6-7=-184, 7-8=-229, 8-10=-184, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1960 (B)

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-58, 3-4=-85, 4-5=-58, 5-6=67, 6-7=31, 7-8=4, 8-10=31, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=4, 6-10=85
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

6) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=31, 3-4=4, 4-5=31, 5-6=67, 6-7=-58, 7-8=-85, 8-10=-58, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=-85, 6-10=-4
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-144, 3-4=-189, 4-5=-144, 5-6=-19, 6-7=-55, 7-8=-100, 8-10=-55, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
Horz: 1-5=54, 6-10=35
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=548 (B)

8) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-55, 3-4=-100, 4-5=-55, 5-6=-19, 6-7=-144, 7-8=-189, 8-10=-144, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
Horz: 1-5=-35, 6-10=-54
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=548 (B)

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=67, 3-4=40, 4-5=67, 5-6=23, 6-7=23, 7-8=4, 8-10=23, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=-121, 6-10=77
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=23, 3-4=-4, 4-5=23, 5-6=23, 6-7=67, 7-8=40, 8-10=67, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=-77, 6-10=121
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=67, 3-4=40, 4-5=67, 5-6=23, 6-7=23, 7-8=4, 8-10=23, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=-121, 6-10=77
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=23, 3-4=-4, 4-5=23, 5-6=23, 6-7=67, 7-8=40, 8-10=67, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
Horz: 1-5=-77, 6-10=121
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=513 (B)

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-19, 3-4=-64, 4-5=-19, 5-6=-64, 6-7=-64, 7-8=-109, 8-10=-64, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
Horz: 1-5=-71, 6-10=26
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=548 (B)

14) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-64, 3-4=-109, 4-5=-64, 5-6=-64, 6-7=-19, 7-8=-64, 8-10=-19, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
Horz: 1-5=-26, 6-10=71
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=548 (B)

15) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 1-3=-90, 3-4=-135, 4-5=-90, 5-6=-90, 6-7=-90, 7-8=-135, 8-10=-90, 15-18=-90, 13-15=-450, 13-21=-579 (F=-489), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1515 (B)

16) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 1-3=-90, 3-4=-135, 4-5=-90, 5-6=-90, 6-7=-90, 7-8=-135, 8-10=-90, 15-18=-90, 13-15=-450, 13-21=-579 (F=-489), 4-17=-45, 7-17=-45
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1515 (B)

17) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-224, 3-4=-269, 4-5=-224, 5-6=-164, 6-7=-157, 7-8=-202, 8-10=-157, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
Horz: 1-5=41, 6-10=26
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

18) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-157, 3-4=-202, 4-5=-157, 5-6=-164, 6-7=-224, 7-8=-269, 8-10=-224, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
Horz: 1-5=-26, 6-10=-41
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

19) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-130, 3-4=-175, 4-5=-130, 5-6=-197, 6-7=-164, 7-8=-209, 8-10=-164, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
Horz: 1-5=-53, 6-10=20
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

20) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-164, 3-4=-209, 4-5=-164, 5-6=-197, 6-7=-130, 7-8=-175, 8-10=-130, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
Horz: 1-5=-20, 6-10=53
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-266, 3-4=-311, 4-5=-266, 5-6=-172, 6-7=-199, 7-8=-244, 8-10=-199, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
Horz: 1-5=41, 6-10=26
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-266, 3-4=-311, 4-5=-266, 5-6=-172, 6-7=-199, 7-8=-244, 8-10=-199, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
Horz: 1-5=41, 6-10=26
Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=289 (B)

Continued on page 3

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	A3	Attic Girder	2	3	E14115598
					Job Reference (optional)

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:25:50

Page: 3

ID:uk8A3l_bUnkWqjG1ia?9VzhLUh-AvhafFfQ8?zoxpwXaU56DJ6jz15SZYR?PQ9u0MzhHPV

- Vert: 1-3=-199, 3-4=-244, 4-5=-199, 5-6=-172, 6-7=-266, 7-8=-311, 8-10=-266, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
 Horz: 1-5=-26, 6-10=-41
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=289 (B)
- 23) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-172, 3-4=-217, 4-5=-172, 5-6=-205, 6-7=-205, 7-8=-250, 8-10=-205, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
 Horz: 1-5=-53, 6-10=20
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=289 (B)
- 24) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-205, 3-4=-250, 4-5=-205, 5-6=-205, 6-7=-172, 7-8=-217, 8-10=-172, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
 Horz: 1-5=-20, 6-10=53
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=289 (B)
- 25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-270, 3-4=-315, 4-5=-270, 5-6=-270, 6-7=-90, 7-8=-135, 8-10=-90, 13-18=-90, 13-21=-602 (F=-512), 4-17=-45, 7-17=-45
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=1853 (B)
- 26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-90, 3-4=-135, 4-5=-90, 5-6=-270, 6-7=-270, 7-8=-315, 8-10=-270, 13-18=-90, 13-21=-602 (F=-512), 4-17=-45, 7-17=-45
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=1853 (B)
- 27) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-225, 3-4=-270, 4-5=-225, 5-6=-225, 6-7=-90, 7-8=-135, 8-10=-90, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=2090 (B)
- 28) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-90, 3-4=-135, 4-5=-90, 5-6=-225, 6-7=-225, 7-8=-270, 8-10=-225, 15-18=-90, 13-15=-360, 13-21=-673 (F=-583), 4-17=-45, 7-17=-45
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=2090 (B)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-58, 3-4=-85, 4-5=-58, 5-6=67, 6-7=31, 7-8=4, 8-10=31, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=4, 6-10=85
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=31, 3-4=4, 4-5=31, 5-6=67, 6-7=-58, 7-8=-85, 8-10=-58, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=-85, 6-10=-4
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-144, 3-4=-189, 4-5=-144, 5-6=-19, 6-7=-55, 7-8=-100, 8-10=-55, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
 Horz: 1-5=54, 6-10=35
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1126 (B)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-55, 3-4=-100, 4-5=-55, 5-6=-19, 6-7=-144, 7-8=-189, 8-10=-144, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
 Horz: 1-5=-35, 6-10=-54
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1126 (B)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=67, 3-4=40, 4-5=67, 5-6=23, 6-7=23, 7-8=4, 8-10=23, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=-121, 6-10=77
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=23, 3-4=-4, 4-5=23, 5-6=23, 6-7=67, 7-8=40, 8-10=67, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=-77, 6-10=121
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 35) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=67, 3-4=40, 4-5=67, 5-6=23, 6-7=23, 7-8=4, 8-10=23, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=-121, 6-10=77
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 36) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=23, 3-4=-4, 4-5=23, 5-6=23, 6-7=67, 7-8=40, 8-10=67, 13-18=-54, 13-21=-389 (F=-335), 4-17=-27, 7-17=-27
 Horz: 1-5=-77, 6-10=121
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1161 (B)
- 37) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-19, 3-4=-64, 4-5=-19, 5-6=-64, 6-7=-64, 7-8=-109, 8-10=-64, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
 Horz: 1-5=-71, 6-10=26
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1126 (B)
- 38) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-64, 3-4=-109, 4-5=-64, 5-6=-64, 6-7=-19, 7-8=-64, 8-10=-19, 13-18=-90, 13-21=-425 (F=-335), 4-17=-45, 7-17=-45
 Horz: 1-5=-26, 6-10=71
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1126 (B)
- 39) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-224, 3-4=-269, 4-5=-224, 5-6=-164, 6-7=-157, 7-8=-202, 8-10=-157, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
 Horz: 1-5=41, 6-10=26
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1718 (B)
- 40) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-157, 3-4=-202, 4-5=-157, 5-6=-164, 6-7=-224, 7-8=-269, 8-10=-224, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
 Horz: 1-5=-26, 6-10=-41
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1718 (B)
- 41) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-130, 3-4=-175, 4-5=-130, 5-6=-197, 6-7=-164, 7-8=-209, 8-10=-164, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
 Horz: 1-5=-53, 6-10=20
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1718 (B)
- 42) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-164, 3-4=-209, 4-5=-164, 5-6=-197, 6-7=-130, 7-8=-175, 8-10=-130, 15-18=-90, 13-15=-360, 13-21=-541 (F=-451), 4-17=-45, 7-17=-45
 Horz: 1-5=-20, 6-10=53
 Drag: 3-15=-45, 8-13=-45
 Concentrated Loads (lb)
 Vert: 15=-1718 (B)
- 43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)

Continued on page 4

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818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss A3	Truss Type Attic Girder	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115598
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:50
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Vert: 1-3=-266, 3-4=-311, 4-5=-266, 5-6=-172,
6-7=-199, 7-8=-244, 8-10=-199, 15-18=-90,
13-15=-360, 13-21=-673 (F=-583), 4-17=-45,
7-17=-45

Horz: 1-5=41, 6-10=26

Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1799 (B)

- 44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-199, 3-4=-244, 4-5=-199, 5-6=-172,
6-7=-266, 7-8=-311, 8-10=-266, 15-18=-90,
13-15=-360, 13-21=-673 (F=-583), 4-17=-45,
7-17=-45

Horz: 1-5=-26, 6-10=-41

Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1799 (B)

- 45) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-172, 3-4=-217, 4-5=-172, 5-6=-205,
6-7=-205, 7-8=-250, 8-10=-205, 15-18=-90,
13-15=-360, 13-21=-673 (F=-583), 4-17=-45,
7-17=-45

Horz: 1-5=-53, 6-10=20

Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1799 (B)

- 46) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 1-3=-205, 3-4=-250, 4-5=-205, 5-6=-205,
6-7=-172, 7-8=-217, 8-10=-172, 15-18=-90,
13-15=-360, 13-21=-673 (F=-583), 4-17=-45,
7-17=-45

Horz: 1-5=-20, 6-10=53

Drag: 3-15=-45, 8-13=-45

Concentrated Loads (lb)

Vert: 15=-1799 (B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss A4	Truss Type Attic Structural Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115599
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:51
ID:y5SWfYH0hkP9pn52cR26fxzhL1v-e5Fytag2vl5oPzVj8BcLIWe_KRU5I7J9e4uRYozhHPU

Page: 2

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C
Exterior (2) zone; cantilever 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) TLL: 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) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 10) Ceiling dead load (5.0 psf) on member(s). 7-8, 14-15,
8-49, 42-49, 42-53, 44-53, 14-44; Wall dead load
(5.0psf) on member(s).7-36, 15-34
- 11) Bottom chord live load (40.0 psf) and additional bottom
chord dead load (0.0 psf) applied only to room. 34-36
- 12) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 1544 lb uplift at
joint 32.
- 13) One RT7A USP connectors recommended to connect
truss to bearing walls due to UPLIFT at jt(s) 1, 24, 29,
26, 30, 28, 27, 25, and 33. This connection is for uplift
only and does not consider lateral forces.
- 14) This truss is designed in accordance with the 2015
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.
- 16) This truss has large uplift reaction(s) from gravity load
case(s). Proper connection is required to secure truss
against upward movement at the bearings. Building
designer must provide for uplift reactions indicated.
- 17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss A5	Truss Type Attic Structural Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115600
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:55
ID:y5SWFYH0hkP9pn52cR26fxzL1v-WtVTjyZyXbEupUN1hHwMpfN2sjEw7kZhsfhZzhHPQ

Page: 2

- 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) TCELL: 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) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 10) Ceiling dead load (5.0 psf) on member(s). 7-8, 14-15,
8-49, 42-49, 42-53, 44-53, 14-44; Wall dead load
(5.0psf) on member(s).7-36, 15-34
- 11) Bottom chord live load (40.0 psf) and additional bottom
chord dead load (0.0 psf) applied only to room. 34-36
- 12) Refer to girder(s) for truss to truss connections.
- 13) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 1585 lb uplift at
joint 32.
- 14) One RT7A USP connectors recommended to connect
truss to bearing walls due to UPLIFT at jt(s) 24, 29, 26,
30, 28, 27, 25, and 33. This connection is for uplift only
and does not consider lateral forces.
- 15) This truss is designed in accordance with the 2015
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.
- 17) This truss has large uplift reaction(s) from gravity load
case(s). Proper connection is required to secure truss
against upward movement at the bearings. Building
designer must provide for uplift reactions indicated.
- 18) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



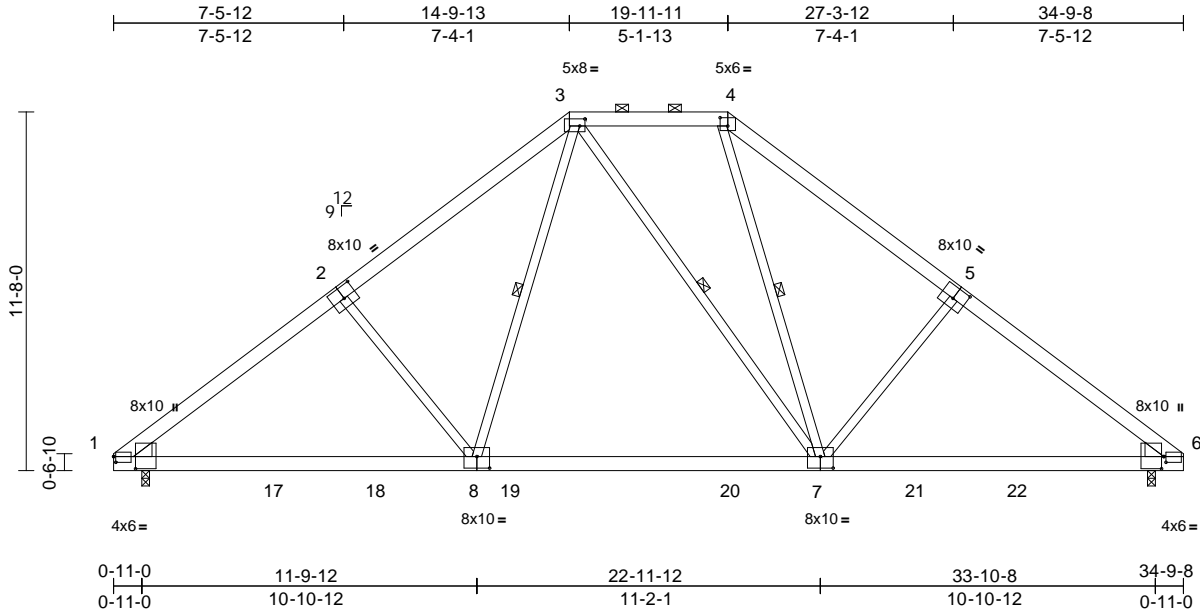
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss B1	Truss Type Piggyback Base	Qty 3	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115601
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:57
ID:IRbq6DWZGHVVoZrJ6xJBrkzhKyR-TFcE8elpU8ry7uytVSj?nu1MsRZisW10?LmmSzhHPO

Page: 1



Scale = 1:74.9

Plate Offsets (X, Y): [1:0-0-13,0-2-4], [1:0-4-12,0-8-9], [2:0-5-0,0-4-8], [3:0-2-0,0-2-12], [4:0-3-0,0-3-4], [5:0-5-0,0-4-8], [6:0-0-13,0-2-4], [6:0-4-12,0-0-14], [7:0-5-0,0-4-8], [8:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.21	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.35	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 256 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x6 SP No.2
 - BOT CHORD 2x6 SP No.2
 - WEBS 2x4 SP No.2
 - WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
 - BOT CHORD Rigid ceiling directly applied or 8-8-2 oc bracing.
 - WEBS 1 Row at midpt 3-8, 3-7, 4-7
- REACTIONS** (size) 1=0-3-0, 6=0-3-0
Max Horiz 1=206 (LC 10)
Max Uplift 1=-149 (LC 10), 6=-149 (LC 9)
Max Grav 1=1378 (LC 3), 6=1367 (LC 3)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-1732/985, 2-3=-1542/1032, 3-4=-985/780, 4-5=-1525/1032, 5-6=-1714/985
 - BOT CHORD 1-17=-676/1281, 17-18=-676/1281, 8-18=-676/1281, 8-19=-399/995, 19-20=-399/995, 7-20=-399/995, 7-21=-676/1268, 21-22=-676/1268, 6-22=-676/1268
 - WEBS 3-8=-466/585, 2-8=-364/250, 3-7=-157/161, 4-7=-464/551, 5-7=-362/248

- 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; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

NOTES

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



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



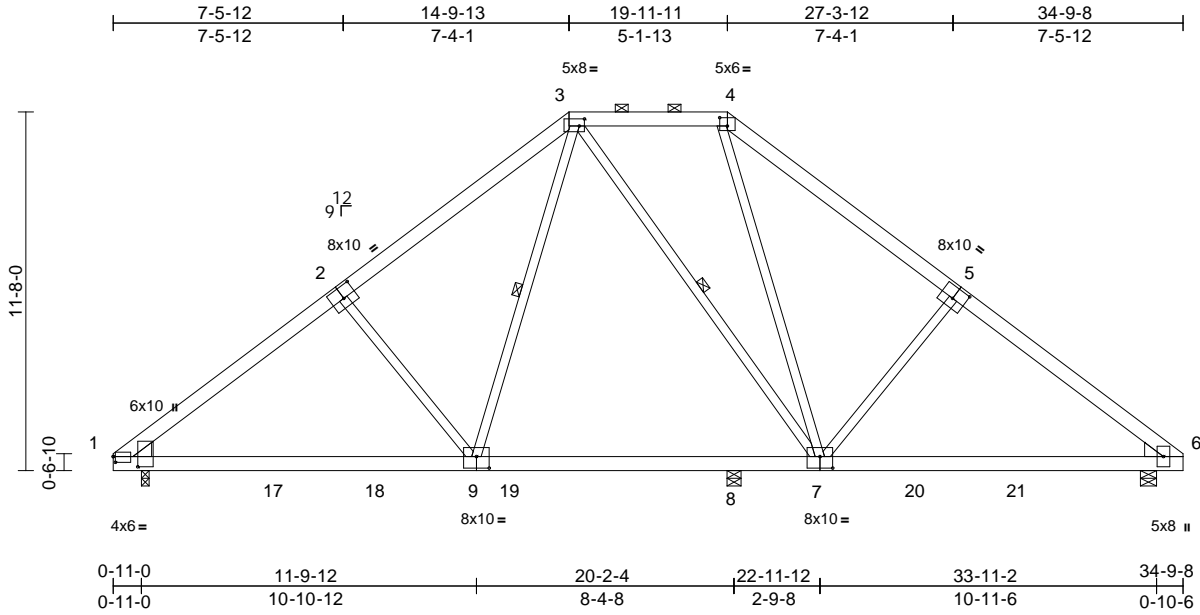
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss B2	Truss Type Piggyback Base	Qty 6	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115602
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:57
ID:Kvq5?OZdwiFk1l6litrH3uzhKuV-TFcE8elpU8ry7uytVSjI?nu2VsR9iC10?LmmSzhHPO

Page: 1



Scale = 1:74.9

Plate Offsets (X, Y): [1:0-0-13,0-2-4], [1:0-4-0,0-9-9], [2:0-5-0,0-4-8], [3:0-2-0,0-2-12], [4:0-3-0,0-3-4], [5:0-5-0,0-4-8], [7:0-5-0,0-4-8], [9:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.09	7-12	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.18	7-12	>996	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 256 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

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

REACTIONS (size) 1=0-3-0, 6=0-6-4, 8=0-5-8
Max Horiz 1=221 (LC 9)
Max Uplift 1=-78 (LC 10), 8=-49 (LC 10)
Max Grav 1=1191 (LC 3), 6=1192 (LC 2), 8=443 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1433/680, 2-3=-1240/726, 3-4=-735/420, 4-5=-1088/470, 5-6=-1331/423
BOT CHORD 1-17=-416/1095, 17-18=-416/1095, 9-18=-416/1095, 9-19=-127/796, 8-19=-127/796, 7-8=-127/796, 7-20=-204/954, 20-21=-204/954, 6-21=-204/954
WEBS 3-9=-447/509, 2-9=-381/277, 3-7=-230/212, 4-7=-115/313, 5-7=-388/261

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6, 1, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



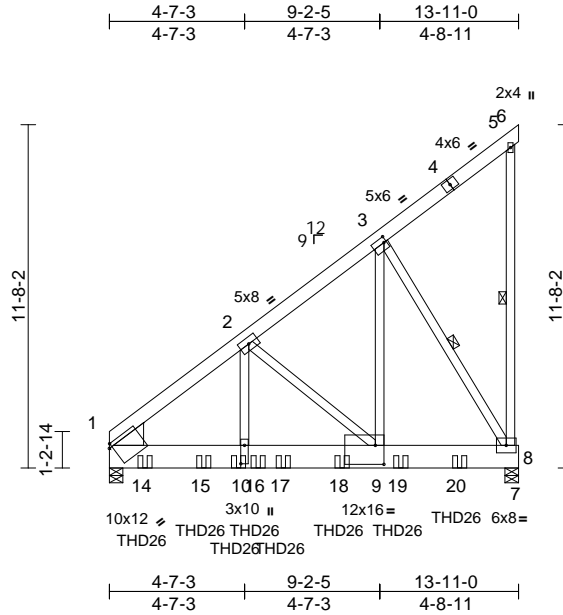
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss B3	Truss Type Monopitch Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115603
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:58
ID:gb2hTwLy32PssXDAi0jrNfzhKa8-xSAcl_mRFSzpl2X329E_X?RAtGseR9mBF5JluzhHPN

Page: 1



Scale = 1:78.4

Plate Offsets (X, Y): [1:0-1-4,0-1-8], [3:0-1-0,0-2-4], [9:0-3-8,0-7-12], [10:0-7-8,0-1-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.08	9-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.15	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 302 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2
WEDGE Left: 2x10 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins, except end verticals.

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

WEBS 1 Row at midpt 5-8, 3-8

REACTIONS (size) 1=0-5-8, 8=0-5-8

Max Horiz 1=271 (LC 9)

Max Grav 1=7122 (LC 3), 8=6870 (LC 4)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-7968/0, 2-3=-4119/0, 3-4=-117/0,

4-5=-59/51, 5-6=-8/0, 5-8=-111/68

BOT CHORD 1-14=-137/6186, 14-15=0/6186,

10-15=0/6186, 10-16=0/6186, 16-17=0/6186,

17-18=0/6186, 9-18=0/6186, 9-19=0/3315,

19-20=0/3315, 8-20=0/3315, 7-8=0/0

WEBS 3-8=-6459/0, 2-10=0/4920, 2-9=-3862/0,

3-9=0/7685

NOTES

1) 2-ply truss to be connected together with 10d

(0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows

staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows

staggered at 0-4-0 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.

- 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); Lumber
DOL=1.60 plate grip DOL=1.33
- 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
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- One RT7A USP connectors recommended to connect
truss to bearing walls due to UPLIFT at jt(s) 8 and 1.
This connection is for uplift only and does not consider
lateral forces.
- This truss is designed in accordance with the 2015
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 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 1-2-9 from the left end to
11-11-0 to connect truss(es) to back face of bottom
chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate
Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-5=-46, 5-6=-46, 7-11=-19

Concentrated Loads (lb)

Vert: 10=-1018 (B), 14=-1018 (B), 15=-1018 (B),

16=-1630 (B), 17=-1691 (B), 18=-1691 (B),

19=-1691 (B), 20=-1691 (B)



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

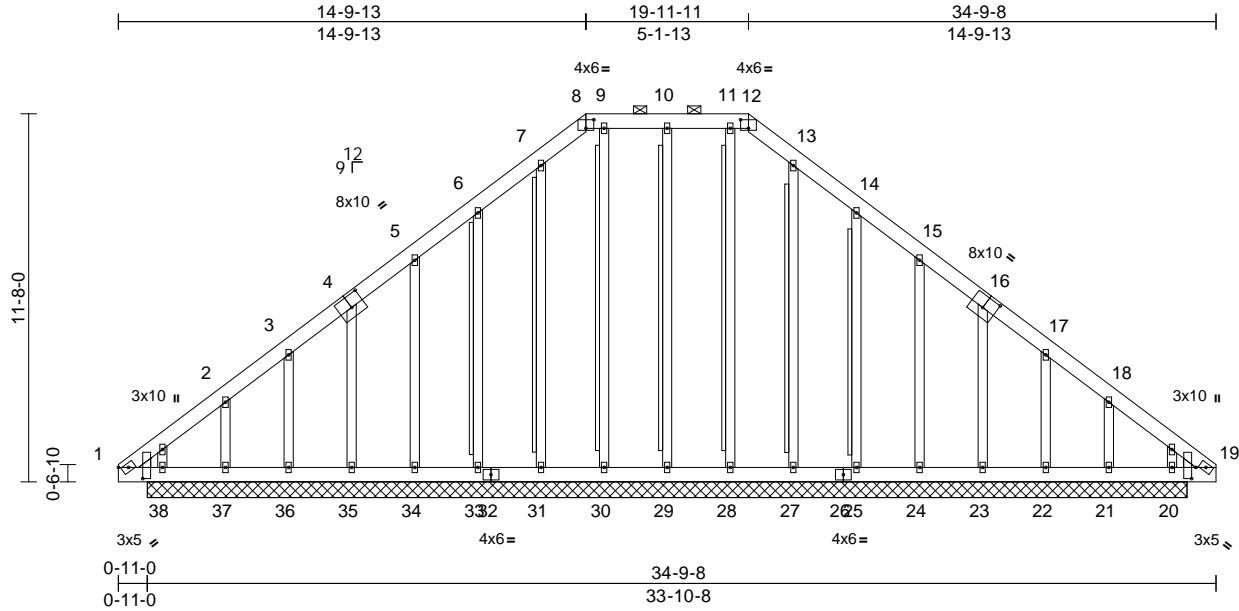
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss B4	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115604
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:25:58
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Page: 1



Scale = 1:73

Plate Offsets (X, Y): [1:0-5-9,0-0-13], [1:0-4-4,0-9-4], [4:0-5-0,0-4-8], [8:0-3-0,0-3-4], [12:0-3-0,0-3-4], [16:0-5-0,0-4-8], [19:0-0-9,0-0-13], [19:0-4-4,0-1-10]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	19	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 337 lb	FT = 20%

LUMBER		Max Uplift	1=-204 (LC 11), 19=-118 (LC 12), 20=-169 (LC 14), 21=-55 (LC 14), 22=-26 (LC 14), 23=-36 (LC 14), 24=-38 (LC 14), 25=-43 (LC 14), 29=-7 (LC 10), 31=-1 (LC 10), 33=-42 (LC 13), 34=-37 (LC 13), 35=-36 (LC 13), 36=-26 (LC 13), 37=-57 (LC 13), 38=-198 (LC 10), 41=-204 (LC 11), 45=-118 (LC 12)	BOT CHORD	1-38=-123/148, 37-38=-102/136, 36-37=-102/136, 35-36=-102/136, 34-35=-105/138, 33-34=-105/138, 32-33=-105/138, 31-32=-105/138, 30-31=-105/138, 29-30=-105/138, 28-29=-105/138, 27-28=-105/138, 26-27=-105/138, 25-26=-105/138, 24-25=-105/138, 23-24=-105/138, 22-23=-102/136, 21-22=-102/136, 20-21=-102/136, 19-20=-102/136
TOP CHORD	2x6 SP No.2				
BOT CHORD	2x6 SP 2400F 2.0E *Except* 26-32:2x6 SP No.2				
OTHERS	2x4 SP No.2 *Except* 36-3,37-2,38-39,22-17,21-18,20-40:2x4 SP No.3				
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3				
BRACING		Max Grav	1=330 (LC 10), 19=263 (LC 14), 20=144 (LC 12), 21=191 (LC 25), 22=149 (LC 25), 23=164 (LC 25), 24=168 (LC 25), 25=167 (LC 25), 27=148 (LC 29), 28=144 (LC 29), 29=157 (LC 28), 30=146 (LC 27), 31=155 (LC 24), 33=165 (LC 24), 34=167 (LC 24), 35=164 (LC 24), 36=149 (LC 24), 37=193 (LC 24), 38=195 (LC 11), 41=330 (LC 10), 45=263 (LC 14)	WEBS	10-29=-118/48, 9-30=-107/27, 7-31=-116/25, 6-33=-142/100, 5-34=-136/91, 4-35=-131/88, 3-36=-114/73, 2-37=-169/121, 11-28=-105/27, 13-27=-110/25, 14-25=-142/100, 15-24=-136/91, 16-23=-131/88, 17-22=-114/73, 18-21=-169/121
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 8-12.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
WEBS	T-Brace: 2x4 SPF No.2 - 10-29, 9-30, 7-31, 6-33, 11-28, 13-27, 14-25 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.				
REACTIONS	(size) 1=32-11-8, 19=32-11-8, 20=32-11-8, 21=32-11-8, 22=32-11-8, 23=32-11-8, 24=32-11-8, 25=32-11-8, 27=32-11-8, 28=32-11-8, 29=32-11-8, 30=32-11-8, 31=32-11-8, 33=32-11-8, 34=32-11-8, 35=32-11-8, 36=32-11-8, 37=32-11-8, 38=32-11-8, 41=32-11-8, 45=32-11-8 Max Horiz 1=-201 (LC 9), 41=-201 (LC 9)	FORCES	(lb) - Maximum Compression/Maximum Tension 1-2=-189/161, 2-3=-146/121, 3-4=-133/110, 4-5=-125/109, 5-6=-142/149, 6-7=-204/221, 7-8=-223/248, 8-9=-203/232, 9-10=-203/232, 10-11=-203/232, 11-12=-203/232, 12-13=-223/248, 13-14=-204/221, 14-15=-142/149, 15-16=-86/80, 16-17=-95/58, 17-18=-108/70, 18-19=-145/116	NOTES	1) Unbalanced roof live loads have been considered for this design.



February 26, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss B4	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115604
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:58
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Page: 2

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C
Exterior (2) zone; 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) T CLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground
snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15
Plate DOL=1.15); Category II; Exp B; Fully Exp.;
Ct=1.10, Lu=50-0-0
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable 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) 1, 19, 29,
30, 31, 33, 34, 35, 36, 37, 38, 28, 27, 25, 24, 23, 22, 21,
20, and 19. This connection is for uplift only and does
not consider lateral forces.
- 10) Non Standard bearing condition. Review required.
- 11) This truss is designed in accordance with the 2015
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.
- 13) Warning: Additional permanent and stability bracing for
truss system (not part of this component design) is
always required.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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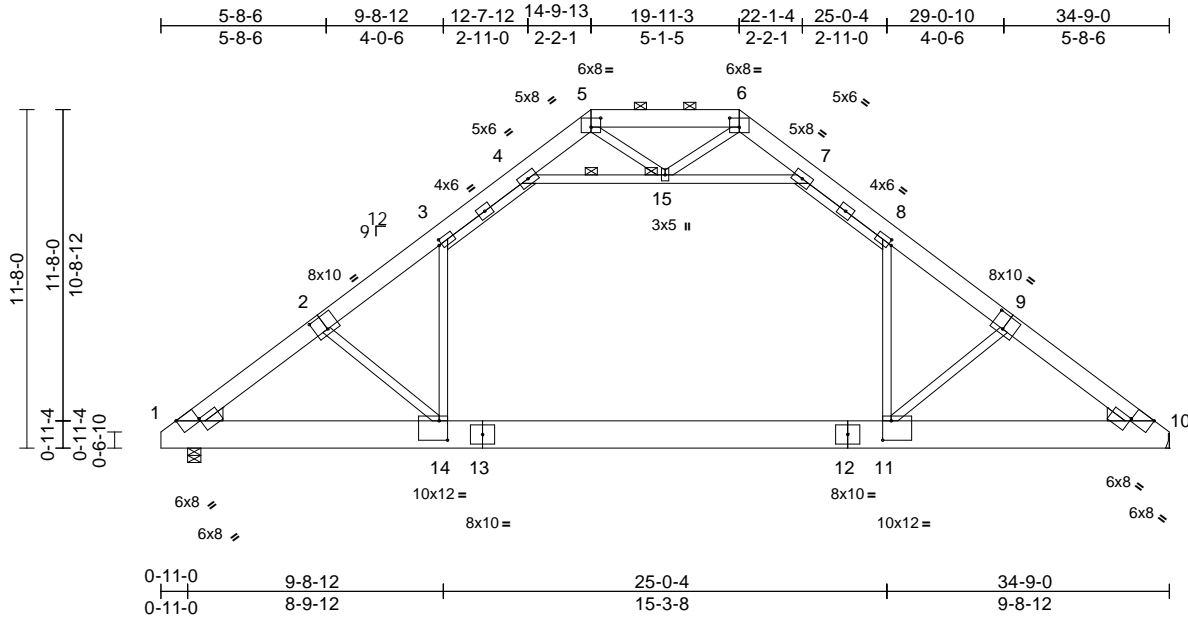
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss C1	Truss Type Attic	Qty 5	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115605
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:79.4

Plate Offsets (X, Y): [1:0-8-3,0-5-0], [2:0-5-0,0-6-0], [3:0-1-3,0-2-0], [5:0-4-0,0-3-12], [6:0-4-0,0-3-12], [8:0-1-3,0-2-0], [9:0-5-0,0-6-0], [10:0-8-3,0-5-0], [11:0-3-8,0-8-0], [14:0-3-8,0-8-0]

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	0.79	Vert(LL)	-0.19	11-14	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.31	11-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	11-14	>999	360		
BCDL	10.0										Weight: 363 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 5-15,15-6,4-3,7-8:2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-15
JOINTS 1 Brace at Jt(s): 15

REACTIONS (size) 1=0-5-8, 10= Mechanical
Max Horiz 1=220 (LC 9)
Max Grav 1=1715 (LC 25), 10=1681 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2475/149, 2-3=-2304/149,
3-4=-1631/244, 4-5=-284/199, 5-6=-124/252,
6-7=-296/180, 7-8=-1604/242,
8-9=-2398/151, 9-10=-2616/157
BOT CHORD 1-14=27/2004, 13-14=0/1729,
12-13=0/1729, 11-12=0/1729,
10-11=-30/2096
WEBS 3-14=0/991, 8-11=0/1141, 4-15=-1998/163,
7-15=-1923/159, 5-15=-26/228,
6-15=-43/159, 2-14=-383/170, 9-11=-690/187

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C
Exterior (2) zone; cantilever left exposed ;C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15,
7-15; Wall dead load (5.0psf) on member(s).3-14, 8-11
- Bottom chord live load (30.0 psf) and additional bottom
chord dead load (0.0 psf) applied only to room. 11-14
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2015
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

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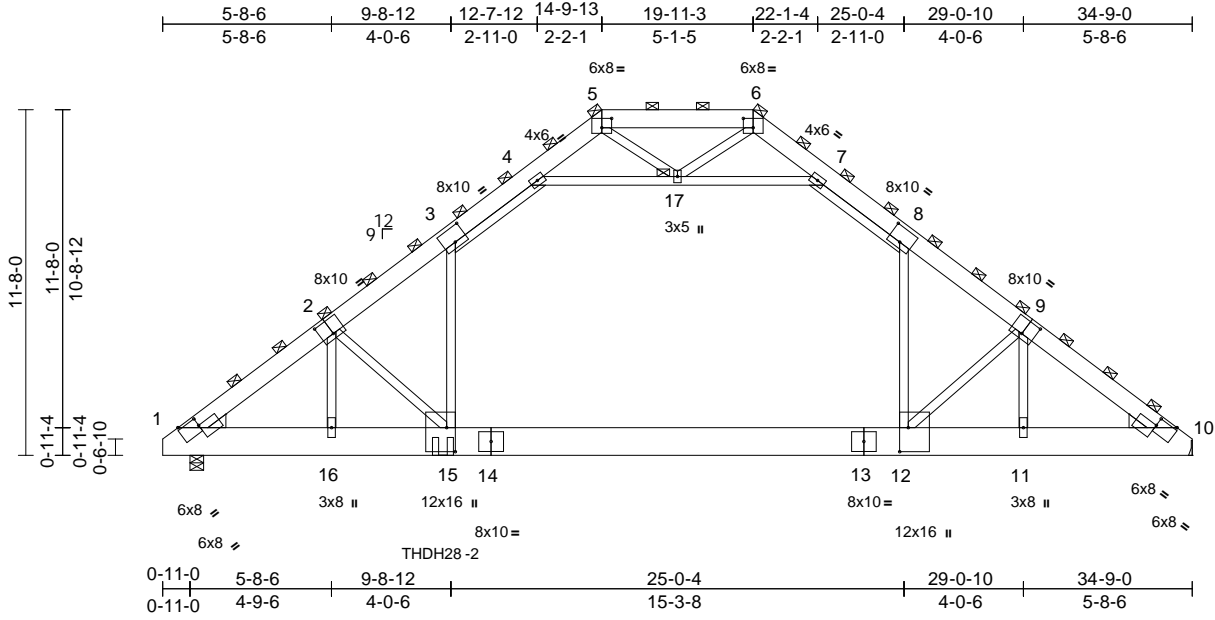
Job 20010112	Truss C2	Truss Type Attic Girder	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115606
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Carter Components (Sanford), Sanford, NC - 27332,

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Scale = 1:77.8

[1:0-7-4,0-1-0], [1:0-7-4,0-4-4], [2:0-5-0,0-6-0], [3:0-5-0,0-5-12], [5:0-4-0,0-3-12], [6:0-4-0,0-3-12], [8:0-5-0,0-5-12], [9:0-5-0,0-6-0], [10:0-7-4,0-1-0], [10:0-7-4,0-4-4],
Plate Offsets (X, Y): [12:0-9-12,0-3-8], [15:0-9-12,0-3-8]

Loading	(psf)	Spacing	6-7-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.24	12-15	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.42	12-15	>971	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	12-15	>999	360		
BCDL	10.0											

Weight: 1118 lb FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-15,8-12,4-7:2x4 SP No.2
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 5, 6, 17

REACTIONS (size) 1=0-5-8, 10= Mechanical
Max Horiz 1=-723 (LC 29)
Max Grav 1=7049 (LC 3), 10=8123 (LC 44)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-8889/0, 2-3=-9907/0, 3-4=-6626/0,
4-5=-594/1133, 5-6=0/1405, 6-7=-573/1058,
7-8=-6574/0, 8-9=-10108/0, 9-10=-11719/0
BOT CHORD 1-16=-303/7246, 15-16=0/7180,
14-15=0/7181, 13-14=0/7181, 12-13=0/7181,
11-12=0/9495, 10-11=0/9462
WEBS 3-15=0/4856, 8-12=0/5395, 4-17=-8643/0,
7-17=-8462/0, 5-17=-14/844, 6-17=-180/630,
2-15=-919/1540, 9-12=-4345/0, 9-11=0/2128,
2-16=-3147/19

NOTES

- 3-ply truss to be connected together with WS45 as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x12 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; and vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-17, 7-17; Wall dead load (5.0psf) on member(s).3-15, 8-12
- Bottom chord live load (30.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-15
- Refer to girder(s) for truss to truss connections.

- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THDH28-2 (With 36-16d nails into Girder & 4-16d nails into Truss) or equivalent at 9-5-8 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



February 26, 2020

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	C2	Attic Girder	2	3	E14115606
					Job Reference (optional)

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

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17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 3-20=-157, 3-4=-190, 4-5=-157, 5-6=-190, 6-7=-157, 7-8=-190, 8-10=-157, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1224 (B)

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

Uniform Loads (lb/ft)

Vert: 3-20=-198, 3-4=-230, 4-5=-198, 5-6=-198, 6-7=-198, 7-8=-230, 8-10=-198, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1340 (B)

3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 3-20=-165, 3-4=-198, 4-5=-165, 5-6=-165, 6-7=-165, 7-8=-198, 8-10=-165, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1471 (B)

4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 3-20=-134, 3-4=-167, 4-5=-134, 5-6=-159, 6-7=-134, 7-8=-167, 8-10=-134, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1384 (B)

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-43, 3-4=-62, 4-5=-43, 5-6=49, 6-7=23, 7-8=3, 8-10=23, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=3, 6-10=62
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

6) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=23, 3-4=3, 4-5=23, 5-6=49, 6-7=-43, 7-8=-62, 8-10=-43, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=-62, 6-10=-3
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-106, 3-4=-138, 4-5=-106, 5-6=-14, 6-7=-40, 7-8=-73, 8-10=-40, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33
Horz: 5-20=40, 6-10=25
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=410 (B)

8) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-40, 3-4=-73, 4-5=-40, 5-6=-14, 6-7=-106, 7-8=-138, 8-10=-106, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33

Horz: 5-20=-25, 6-10=-40

Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=410 (B)

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=49, 3-4=29, 4-5=49, 5-6=16, 6-7=16, 7-8=3, 8-10=16, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=-89, 6-10=56
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=16, 3-4=-3, 4-5=16, 5-6=16, 6-7=49, 7-8=29, 8-10=49, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=-56, 6-10=89
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=49, 3-4=29, 4-5=49, 5-6=16, 6-7=16, 7-8=3, 8-10=16, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=-89, 6-10=56
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=16, 3-4=-3, 4-5=16, 5-6=16, 6-7=49, 7-8=29, 8-10=49, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20
Horz: 5-20=-56, 6-10=89
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=384 (B)

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-14, 3-4=-47, 4-5=-14, 5-6=-46, 6-7=-46, 7-8=-79, 8-10=-46, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33
Horz: 5-20=-52, 6-10=19
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=410 (B)

14) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-46, 3-4=-79, 4-5=-46, 5-6=-46, 6-7=-14, 7-8=-47, 8-10=-14, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33
Horz: 5-20=-19, 6-10=52
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=410 (B)

15) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 3-20=-66, 3-4=-99, 4-5=-66, 5-6=-66, 6-7=-66, 7-8=-99, 8-10=-66, 1-15=-66, 12-15=-263, 10-12=-386 (F=-320), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1042 (B)

16) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 3-20=-66, 3-4=-99, 4-5=-66, 5-6=-66, 6-7=-66, 7-8=-99, 8-10=-66, 1-15=-66, 12-15=-263, 10-12=-386 (F=-320), 4-17=-33, 7-17=-33
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1042 (B)

17) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-164, 3-4=-197, 4-5=-164, 5-6=-120, 6-7=-115, 7-8=-148, 8-10=-115, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Horz: 5-20=30, 6-10=19
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=219 (B)

18) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-115, 3-4=-148, 4-5=-115, 5-6=-120, 6-7=-164, 7-8=-197, 8-10=-164, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Horz: 5-20=-19, 6-10=-30
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=219 (B)

19) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-95, 3-4=-128, 4-5=-95, 5-6=-144, 6-7=-120, 7-8=-153, 8-10=-120, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Horz: 5-20=-39, 6-10=15
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=219 (B)

20) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-120, 3-4=-153, 4-5=-120, 5-6=-144, 6-7=-95, 7-8=-128, 8-10=-95, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Horz: 5-20=-15, 6-10=39
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=219 (B)

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-194, 3-4=-227, 4-5=-194, 5-6=-126, 6-7=-146, 7-8=-178, 8-10=-146, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33
Horz: 5-20=30, 6-10=19
Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=219 (B)

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	C2	Attic Girder	2	3	E14115606
					Job Reference (optional)

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:59

Page: 3

ID:1h677HJuoep_W_0HxYQZwg3zhK8r-Pek_YKrn40m5gNC6FtID4C_K9gDsAipKUJqsqKzhHPM

<p>Vert: 3-20=-146, 3-4=-178, 4-5=-146, 5-6=-126, 6-7=-194, 7-8=-227, 8-10=-194, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-19, 6-10=-30 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=219 (B)</p> <p>23) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-126, 3-4=-159, 4-5=-126, 5-6=-150, 6-7=-150, 7-8=-183, 8-10=-150, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-39, 6-10=15 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=219 (B)</p> <p>24) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-150, 3-4=-183, 4-5=-150, 5-6=-150, 6-7=-126, 7-8=-159, 8-10=-126, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-15, 6-10=39 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=219 (B)</p> <p>25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-198, 3-4=-230, 4-5=-198, 5-6=-198, 6-7=-66, 7-8=-99, 8-10=-66, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=1340 (B)</p> <p>26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-66, 3-4=-99, 4-5=-66, 5-6=-198, 6-7=-198, 7-8=-230, 8-10=-198, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=1340 (B)</p> <p>27) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-165, 3-4=-198, 4-5=-165, 5-6=-165, 6-7=-66, 7-8=-99, 8-10=-66, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=1471 (B)</p> <p>28) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-66, 3-4=-99, 4-5=-66, 5-6=-165, 6-7=-165, 7-8=-198, 8-10=-165, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=1471 (B)</p> <p>29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-43, 3-4=-62, 4-5=-43, 5-6=49, 6-7=23, 7-8=3, 8-10=23, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p>	<p>Horz: 5-20=3, 6-10=62 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p> <p>30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=23, 3-4=3, 4-5=23, 5-6=49, 6-7=-43, 7-8=62, 8-10=-43, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p> <p>Horz: 5-20=-62, 6-10=-3 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p> <p>31) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-106, 3-4=-138, 4-5=-106, 5-6=-14, 6-7=40, 7-8=-73, 8-10=40, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=40, 6-10=25 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-812 (B)</p> <p>32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-40, 3-4=-73, 4-5=-40, 5-6=-14, 6-7=-106, 7-8=-138, 8-10=-106, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-25, 6-10=-40 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-812 (B)</p> <p>33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=49, 3-4=29, 4-5=49, 5-6=16, 6-7=16, 7-8=3, 8-10=16, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p> <p>Horz: 5-20=-89, 6-10=89 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p> <p>34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=16, 3-4=-3, 4-5=16, 5-6=16, 6-7=49, 7-8=29, 8-10=49, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p> <p>Horz: 5-20=-56, 6-10=89 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p> <p>35) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=49, 3-4=29, 4-5=49, 5-6=16, 6-7=16, 7-8=3, 8-10=16, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p> <p>Horz: 5-20=-89, 6-10=89 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p> <p>36) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=16, 3-4=-3, 4-5=16, 5-6=16, 6-7=49, 7-8=29, 8-10=49, 1-12=-40, 10-12=-174 (F=-134), 4-17=-20, 7-17=-20</p> <p>Horz: 5-20=-56, 6-10=89 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-839 (B)</p>	<p>37) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-14, 3-4=-47, 4-5=-14, 5-6=-46, 6-7=-46, 7-8=-79, 8-10=-46, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-52, 6-10=19 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-812 (B)</p> <p>38) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-46, 3-4=-79, 4-5=-46, 5-6=-46, 6-7=-14, 7-8=-47, 8-10=-14, 1-12=-66, 10-12=-200 (F=-134), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-19, 6-10=52 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-812 (B)</p> <p>39) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-164, 3-4=-197, 4-5=-164, 5-6=-120, 6-7=-115, 7-8=-148, 8-10=-115, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=30, 6-10=19 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-1222 (B)</p> <p>40) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-115, 3-4=-148, 4-5=-115, 5-6=-120, 6-7=-164, 7-8=-197, 8-10=-164, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-19, 6-10=-30 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-1222 (B)</p> <p>41) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-95, 3-4=-128, 4-5=-95, 5-6=-144, 6-7=-120, 7-8=-153, 8-10=-120, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-39, 6-10=15 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-1222 (B)</p> <p>42) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft) Vert: 3-20=-120, 3-4=-153, 4-5=-120, 5-6=-144, 6-7=-95, 7-8=-128, 8-10=-95, 1-15=-66, 12-15=-214, 10-12=-339 (F=-274), 4-17=-33, 7-17=-33</p> <p>Horz: 5-20=-15, 6-10=39 Drag: 3-15=-33, 8-12=-33</p> <p>Concentrated Loads (lb) Vert: 15=-1222 (B)</p> <p>43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33</p> <p>Uniform Loads (lb/ft)</p>
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818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss C2	Truss Type Attic Girder	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115606
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:25:59
ID:1h677HUoepW_x0HxYQZWg3zhK8r-Pek_YKm40m5gNC6FctID4C_K9gDsAipKUJqsqKzhHPM

Page: 4

Vert: 3-20=-194, 3-4=-227, 4-5=-194, 5-6=-126,
6-7=-146, 7-8=-178, 8-10=-146, 1-15=-66,
12-15=-214, 10-12=-339 (F=-274), 4-17=-33,
7-17=-33

Horz: 5-20=30, 6-10=19

Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1276 (B)

- 44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-146, 3-4=-178, 4-5=-146, 5-6=-126,
6-7=-194, 7-8=-227, 8-10=-194, 1-15=-66,
12-15=-214, 10-12=-339 (F=-274), 4-17=-33,
7-17=-33

Horz: 5-20=-19, 6-10=-30

Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1276 (B)

- 45) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-126, 3-4=-159, 4-5=-126, 5-6=-150,
6-7=-150, 7-8=-183, 8-10=-150, 1-15=-66,
12-15=-214, 10-12=-339 (F=-274), 4-17=-33,
7-17=-33

Horz: 5-20=-39, 6-10=15

Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1276 (B)

- 46) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic
Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel):
Lumber Increase=1.60, Plate Increase=1.33

Uniform Loads (lb/ft)

Vert: 3-20=-150, 3-4=-183, 4-5=-150, 5-6=-150,
6-7=-126, 7-8=-159, 8-10=-126, 1-15=-66,
12-15=-214, 10-12=-339 (F=-274), 4-17=-33,
7-17=-33

Horz: 5-20=-15, 6-10=39

Drag: 3-15=-33, 8-12=-33

Concentrated Loads (lb)

Vert: 15=-1276 (B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



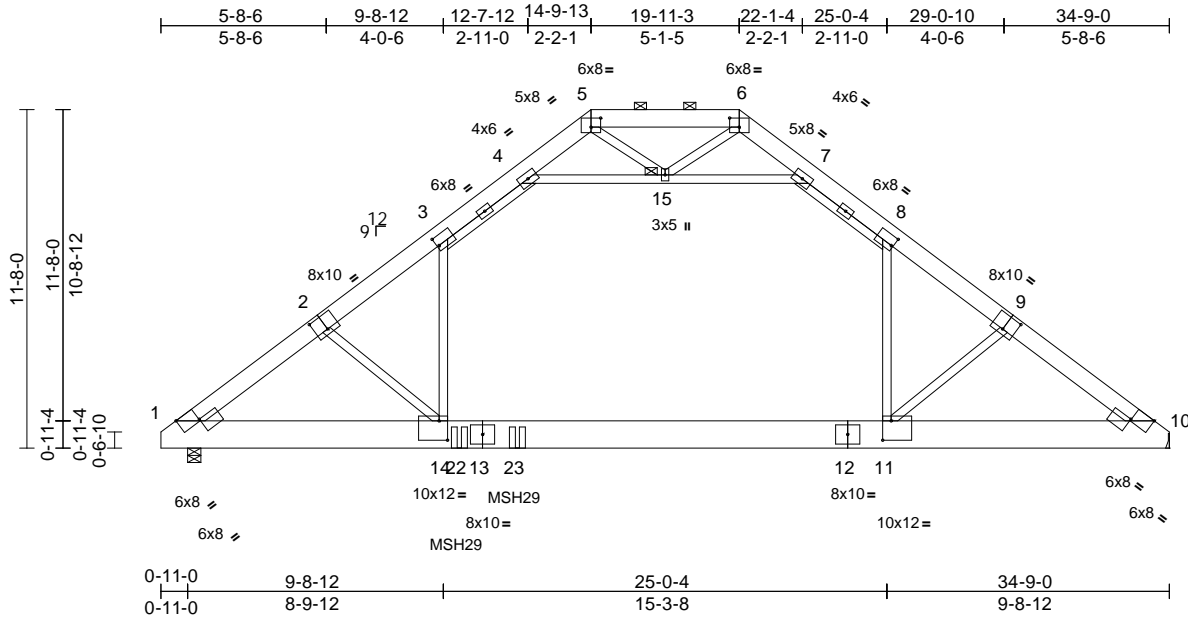
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss C3	Truss Type Attic	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115607
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:00
ID:zplK?WOXsAyhNdbJd5idmbzhKTd-tqIMmfmin3DX_LhSAAgSDQWS53ZTCAUjzaQNnzhHPL

Page: 1



Scale = 1:79.4

Plate Offsets (X, Y): [1:0-8-3,0-5-4], [2:0-5-0,0-6-0], [3:0-0-13,0-3-12], [5:0-4-0,0-3-12], [6:0-4-0,0-3-12], [8:0-0-13,0-3-12], [9:0-5-0,0-6-0], [10:0-8-3,0-5-4], [11:0-3-8,0-8-0], [14:0-3-8,0-8-0]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.19	11-14	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.33	11-14	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	11-14	>999	360		
BCDL	10.0										Weight: 721 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 5-15,15-6,4-3,7-8:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 15

REACTIONS (size) 1=0-5-8, 10= Mechanical
Max Horiz 1=-213 (LC 29)
Max Grav 1=3041 (LC 3), 10=2261 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4373/0, 2-3=-4124/0, 3-4=-2507/0, 4-5=0/439, 5-6=0/607, 6-7=0/513, 7-8=-2617/0, 8-9=-3905/0, 9-10=-4112/0
BOT CHORD 1-14=0/3420, 14-22=0/2868, 13-22=0/2868, 13-23=0/2868, 12-23=0/2868, 11-12=0/2868, 10-11=0/3229
WEBS 3-14=0/2504, 8-11=0/1952, 4-15=-3468/0, 7-15=-3743/0, 5-15=-152/181, 6-15=0/454, 2-14=-810/0, 9-11=-676/156

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x12 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Provide adequate drainage to prevent water ponding.
- All plates are 6x8 MT20 unless otherwise indicated.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 7-15; Wall dead load (5.0psf) on member(s). 3-14, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 11-14
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use USP MSH29 (With 18-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-3-6 from the left end to 12-3-6 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-18=-46, 3-4=-56, 4-5=-46, 5-6=-56, 6-7=-46, 7-8=-56, 8-10=-46, 1-10=-19, 4-15=-10, 7-15=-10
Drag: 3-14=-10, 8-11=-10
Concentrated Loads (lb)
Vert: 22=-821 (F), 23=-821 (F)



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



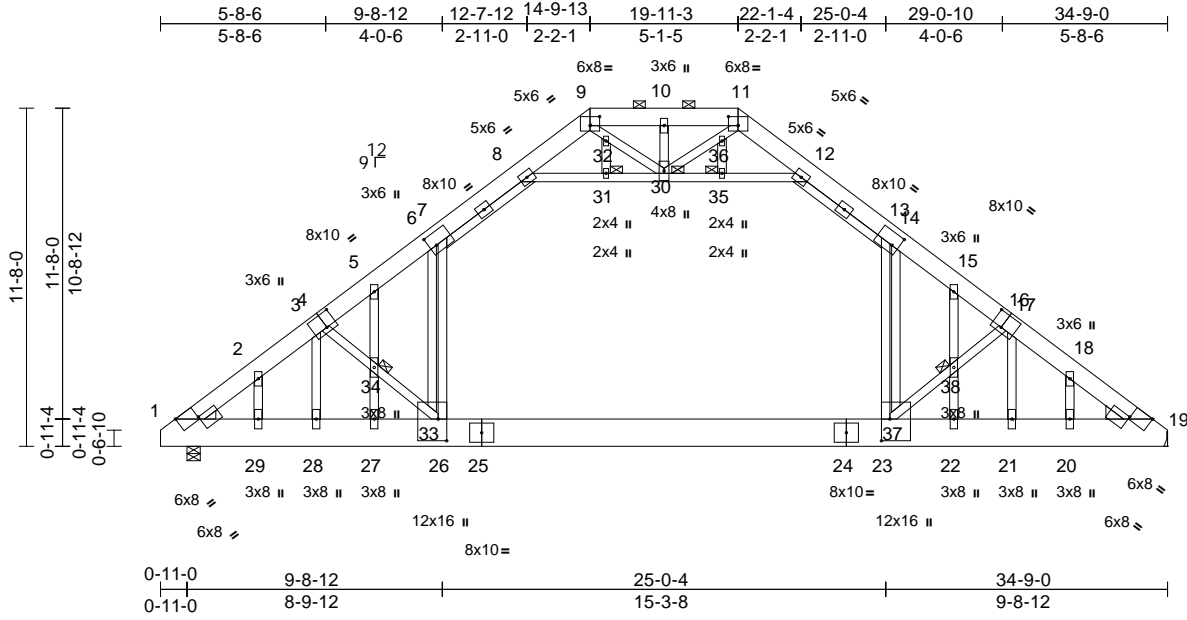
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss C4	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115608
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:01
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Page: 1



Scale = 1:79.5

[1:0-8-3,0-5-0], [4:0-4-4,0-6-0], [7:0-2-13,0-5-0], [9:0-4-0,0-3-12], [11:0-4-0,0-3-12], [13:0-2-13,0-5-0], [16:0-4-4,0-6-0], [19:0-8-3,0-5-0], [23:0-9-0,0-3-8],

Plate Offsets (X, Y): [26:0-9-0,0-3-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.21	23-26	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.31	23-26	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.03	19	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	23-26	>999	360		
BCDL	10.0										Weight: 412 lb	FT = 20%

LUMBER	WEBS
TOP CHORD 2x8 SP 2400F 2.0E	7-26=-23/1305, 13-23=-36/1498,
BOT CHORD 2x12 SP 2400F 2.0E	8-31=-2106/164, 30-31=-2127/166,
WEBS 2x4 SP No.2 *Except*	30-35=-2083/164, 12-35=-2063/162,
OTHERS 2x4 SP No.3 *Except* 33-6,37-14:2x4 SP No.2	9-32=-17/400, 30-32=-59/175,
WEDGE Left: 2x4 SP No.3 Right: 2x6 SP No.2	30-36=-67/147, 11-36=-22/355,
BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-11.	4-34=-193/315, 33-34=-214/281,
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.	26-33=-243/503, 23-37=-773/244,
JOINTS 1 Brace at Jt(s): 30, 31, 34, 35, 38	37-38=-637/181, 16-38=-607/179,
REACTIONS (size) 1=0-5-8, 19= Mechanical Max Horiz 1=-213 (LC 9) Max Grav 1=1777 (LC 25), 19=1736 (LC 26)	10-30=-517/63, 31-32=-15/396,
FORCES (lb) - Maximum Compression/Maximum Tension	6-33=-43/280, 5-34=-793/23, 27-34=-746/21,
TOP CHORD 1-2=-2235/99, 2-3=-2155/148, 3-4=-2210/131, 4-5=-2240/113, 5-6=-2656/140, 6-7=-2448/185, 7-8=-1704/235, 8-9=-288/216, 9-10=-150/315, 10-11=-150/315, 11-12=-290/206, 12-13=-1689/234, 13-14=-2573/192, 14-15=-2650/139, 15-16=-2323/118, 16-17=-2421/144, 17-18=-2633/175, 18-19=-2692/127	3-28=-288/79, 2-29=-2/67, 35-36=-14/385, 14-37=-188/112, 15-38=-670/15, 22-38=-604/11, 17-21=-55/351, 18-20=-9/55
BOT CHORD 1-29=-63/1837, 28-29=-7/1837, 27-28=-7/1836, 26-27=-7/1836, 25-26=0/1836, 24-25=0/1836, 23-24=0/1836, 22-23=-32/2106, 21-22=-32/2106, 20-21=-31/2104, 19-20=-32/2103	

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) Provide adequate drainage to prevent water ponding.
6) All plates are 3x8 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 7-8, 12-13, 8-31, 30-31, 30-35, 12-35; Wall dead load (5.0psf) on member(s). 7-26, 13-23
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 23-26
- 11) Refer to girder(s) for truss to truss connections.
- 12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 1. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.



February 26, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss C4	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115608
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:01
ID:zplK?WOXsAyhNdbJd5idmbzhKTd-L1skz?oKYNLOcVGekHoh9d3cxTwBeX1dxJzvDzhHPK

Page: 2

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

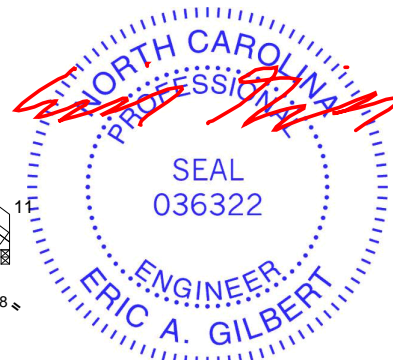
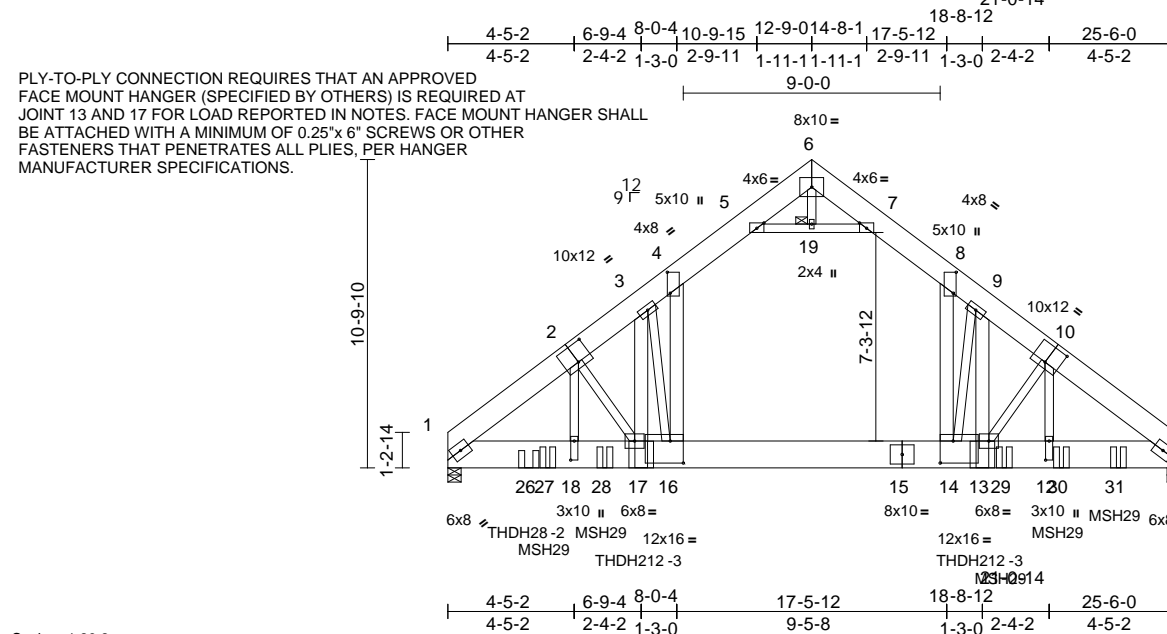
Job 20010112	Truss D1	Truss Type Attic Girder	Qty 1	Ply 4	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115609
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:02

Page: 1

ID:Jwlzti?QhZKqguz4bT7l0azhll4-pDQ7BLpyJhTEFrgH?JwircvqfFSN1jmAH3WRfzhHPJ



Scale = 1:80.8

Plate Offsets (X, Y): [2:0-6-0,0-7-8], [4:0-8-13,0-1-4], [5:Edge,0-2-4], [7:Edge,0-2-4], [8:0-8-13,0-1-4], [10:0-6-0,0-7-8], [12:0-8-0,0-1-8], [14:0-5-8,0-9-4], [16:0-5-8,0-9-4], [18:0-8-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.10	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.19	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.03	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 1359 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x10 SP 2400F 2.0E
 BOT CHORD 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.3 *Except*
 8-14,4-16,17-3,9-13:2x6 SP No.2, 5-7:2x4 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.
- JOINTS**
 1 Brace at Jt(s): 19
- REACTIONS** (size) 1=0-5-8, 11=0-3-8
 Max Horiz 1=-189 (LC 31)
 Max Grav 1=14740 (LC 3), 11=14242 (LC 3)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-19083/0, 2-3=-16980/0, 3-4=-17430/0, 4-5=-9342/0, 5-6=0/2613, 6-7=0/2586, 7-8=-9369/0, 8-9=-17350/0, 9-10=-16893/0, 10-11=-18505/0
 BOT CHORD 1-26=0/14906, 26-27=0/14906, 18-27=0/14906, 18-28=0/14995, 17-28=0/14995, 16-17=0/12933, 15-16=0/11481, 14-15=0/11481, 13-14=0/12846, 13-29=0/14512, 12-29=0/14512, 12-30=0/14445, 30-31=0/14445, 11-31=0/14445
 WEBS 8-14=0/12742, 4-16=0/12915, 5-19=-15592/0, 7-19=-15592/0, 6-19=0/2315, 2-18=0/3764, 10-12=0/2865, 3-17=0/2958, 9-13=0/2660, 3-16=-5326/0, 2-17=-3747/0, 9-14=-4926/0, 10-13=-3042/0
- 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x12 - 6 rows staggered at 0-4-0 oc.
 Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
 - 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
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-19, 7-19; Wall dead load (5.0psf) on member(s).8-14, 4-16
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 11. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP THDH28-2 (With 36-16d nails into Girder & 10-16d nails into Truss) or equivalent at 2-10-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
 - Use USP MSH29 (With 18-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 14-0-0 oc max. starting at 3-6-0 from the left end to 23-6-0 to connect truss(es) to back face of bottom chord.
 - Use USP THDH212-3 (With 56-16d nails into Girder & 20-16d nails into Truss) or equivalent spaced at 11-11-8 oc max. starting at 6-9-4 from the left end to 18-8-12 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Attic room checked for L/360 deflection.

NOTES
 1) N/A.
 N/A.

February 26,2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss D1	Truss Type Attic Girder	Qty 1	Ply 4	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115609
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:02
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Page: 2

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-4=-48, 4-5=-58, 5-6=-48, 6-7=-48, 7-8=-58,
8-11=-48, 20-23=-20, 5-19=-10, 7-19=-10

Drag: 8-14=-10, 4-16=-10

Concentrated Loads (lb)

Vert: 17=-5642 (B), 13=-5642 (B), 26=-1738 (B),
27=-1282 (B), 28=-1282 (B), 29=-1282 (B),
30=-1282 (B), 31=-1282 (B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
Edenton, NC 27932

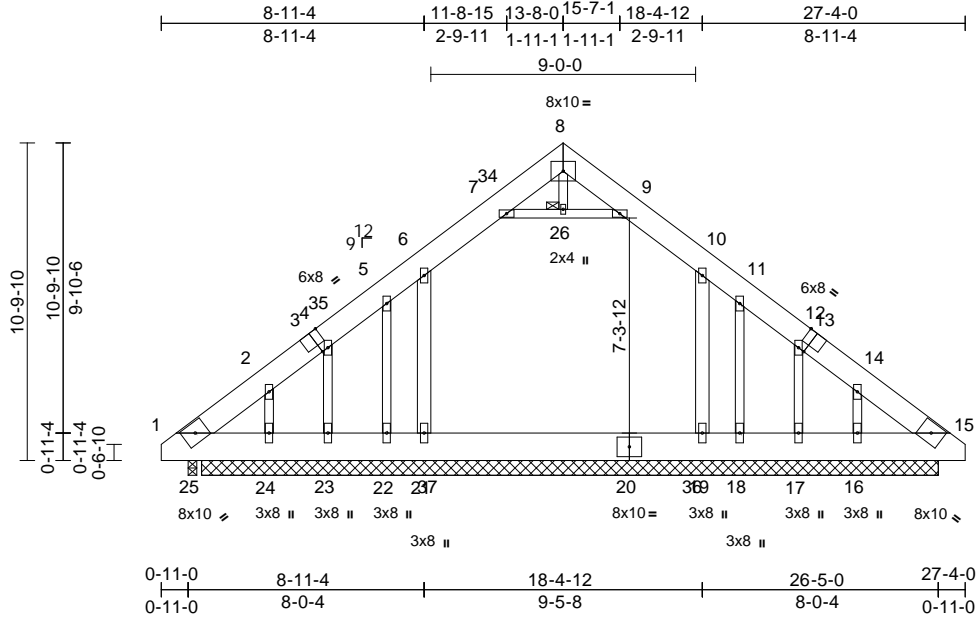
Job 20010112	Truss D2	Truss Type Attic Supported Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115610
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:02

Page: 1

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Scale = 1:78.3

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.25	27-29	>447	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.48	27-29	>236	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 321 lb	FT = 20%

LUMBER		BOT CHORD	
TOP CHORD	2x10 SP 2400F 2.0E	1-34=0/0, 34-35=0/0, 1-35=0/0,	
BOT CHORD	2x12 SP 2400F 2.0E	1-25=-23/287, 24-25=-11/277,	
WEBS	2x6 SP No.2 *Except* 7-9:2x4 SP No.2, 8-26:2x4 SP No.3	23-24=-19/244, 22-23=-18/243,	
OTHERS	2x4 SP No.3	21-22=-18/242, 21-37=-18/242,	
BRACING		20-37=-18/242, 20-36=-18/242,	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	19-36=-18/242, 18-19=-18/242,	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	17-18=-17/243, 16-17=-17/244,	
JOINTS	1 Brace at Jt(s): 26	15-16=-16/247	
REACTIONS	(size)	10-19=-200/81, 6-21=-201/83,	
Max Horiz	25=189 (LC 10)	7-26=-151/126, 9-26=-151/126, 8-26=-18/22,	
Max Uplift	16=-73 (LC 14), 17=-9 (LC 14), 18=-372 (LC 19), 22=-313 (LC 19), 23=-222 (LC 19), 25=-687 (LC 19)	5-22=-77/76, 4-23=-91/103, 2-24=-903/0,	
Max Grav	1=302 (LC 19), 15=293 (LC 25), 16=191 (LC 26), 17=190 (LC 26), 18=-29 (LC 30), 19=740 (LC 26), 21=726 (LC 25), 22=-4 (LC 29), 23=-13 (LC 2), 24=1783 (LC 19), 25=-37 (LC 2)	11-18=-94/66, 12-17=-123/86, 14-16=-135/94	
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=-1131/334, 2-3=-381/15, 3-4=-333/26, 4-5=-334/42, 5-6=-290/86, 6-7=-330/152, 7-8=-191/73, 8-9=-191/73, 9-10=-331/152, 10-11=-271/86, 11-12=-299/38, 12-13=-267/25, 13-14=-316/18, 14-15=-327/27		

NOTES	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33	
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.	
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10	
5) All plates are 3x6 MT20 unless otherwise indicated.	
6) Gable studs spaced at 2-0-0 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, 19, 21, 22, 23, 24, 18, 17, 16, and 15. This connection is for uplift only and does not consider lateral forces.
- 9) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 25. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

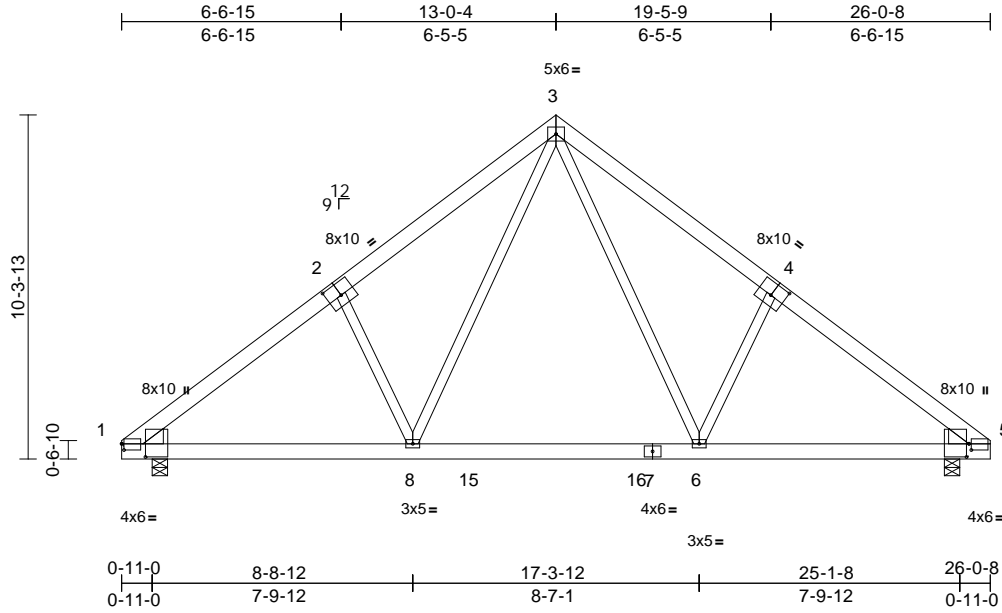
TRENCO ENGINEERING BY
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss E1	Truss Type Common	Qty 10	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115611
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:03
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Page: 1



Scale = 1:69.1

Plate Offsets (X, Y): [1:0-0-13,0-2-4], [1:0-4-12,0-8-9], [2:0-5-0,0-4-8], [4:0-5-0,0-4-8], [5:0-0-13,0-2-4], [5:0-4-12,0-0-14]

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	0.43	Vert(LL)	-0.12	6-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.20	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 185 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except* 6-4,8-2:2x4 SP No.3
 WEDGE Left: 2x6 SP No.2
 Right: 2x6 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=0-5-8, 5=0-5-8

Max Horiz 1=-194 (LC 9)
 Max Grav 1=1042 (LC 2), 5=1042 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

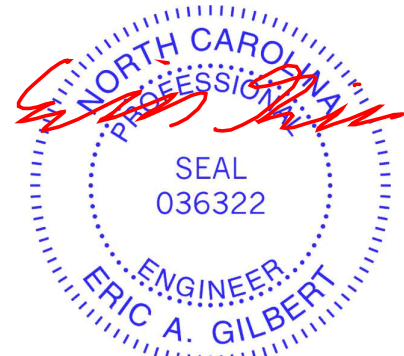
TOP CHORD 1-2=-1156/229, 2-3=-1039/324,
 3-4=-1040/324, 4-5=-1156/229
 BOT CHORD 1-8=-68/944, 8-15=0/643, 15-16=0/643,
 7-16=0/643, 6-7=0/643, 5-6=-68/828
 WEBS 3-6=-114/480, 4-6=-293/233, 3-8=-114/480,
 2-8=-293/233

NOTES

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 1. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



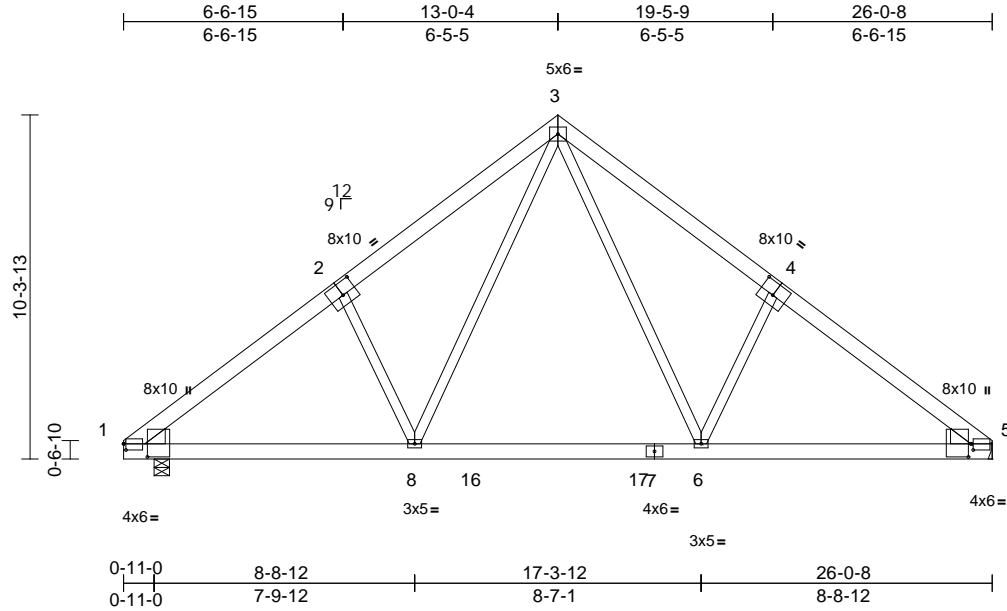
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss E2	Truss Type Common	Qty 2	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115612
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:03
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Page: 1



Scale = 1:69.1

Plate Offsets (X, Y): [1:0-0-13,0-2-4], [1:0-4-12,0-8-9], [2:0-5-0,0-4-8], [4:0-5-0,0-4-8], [5:0-0-13,0-2-4], [5:0-4-12,0-0-14]

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	0.44	Vert(LL)	-0.10	6-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.17	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 185 lb	FT = 20%

LUMBER

- TOP CHORD 2x6 SP No.2
- BOT CHORD 2x6 SP No.2
- WEBS 2x4 SP No.2 *Except* 6-4,8-2:2x4 SP No.3
- WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

- TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

- (size) 1=0-5-8, 5= Mechanical
- Max Horiz 1=194 (LC 10)
- Max Grav 1=1087 (LC 2), 5=992 (LC 2)

FORCES

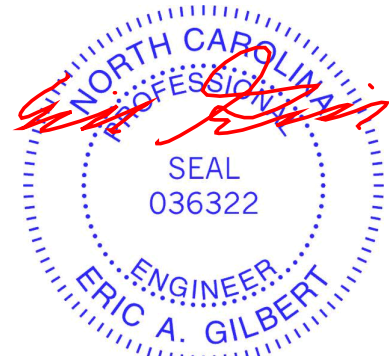
- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-1214/238, 2-3=-1094/333, 3-4=-1235/355, 4-5=-1300/257
- BOT CHORD 1-8=-78/986, 8-16=0/697, 16-17=0/697, 17-18=0/697, 6-7=0/697, 5-6=-100/1010
- WEBS 3-8=-108/448, 3-6=-148/697, 4-6=-391/248, 2-8=-294/234

NOTES

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



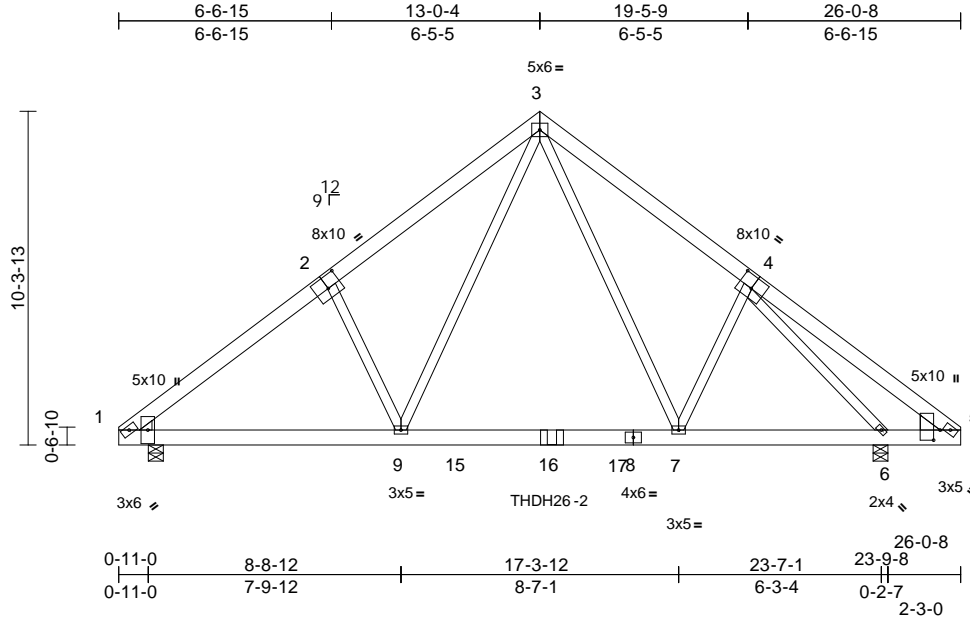
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss E3	Truss Type Common Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115613
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:04
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Page: 1



Scale = 1:71.3

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.07	7-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	7-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 387 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 7-4,9-2:2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x6 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. Except: 6-0-0 oc bracing: 5-6.

REACTIONS (size) 1=0-5-8, 6=0-5-8
Max Horiz 1=-188 (LC 5)
Max Uplift 1=-20 (LC 9), 6=-22 (LC 10)
Max Grav 1=1090 (LC 2), 6=1211 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1263/74, 2-3=-1111/149, 3-4=-1086/153, 4-5=-33/200
BOT CHORD 1-9=-71/989, 9-15=0/663, 15-16=0/663, 16-17=0/663, 8-17=0/663, 7-8=0/663, 6-7=0/773, 5-6=-97/55
WEBS 3-7=-94/482, 4-7=-105/208, 3-9=-83/552, 2-9=-262/183, 4-6=-1307/47

NOTES

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

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.33
- 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
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use USP THDH26-2 (With 20-16d nails into Girder & 8-16d nails into Truss) or equivalent at 13-4-12 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-46, 3-5=-46, 1-5=-19

Concentrated Loads (lb)
Vert: 16=-266 (F)



February 26, 2020

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818 Soundside Road
Edenton, NC 27932

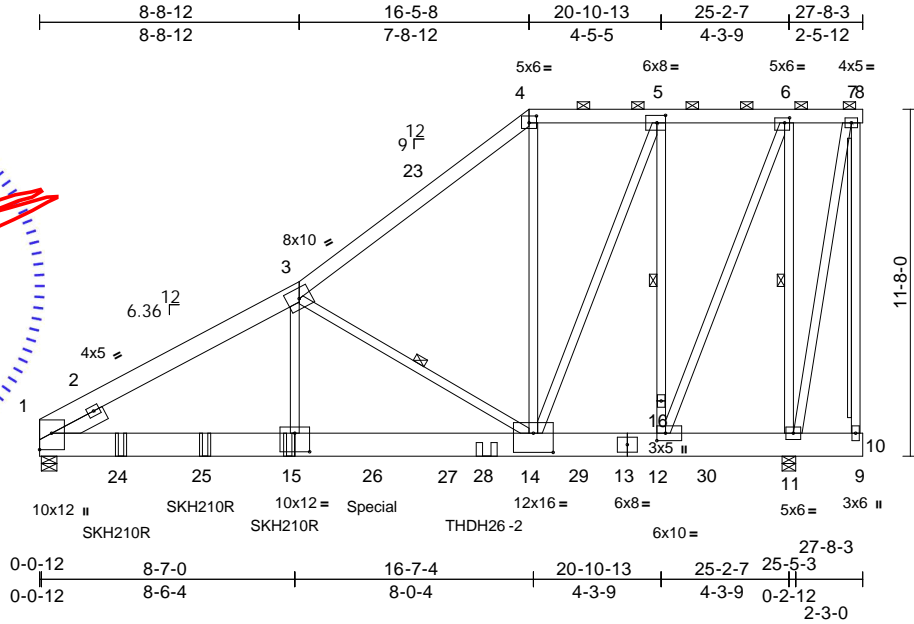
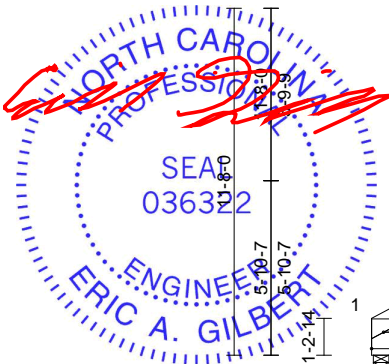
Job 20010112	Truss E4	Truss Type Piggyback Base Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115614
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8:33 S Feb 13 2020 Print: 8:33 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:04

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Scale = 1:77.5

Plate Offsets (X, Y): [1:Edge,0-4-14], [4:0-3-0,0-2-12], [5:0-3-8,0-3-0], [6:0-2-0,0-2-0], [12:0-3-8,0-3-0], [14:0-8-0,0-7-12], [15:0-6-0,0-7-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.19	14-15	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.35	14-15	>882	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.03	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 650 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x6 SP No.2 *Except* 1-3:2x8 SP 2400F 2.0E
- BOT CHORD 2x10 SP 2400F 2.0E
- WEBS 2x4 SP No.2 *Except* 15-3:2x4 SP No.3, 14-4,6-11:2x4 SP No.1
- SLIDER Left 2x6 SP No.2 -- 1-11-0
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- WEBS 1 Row at midpt 3-14, 6-11, 5-12
- WEBS T-Brace: 2x4 SPF No.2 - 7-10
- Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.
- REACTIONS** (size) 1=0-6-4, 11=0-5-8
- Max Horiz 1=275 (LC 11)
- Max Grav 1=6819 (LC 3), 11=7287 (LC 3)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-8097/0, 2-3=-10139/0, 3-23=-4920/0, 4-23=-4812/0, 4-5=-3898/0, 5-6=-2087/0, 6-7=-136/0, 7-8=0/0, 7-10=-701/0
- BOT CHORD 1-24=0/8798, 24-25=0/8798, 15-25=0/8798, 15-26=0/8663, 26-27=0/8663, 27-28=0/8663, 14-28=0/8663, 14-29=0/2087, 13-29=0/2087, 12-13=0/2087, 12-30=0/204, 11-30=0/204, 10-11=0/4, 9-10=0/0
- WEBS 7-11=0/708, 3-15=0/4790, 3-14=-5749/0, 4-14=0/2564, 6-11=-5125/0, 12-16=-4725/0, 5-16=-4725/0, 5-14=0/4996, 6-12=0/5196
- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 3 rows staggered at 0-4-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.33
 - 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
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 11. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use USP SKH210R (With 14-16d nails into Girder & 10-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-9-15 oc max. starting at 2-8-14 from the left end to 8-4-12 to connect truss(es) to front face of bottom chord.
 - Use USP THDH26-2 (With 20-16d nails into Girder & 8-16d nails into Truss) or equivalent at 15-0-7 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg. to the left, sloping 0.0 deg. down.
 - Fill all nail holes where hanger is in contact with lumber.

February 26, 2020

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	E4	Piggyback Base Girder	1	2	E14115614
					Job Reference (optional)

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

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- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4152 lb down at 11-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 17) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-46, 3-4=-46, 4-7=-56, 7-8=-56, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-4=-58, 4-7=-58, 7-8=-19, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-888 (F), 24=-1069 (F), 25=-1021 (F), 26=-2961 (F), 28=-417 (B)
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-48, 3-4=-48, 4-7=-48, 7-8=-19, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-933 (F), 24=-1221 (F), 25=-1211 (F), 26=-4152 (F), 28=-363 (B)
- 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-40, 3-4=-40, 4-7=-47, 7-8=-47, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-40, 3-23=-40, 4-23=-51, 4-7=-25, 7-8=-25, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-25, 3-4=-25, 4-5=-55, 5-7=-40, 7-8=-40, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-7, 3-4=-13, 4-7=14, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-5, 3-4=1
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=7, 3-4=7, 4-7=14, 7-8=9, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-19, 3-4=-18
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-25, 3-4=-31, 4-7=-4, 7-8=-8, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=6, 3-4=12
Concentrated Loads (lb)
Vert: 15=32 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=104 (B)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-12, 3-4=-12, 4-7=-4, 7-8=1, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=8, 3-4=7
Concentrated Loads (lb)
Vert: 15=32 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=104 (B)
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=14, 3-4=14, 4-7=5, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-26, 3-4=-26
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=5, 3-4=5, 4-7=5, 7-8=9, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-16, 3-4=-16
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=14, 3-4=14, 4-7=5, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-26, 3-4=-26
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=5, 3-4=5, 4-7=5, 7-8=9, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-16, 3-4=-16
Concentrated Loads (lb)
Vert: 15=21 (F), 24=-381 (F), 25=-374 (F), 26=-1308 (F), 28=97 (B)
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-4, 3-4=-4, 4-7=-14, 7-8=-8, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=-15, 3-4=-15
Concentrated Loads (lb)
Vert: 15=32 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=104 (B)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-14, 4-7=-14, 7-8=1, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=32 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=104 (B)
- 17) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-46, 3-23=-46, 4-23=-61, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 18) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-27, 3-4=-27, 4-5=-67, 5-7=-46, 7-8=-46, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 19) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-19, 3-4=-19, 4-7=-19, 7-8=-19, 17-27=-19, 27-29=-390 (F=-371), 12-29=-429 (F=-371), 12-30=-390 (F=-371), 11-30=-429 (F=-371), 9-11=-390 (F=-371)
Concentrated Loads (lb)
Vert: 15=-644 (F), 24=-947 (F), 25=-971 (F), 26=-3782 (F), 28=-202 (B)
- 20) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-44, 3-4=-48, 4-7=-35, 7-8=-38, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=5, 3-4=9
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-34, 3-4=-34, 4-7=-35, 7-8=31, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-28, 3-4=-28, 4-7=-43, 7-8=-38, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE	E14115614
20010112	E4	Piggyback Base Girder	1	2	Job Reference (optional)	

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

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- Vert: 1-3=-35, 3-4=-35, 4-7=-43, 7-8=-31, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-4, 3-4=-4
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 24) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-53, 3-4=-57, 4-7=-37, 7-8=-11, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=5, 3-4=9
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-43, 3-4=-43, 4-7=-37, 7-8=-4, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-6, 3-4=-6
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-37, 3-4=-37, 4-7=-44, 7-8=-11, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-11, 3-4=-11
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-44, 3-4=-44, 4-7=-44, 7-8=-4, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-4, 3-4=-4
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 28) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-19, 3-4=-19, 4-7=-58, 7-8=-58, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 29) 3rd Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-25, 3-23=-40, 4-23=-51, 4-7=-25, 7-8=-25, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 30) 4th Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-49, 3-4=-25, 4-7=-25, 7-8=-25, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 31) 5th Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-25, 3-23=-44, 4-23=-40, 4-7=-25, 7-8=-25, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 32) 6th Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-25, 3-4=-25, 4-5=-55, 5-7=-40, 7-8=-40, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 33) 7th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-27, 3-4=-27, 4-7=-90, 7-8=-90, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 34) 8th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-27, 3-4=-90, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 35) 9th Unbal.Dead + Snow (Unbal. Left) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-27, 3-23=-46, 4-23=-61, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 36) 10th Unbal.Dead + Snow (Unbal. Left) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-59, 3-4=-27, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 37) 11th Unbal.Dead + Snow (Unbal. Right) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-27, 3-23=-52, 4-23=-46, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 38) 12th Unbal.Dead + Snow (Unbal. Right) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-27, 3-4=-27, 4-5=-67, 5-7=-46, 7-8=-46, 17-27=-19, 9-27=-119 (F=-100)
 Concentrated Loads (lb)
 Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 39) 13th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-25, 3-4=-25, 4-7=-72, 7-8=-72, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 40) 14th Unbal.Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-25, 3-4=-72, 4-7=-25, 7-8=-25, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Concentrated Loads (lb)
 Vert: 15=-828 (F), 24=-1109 (F), 25=-1106 (F), 26=-3887 (F), 28=-337 (B)
- 41) 15th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-30, 3-4=-34, 4-7=-61, 7-8=-64, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=5, 3-4=9
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 42) 16th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-30, 3-4=-81, 4-7=-14, 7-8=-17, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=5, 3-4=9
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 43) 17th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-20, 3-4=-20, 4-7=-61, 7-8=-57, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-6, 3-4=-6
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 44) 18th Unbal.Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-20, 3-4=-67, 4-7=-14, 7-8=-10, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
 Horz: 1-3=-6, 3-4=-6
 Concentrated Loads (lb)
 Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MI TEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	E4	Piggyback Base Girder	1	2	E14115614
					Job Reference (optional)

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:04

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ID: _seP9BQCJmuawc8fgnTsdUzhZT-lbXtclqCrkyTz?DPQLOnGhFAhQDrU3dybVWYzhHPH

- 45) 19th Unbal. Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-14, 4-7=-68, 7-8=-64, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 46) 20th Unbal. Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-61, 4-7=-21, 7-8=-17, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 47) 21st Unbal. Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-21, 3-4=-21, 4-7=-68, 7-8=-57, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 48) 22nd Unbal. Dead + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-21, 3-4=-68, 4-7=-21, 7-8=-10, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-38 (F), 24=-370 (F), 25=-363 (F), 26=-1275 (F), 28=50 (B)
- 49) 23rd Unbal. Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-27, 3-4=-27, 4-7=-90, 7-8=-90, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 50) 24th Unbal. Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-27, 3-4=-90, 4-7=-27, 7-8=-27, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-749 (F), 24=-920 (F), 25=-881 (F), 26=-2607 (F), 28=-382 (B)
- 51) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-58, 3-4=-58, 4-7=-58, 7-8=-19, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-888 (F), 24=-1069 (F), 25=-1021 (F), 26=-2961 (F), 28=-417 (B)
- 52) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
- Vert: 1-3=-19, 3-4=-19, 4-7=-58, 7-8=-19, 17-27=-19, 9-27=-119 (F=-100)
Concentrated Loads (lb)
Vert: 15=-888 (F), 24=-1069 (F), 25=-1021 (F), 26=-2961 (F), 28=-417 (B)
- 53) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-48, 3-4=-48, 4-7=-48, 7-8=-19, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-933 (F), 24=-1221 (F), 25=-1211 (F), 26=-4152 (F), 28=-363 (B)
- 54) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-19, 3-4=-19, 4-7=-48, 7-8=-19, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Concentrated Loads (lb)
Vert: 15=-933 (F), 24=-1221 (F), 25=-1211 (F), 26=-4152 (F), 28=-363 (B)
- 55) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-7, 3-4=-13, 4-7=14, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-5, 3-4=-1
Concentrated Loads (lb)
Vert: 15=-500 (F), 24=-634 (F), 25=-622 (F), 26=-1998 (F), 28=-260 (B)
- 56) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=7, 3-4=7, 4-7=14, 7-8=9, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-19, 3-4=-18
Concentrated Loads (lb)
Vert: 15=-500 (F), 24=-634 (F), 25=-622 (F), 26=-1998 (F), 28=-260 (B)
- 57) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-25, 3-4=-31, 4-7=-4, 7-8=-8, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=6, 3-4=12
Concentrated Loads (lb)
Vert: 15=-489 (F), 24=-623 (F), 25=-611 (F), 26=-1965 (F), 28=-252 (B)
- 58) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-12, 3-4=-12, 4-7=-4, 7-8=1, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=8, 3-4=7
Concentrated Loads (lb)
Vert: 15=-489 (F), 24=-623 (F), 25=-611 (F), 26=-1965 (F), 28=-252 (B)
- 59) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=14, 3-4=14, 4-7=5, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-26, 3-4=-26
Concentrated Loads (lb)
Vert: 15=-500 (F), 24=-634 (F), 25=-622 (F), 26=-1998 (F), 28=-260 (B)
- 60) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-28, 3-4=-28, 4-7=-43, 7-8=-38, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
- 61) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=14, 3-4=14, 4-7=5, 7-8=-1, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-26, 3-4=-26
Concentrated Loads (lb)
Vert: 15=-500 (F), 24=-634 (F), 25=-622 (F), 26=-1998 (F), 28=-260 (B)
- 62) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=5, 3-4=5, 4-7=5, 7-8=9, 17-27=-12, 9-27=-112 (F=-100)
Horz: 1-3=-16, 3-4=-16
Concentrated Loads (lb)
Vert: 15=-500 (F), 24=-634 (F), 25=-622 (F), 26=-1998 (F), 28=-260 (B)
- 63) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-4, 3-4=-4, 4-7=14, 7-8=-8, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=-15, 3-4=-15
Concentrated Loads (lb)
Vert: 15=-489 (F), 24=-623 (F), 25=-611 (F), 26=-1965 (F), 28=-252 (B)
- 64) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-14, 4-7=-14, 7-8=1, 17-27=-19, 9-27=-119 (F=-100)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-489 (F), 24=-623 (F), 25=-611 (F), 26=-1965 (F), 28=-252 (B)
- 65) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-44, 3-4=-48, 4-7=-35, 7-8=-38, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=5, 3-4=9
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 66) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-34, 3-4=-34, 4-7=-35, 7-8=-31, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 67) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-28, 3-4=-28, 4-7=-43, 7-8=-38, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	E4	Piggyback Base Girder	1	2	E14115614
					Job Reference (optional)

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:04

Page: 5

ID: _seP9BQCJmuawc8fgnTsdUzhZT-lbXtclqCrkyTz?DPQLOnGhFAhQDrU3dbYhWYzHHPH

- Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 68) Reversal: Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-35, 3-4=-35, 4-7=-43, 7-8=-31, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 69) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-53, 3-4=-57, 4-7=-37, 7-8=-11, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=5, 3-4=9
Concentrated Loads (lb)
Vert: 15=-850 (F), 24=-1092 (F), 25=-1084 (F), 26=-3683 (F), 28=-337 (B)
- 70) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-43, 3-4=-43, 4-7=-37, 7-8=-4, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-850 (F), 24=-1092 (F), 25=-1084 (F), 26=-3683 (F), 28=-337 (B)
- 71) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-37, 3-4=-37, 4-7=-44, 7-8=-11, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-850 (F), 24=-1092 (F), 25=-1084 (F), 26=-3683 (F), 28=-337 (B)
- 72) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-44, 3-4=-44, 4-7=-44, 7-8=-4, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-850 (F), 24=-1092 (F), 25=-1084 (F), 26=-3683 (F), 28=-337 (B)
- 73) Reversal: 15th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-30, 3-4=-34, 4-7=-61, 7-8=-64, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=5, 3-4=9
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 74) Reversal: 16th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-30, 3-4=-81, 4-7=-14, 7-8=-17, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=5, 3-4=9
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 75) Reversal: 17th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-20, 3-4=-20, 4-7=-61, 7-8=-57, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 76) Reversal: 18th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-20, 3-4=-67, 4-7=-14, 7-8=-10, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-6, 3-4=-6
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 77) Reversal: 19th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-14, 4-7=-68, 7-8=-64, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 78) Reversal: 20th Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-14, 3-4=-61, 4-7=-21, 7-8=-17, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-11, 3-4=-11
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 79) Reversal: 21st Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-21, 3-4=-21, 4-7=-68, 7-8=-57, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)
- 80) Reversal: 22nd Unbal.Death + 0.75 Snow (unbal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
Uniform Loads (lb/ft)
Vert: 1-3=-21, 3-4=-68, 4-7=-21, 7-8=-10, 17-27=-19, 27-29=-323 (F=-303), 12-29=-352 (F=-303), 12-30=-323 (F=-303), 11-30=-352 (F=-303), 9-11=-323 (F=-303)
Horz: 1-3=-4, 3-4=-4
Concentrated Loads (lb)
Vert: 15=-771 (F), 24=-1008 (F), 25=-1006 (F), 26=-3484 (F), 28=-322 (B)

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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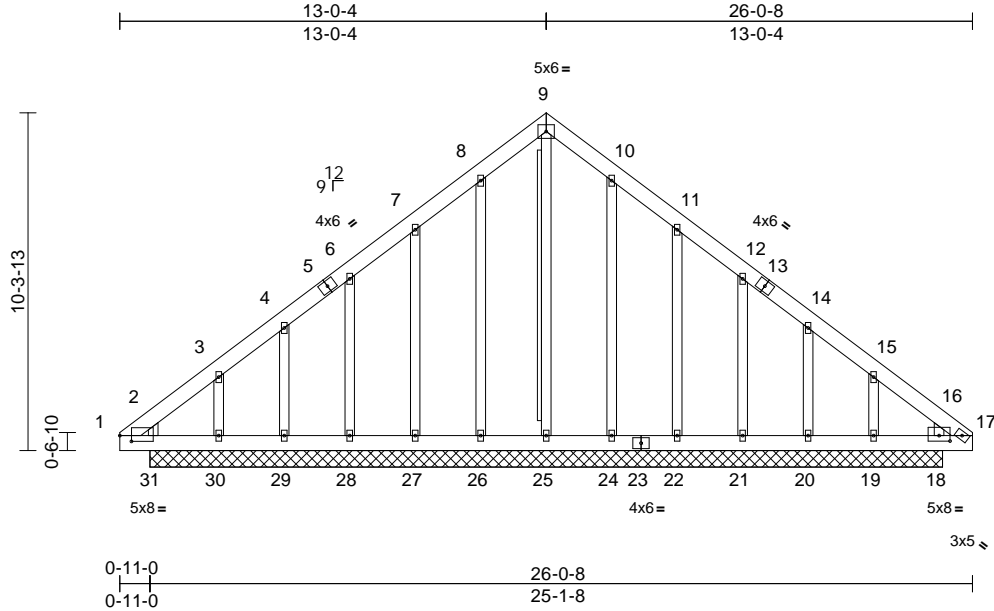
Job 20010112	Truss E5	Truss Type Common Supported Gable	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115615
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Carter Components (Sanford), Sanford, NC - 27332,

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Scale = 1:70.4

Plate Offsets (X, Y): [1:0-4-4,0-2-2], [18:0-4-0,0-2-0]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	17	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 225 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 23-1:2x6 SP 2400F 2.0E
OTHERS 2x4 SP No.3 *Except* 25-9,26-8,27-7,24-10,22-11:2x4 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.

WEBS
T-Brace: 2x4 SPF No.2 - 9-25
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (size)
1=24-2-8, 17=24-2-8, 18=24-2-8,
19=24-2-8, 20=24-2-8, 21=24-2-8,
22=24-2-8, 24=24-2-8, 25=24-2-8,
26=24-2-8, 27=24-2-8, 28=24-2-8,
29=24-2-8, 30=24-2-8, 31=24-2-8,
32=24-2-8, 34=24-2-8
Max Horiz 1=188 (LC 9), 32=188 (LC 9)
Max Uplift 1=104 (LC 11), 17=73 (LC 12),
18=43 (LC 14), 19=39 (LC 14),
20=34 (LC 14), 21=34 (LC 14),
22=43 (LC 14), 24=15 (LC 14),
26=19 (LC 13), 27=42 (LC 13),
28=34 (LC 13), 29=34 (LC 13),
30=38 (LC 13), 31=40 (LC 13),
32=104 (LC 11), 34=73 (LC 12)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD
1-2=-200/153, 2-3=-168/134, 3-4=-131/110,
4-5=-118/82, 5-6=-87/89, 6-7=-107/87,
7-8=-142/144, 8-9=-180/194, 9-10=-180/194,
10-11=-142/144, 11-12=-81/73,
12-13=-40/42, 13-14=-83/35, 14-15=-94/63,
15-16=-142/110, 16-17=-200/156
BOT CHORD
1-31=-122/161, 30-31=-122/161,
29-30=-122/161, 28-29=-122/161,
27-28=-122/161, 26-27=-122/161,
25-26=-122/161, 24-25=-122/161,
23-24=-122/161, 22-23=-122/161,
21-22=-122/161, 20-21=-122/161,
19-20=-122/161, 18-19=-122/161,
17-18=-122/161
WEBS
9-25=-151/87, 8-26=-127/57, 7-27=-141/99,
6-28=-129/86, 4-29=-130/86, 3-30=-136/92,
2-31=-110/86, 10-24=-121/57,
11-22=-141/99, 12-21=-129/86,
14-20=-130/86, 15-19=-136/92,
16-18=-116/92

NOTES

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 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.



February 26, 2020

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE
20010112	E5	Common Supported Gable	1	1	E14115615
					Job Reference (optional)

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

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Page: 2

- 8) Solid blocking is required on both sides of the truss at joint(s), 1.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 17, 19 lb uplift at joint 26, 42 lb uplift at joint 27, 34 lb uplift at joint 28, 34 lb uplift at joint 29, 38 lb uplift at joint 30, 40 lb uplift at joint 31, 15 lb uplift at joint 24, 43 lb uplift at joint 22, 34 lb uplift at joint 21, 34 lb uplift at joint 20, 39 lb uplift at joint 19, 43 lb uplift at joint 18 and 73 lb uplift at joint 17.
- 10) 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.
- 11) Non Standard bearing condition. Review required.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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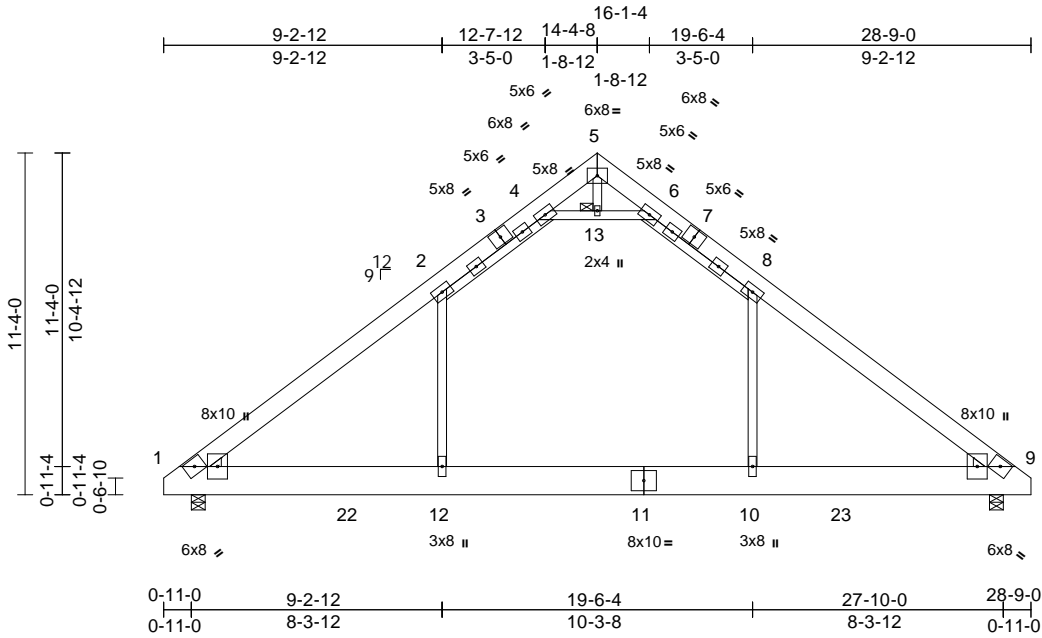
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss F1	Truss Type Attic	Qty 2	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115616
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:76.4

Plate Offsets (X, Y): [1:0-0-13,Edge], [9:0-0-13,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	0.81	Vert(LL)	-0.12	10-12	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.20	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.04	10-12	>999	360		
BCDL	10.0										Weight: 283 lb	FT = 20%

LUMBER
 TOP CHORD 2x8 SP 2400F 2.0E
 BOT CHORD 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.2 *Except* 5-13,4-2,8-6:2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

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

JOINTS
 1 Brace at Jt(s): 13

REACTIONS (size) 1=0-5-8, 9=0-5-8
 Max Horiz 1=196 (LC 10)
 Max Grav 1=1496 (LC 25), 9=1496 (LC 26)

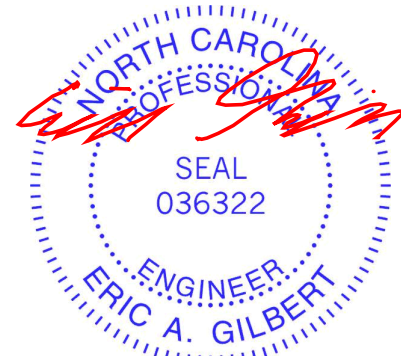
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-1908/74, 2-3=-1254/184,
 3-4=-1154/196, 4-5=-70/576, 5-6=-70/577,
 6-7=-1153/196, 7-8=-1253/184, 8-9=-1908/74
 BOT CHORD 1-22=-47/1364, 12-22=0/1364, 11-12=0/1367,
 10-11=0/1367, 10-23=0/1363, 9-23=0/1363
 WEBS 8-10=0/789, 2-12=0/789, 4-13=-2119/354,
 6-13=-2119/354, 5-13=-28/288

- 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
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 2-4, 6-8, 4-13, 6-13; Wall dead load (5.0psf) on member(s).8-10, 2-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 10-12
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 9. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



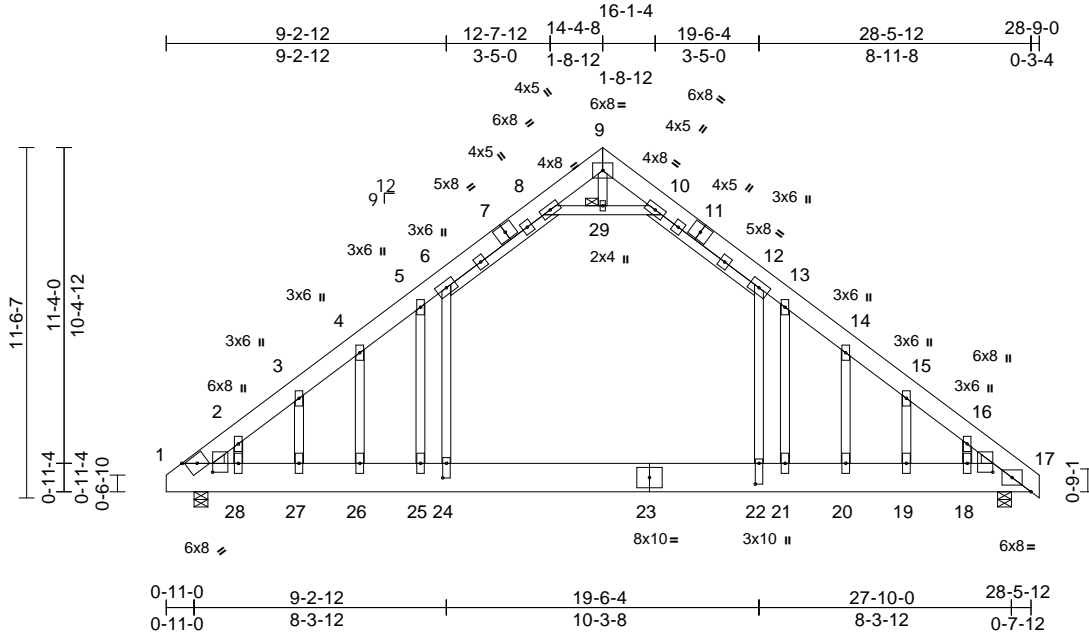
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss F2	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115617
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 E Feb 13 2020 Print: 8.330 E Feb 13 2020 MITek Industries, Inc. Wed Feb 26 16:48:14
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Page: 1



Scale = 1:75.9

Plate Offsets (X, Y): [1:0-0-13,Edge], [1:0-3-8,1-0-3], [17:0-3-8,Edge], [17:0-7-12,1-3-2], [22:0-8-4,0-1-8], [24:0-5-12,0-1-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.09	22-24	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.14	22-24	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	17	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.03	22-24	>999	360		
BCDL	10.0										Weight: 321 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 9-29,8-6,12-10:2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 25-5,21-13:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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

JOINTS
1 Brace at Jt(s): 29

REACTIONS
(lb/size) 1=993/0-5-8, 17=1040/0-5-8
Max Horiz 1=202 (LC 9)
Max Grav 1=1360 (LC 26), 17=1417 (LC 27)

FORCES
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD
1-2=-1654/0, 2-3=-1601/0, 3-4=-1555/39,
4-5=-1718/106, 5-6=-1817/148,
6-7=-1156/161, 7-8=-1059/191, 8-9=-28/381,
9-10=-28/381, 10-11=-1059/191,
11-12=-1156/161, 12-13=-1816/148,
13-14=-1718/106, 14-15=-1555/39,
15-16=-1600/0, 16-17=-1623/0

BOT CHORD
1-28=-41/1251, 27-28=0/1252,
26-27=0/1251, 25-26=0/1248, 24-25=0/1246,
23-24=0/1252, 22-23=0/1252, 21-22=0/1246,
20-21=0/1248, 19-20=0/1251, 18-19=0/1251,
17-18=0/1251

WEBS
12-22=-42/1064, 6-24=-42/1064,
8-29=-1735/291, 10-29=-1735/291,
5-25=-291/58, 4-26=-405/90, 13-21=-290/58,
14-20=-404/90

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- All plates are 3x8 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 6-8, 10-12, 8-29, 10-29; Wall dead load (5.0psf) on member (s).12-22, 6-24
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 22-24
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 17. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

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Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



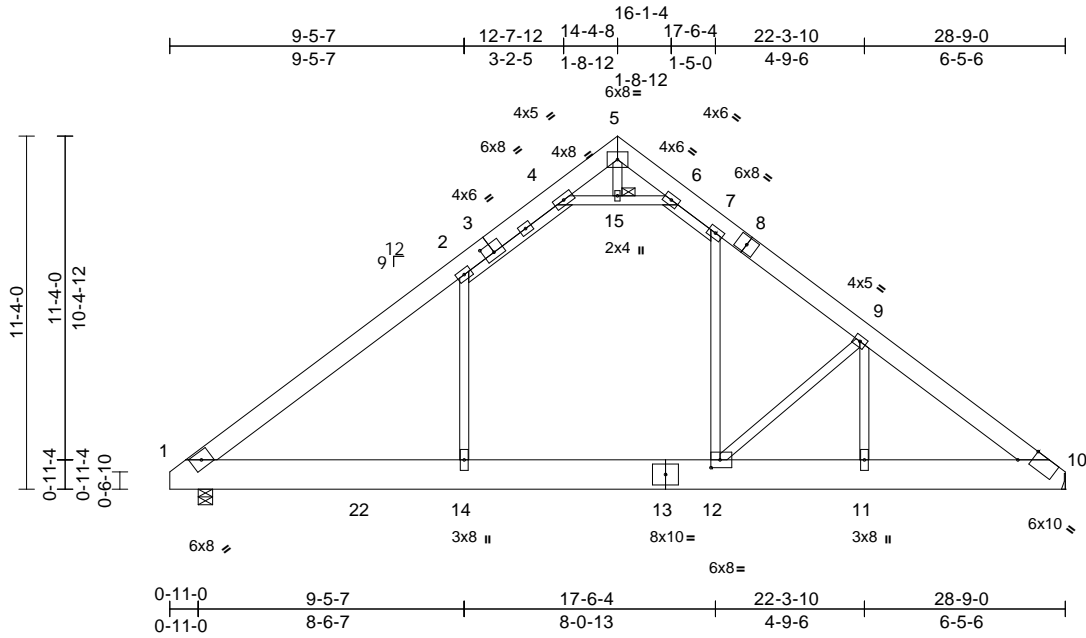
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss G1	Truss Type Attic	Qty 3	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115618
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:08
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Page: 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	0.63	Vert(LL)	-0.06	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.11	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.02	12-14	>999	360		
BCDL	10.0										Weight: 295 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 9-11,5-15,7-6,4-2:2x4 SP No.3

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

JOINTS
1 Brace at Jt(s): 15

REACTIONS (size) 1=0-5-8, 10= Mechanical
Max Horiz 1=-212 (LC 9)
Max Grav 1=1483 (LC 25), 10=1357 (LC 26)

FORCES
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1843/110, 2-3=-1316/175,
3-4=-1223/197, 4-5=-26/186, 5-6=-47/349,
6-7=-1079/175, 7-8=-1671/164,
8-9=-1799/154, 9-10=-1994/123
BOT CHORD 1-22=-19/1361, 14-22=0/1361,
13-14=0/1363, 12-13=0/1363, 11-12=0/1555,
10-11=0/1555
WEBS 2-14=-9/531, 7-12=-80/961, 9-12=-558/159,
9-11=-67/220, 4-15=-1721/296,
6-15=-1721/296, 5-15=-21/237

- 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
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 2-4, 6-7, 4-15, 6-15; Wall dead load (5.0psf) on member(s).2-14, 7-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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



February 26, 2020

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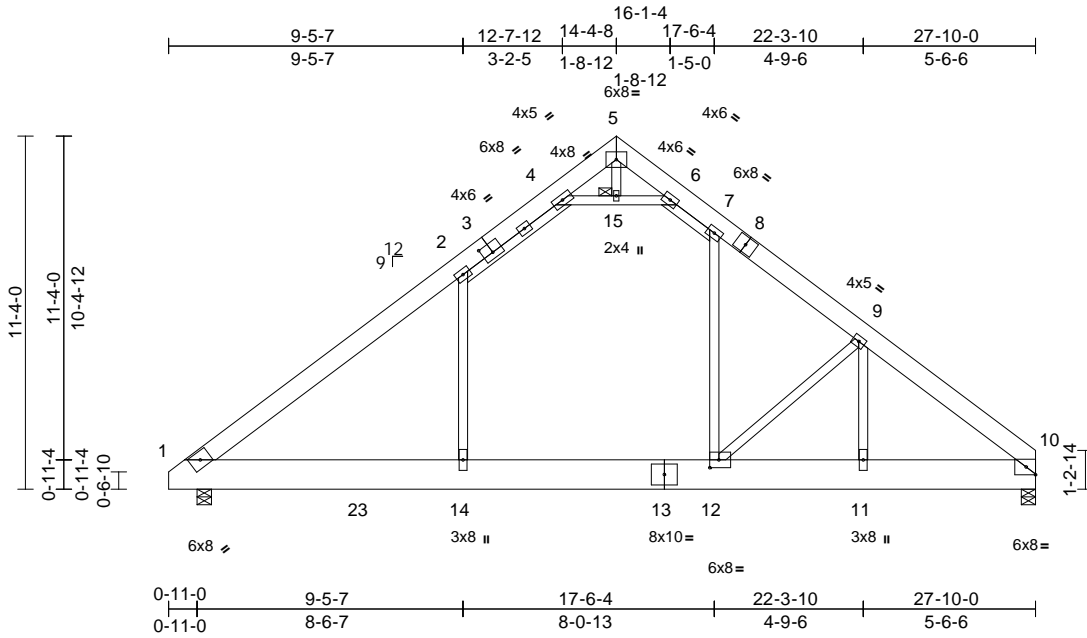
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss G2	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115619
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:08
ID: sygshlYVaUJelDthpci743zhKmn-eNnOROtjvXEoyal_eFQKx6stmL?nrBFYDWRfzhHPD

Page: 1



Scale = 1:74

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.06	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.10	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.02	12-14	>999	360		
BCDL	10.0										Weight: 290 lb	FT = 20%

LUMBER

TOP CHORD 2x8 SP 2400F 2.0E
 BOT CHORD 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.3 *Except* 4-6,2-14,7-12,12-9;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.

JOINTS 1 Brace at Jt(s): 15

REACTIONS (size) 1=0-5-8, 10=0-5-8
 Max Horiz 1=200 (LC 9)
 Max Grav 1=1442 (LC 25), 10=1332 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-1763/126, 2-3=-1256/172, 3-4=-1163/194, 4-5=-26/186, 5-6=-46/328, 6-7=-1041/172, 7-8=-1580/158, 8-9=-1708/148, 9-10=-1733/106
 BOT CHORD 1-23=-25/1298, 14-23=0/1298, 13-14=0/1299, 12-13=0/1299, 11-12=0/1315, 10-11=0/1315
 WEBS 9-11=-267/92, 4-15=-1645/291, 6-15=-1645/291, 5-15=-20/228, 2-14=-28/507, 7-12=-75/872, 9-12=-359/144

NOTES

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

- 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
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 2-4, 6-7, 4-15, 6-15; Wall dead load (5.0psf) on member(s).2-14, 7-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 1. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

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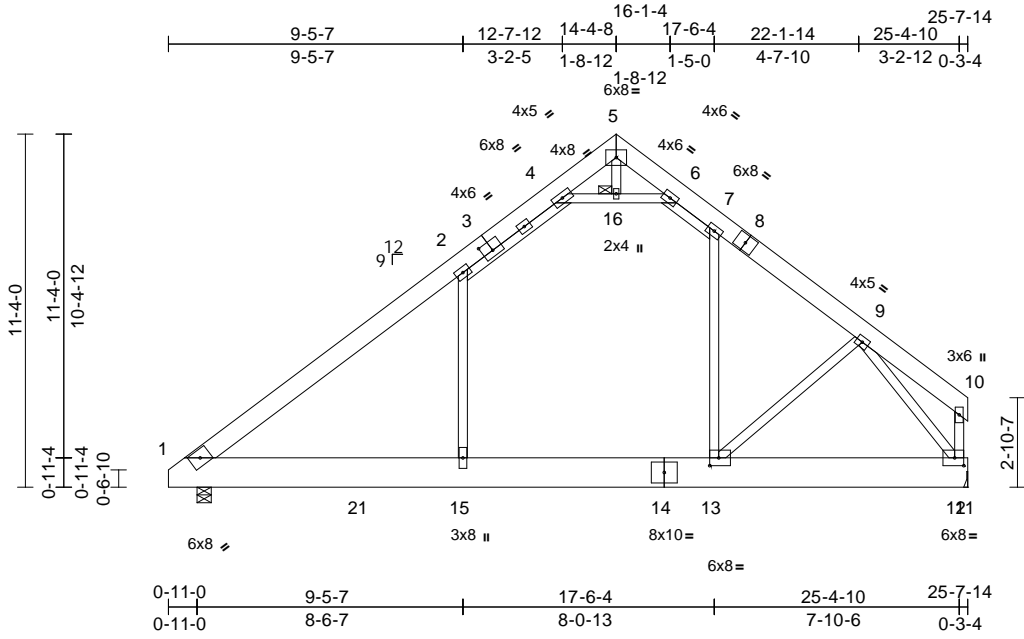
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss G3	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115620
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:09
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Page: 1



Scale = 1:74

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.07	15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.11	15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.01	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.03	13-15	>999	360		
BCDL	10.0										Weight: 275 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 4-6,2-15,7-13,13-9:2x4 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.

JOINTS
1 Brace at Jt(s): 16

REACTIONS (size) 1=0-5-8, 12= Mechanical
Max Horiz 1=195 (LC 10)
Max Grav 1=1320 (LC 25), 12=1272 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1516/178, 2-3=-1064/148,
3-4=-972/176, 4-5=-31/193, 5-6=-43/260,
6-7=-924/164, 7-8=-1309/130,
8-9=-1411/114, 9-10=-37/76
BOT CHORD 1-21=-43/1095, 15-21=0/1095,
14-15=0/1096, 13-14=0/1096,
12-13=-43/835, 11-12=0/0
WEBS 4-16=-1403/275, 6-16=-1403/275,
5-16=-18/198, 2-15=-82/438, 7-13=-37/607,
9-13=0/352, 10-12=-70/43, 9-12=-1502/79

- 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
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 2-4, 6-7, 4-16, 6-16; Wall dead load (5.0psf) on member(s).2-15, 7-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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



February 26, 2020

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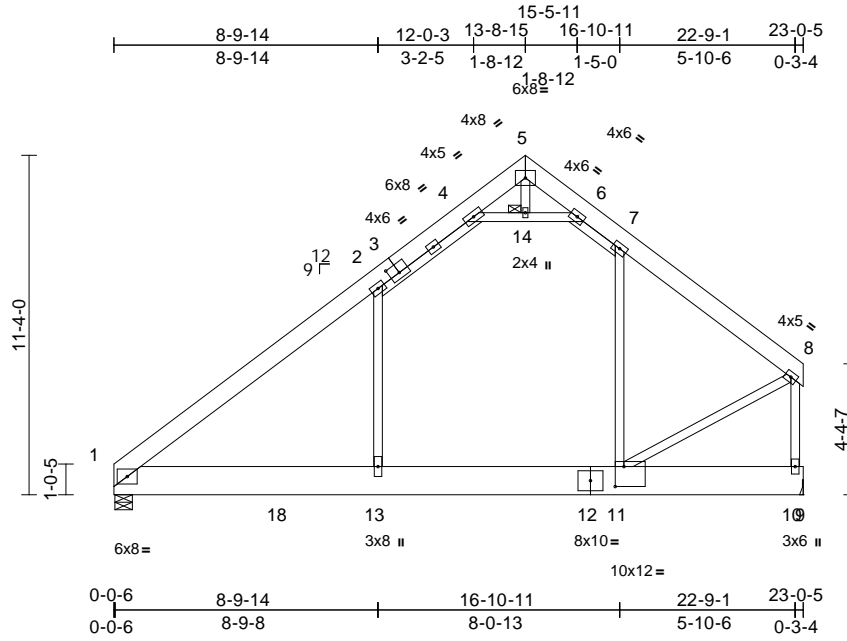
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss G4	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115621
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:09
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Page: 1



Scale = 1:77

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

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	0.44	Vert(LL)	-0.08	13-17	>999	240
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.14	13-17	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	1	n/a	n/a
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.04	11-13	>999	360
BCDL	10.0									
										Weight: 252 lb FT = 20%

LUMBER

TOP CHORD 2x8 SP 2400F 2.0E
 BOT CHORD 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.2 *Except* 5-14,2-4,7-6,8-10:2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 JOINTS 1 Brace at Jt(s): 14

REACTIONS

(size) 1=0-7-0, 10= Mechanical
 Max Horiz 1=201 (LC 10)
 Max Grav 1=1214 (LC 25), 10=1268 (LC 25)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-1362/21, 2-3=-941/133, 3-4=-849/161, 4-5=-49/217, 5-6=-49/243, 6-7=-857/161, 7-8=-1264/89
 BOT CHORD 1-18=-43/976, 13-18=0/976, 12-13=0/977, 11-12=0/977, 10-11=0/0, 9-10=0/0
 WEBS 2-13=-111/391, 7-11=-51/462, 4-14=-1284/280, 6-14=-1284/280, 5-14=-19/184, 8-11=0/1155, 8-10=-1455/90

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 exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Ceiling dead load (5.0 psf) on member(s). 2-4, 6-7, 4-14, 6-14; Wall dead load (5.0psf) on member(s).2-13, 7-11
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 11-13
- 7) Refer to girder(s) for truss to truss connections.
- 8) 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.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



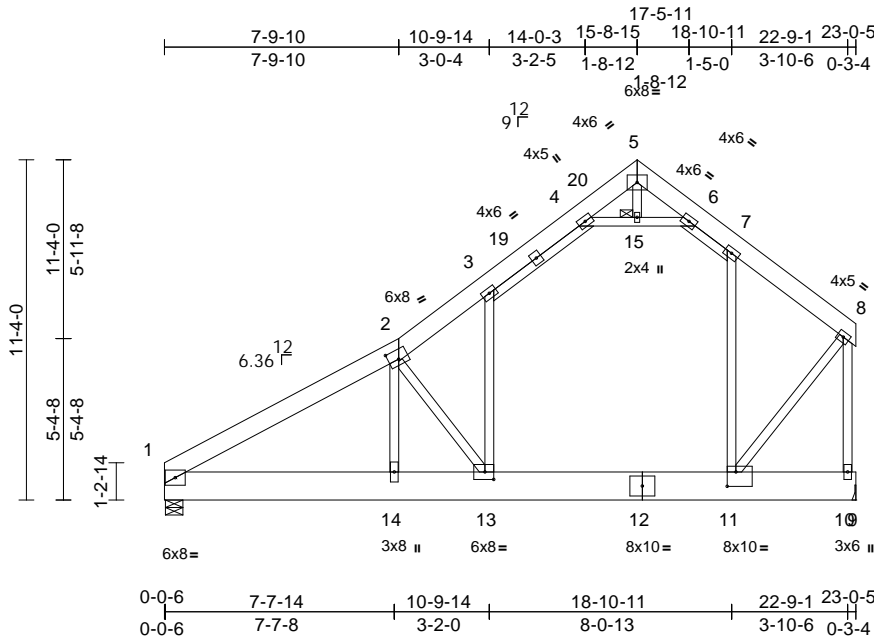
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss G5	Truss Type Attic	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115622
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:10
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Page: 1



Scale = 1:76.7

Plate Offsets (X, Y): [2:0-4-0,0-3-12], [11:0-3-8,0-5-12], [13:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.06	13	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.11	13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 264 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x12 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-13,7-11,4-6,8-11:2x4 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.

JOINTS 1 Brace at Jt(s): 15
REACTIONS (size) 1=0-7-0, 10= Mechanical
Max Horiz 1=196 (LC 12)
Max Uplift 10=5 (LC 15)
Max Grav 1=910 (LC 2), 10=999 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1280/188, 2-3=-895/166,
3-19=-587/172, 4-19=-557/190, 4-20=-44/59,
5-20=-31/106, 5-6=-92/63, 6-7=-597/212,
7-8=-763/168
BOT CHORD 1-14=-238/1144, 13-14=-236/1130,
12-13=-79/605, 11-12=-79/605, 10-11=0/0,
9-10=0/0
WEBS 2-14=-66/454, 2-13=-954/285, 3-13=0/370,
7-11=-71/171, 4-15=-674/247,
6-15=-674/247, 5-15=-30/82,
8-10=-1302/235, 8-11=-132/1017

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; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- 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
- Unbalanced snow loads have been considered for this design.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 10.
- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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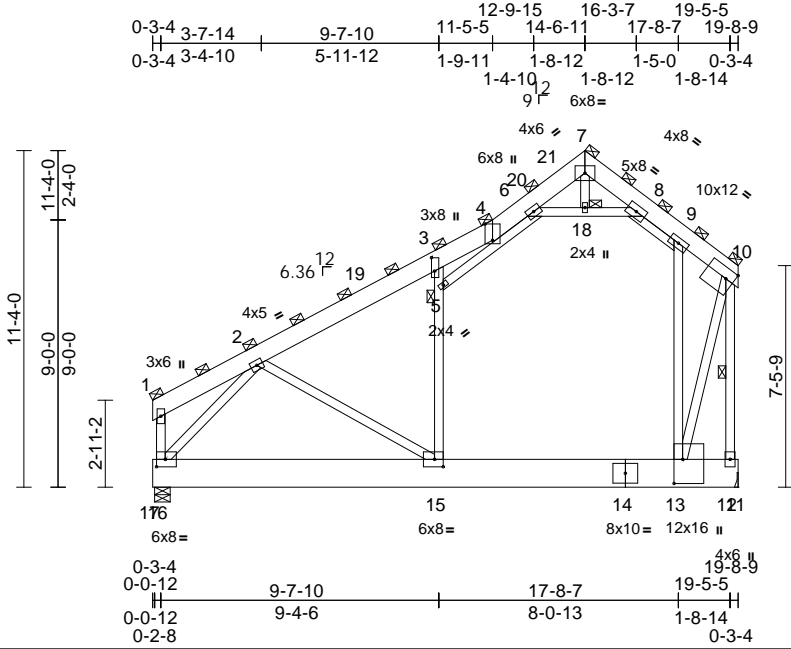
Job 20010112	Truss G6	Truss Type Attic Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115623
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:11

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Scale = 1:77.6

Plate Offsets (X, Y): [3:0-5-7,0-1-4], [4:0-6-10,Edge], [10:Edge,0-4-0], [13:0-9-12,0-3-8], [15:0-3-8,0-3-0], [16:0-3-8,0-3-0]

Loading	(psf)	Spacing	6-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.25	15-16	>936	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.43	15-16	>531	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.01	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.11	13-15	>901	360		
BCDL	10.0											
											Weight: 489 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x8 SP 2400F 2.0E
 BOT CHORD 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.2 *Except*
 7-18,9-8,16-2,6-5,1-16:2x4 SP No.3,
 10-13:2x4 SP No.1
- BRACING**
- TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
 (Switched from sheeted: Spacing > 2-8-0).
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing.
 WEBS 1 Row at midpt 10-12
 JOINTS 1 Brace at Jt(s): 4,
 7, 18, 5, 10, 1
- REACTIONS** (size) 12= Mechanical, 16=0-6-4
 Max Horiz 16=481 (LC 8)
 Max Grav 12=4344 (LC 25), 16=4949 (LC 25)
- FORCES** (lb) - Maximum Compression/Maximum
 Tension
- TOP CHORD 1-2=0/285, 2-19=-2912/0, 3-19=-2514/0,
 3-4=-2417/0, 4-5=0/467, 4-6=-1698/0,
 6-20=-10/792, 20-21=0/799, 7-21=0/859,
 7-8=-442/261, 8-9=-2366/0, 9-10=-1872/0
 BOT CHORD 16-17=0/0, 15-16=-169/2340, 14-15=0/2116,
 13-14=0/2116, 12-13=0/0, 11-12=0/0
 WEBS 2-15=-325/493, 5-15=-320/1466,
 3-5=-313/1196, 9-13=-1399/0, 6-18=-2783/0,
 8-18=-2783/0, 7-18=0/420, 2-16=-3437/0,
 10-12=-8626/0, 1-16=0/207, 10-13=0/8576
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x12 - 2 rows staggered at 0-9-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.33
 - 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
 - Unbalanced snow loads have been considered for this design.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 4-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-15, 3-5, 9-13
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
 - Refer to girder(s) for truss to truss connections.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-143, 3-4=-173, 4-6=-173, 6-7=-143, 7-8=-143, 8-9=-173, 9-10=-143, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
 - Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)



February 26, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE	E14115623
20010112	G6	Attic Girder	1	2	Job Reference (optional)	

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:11

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- Vert: 1-3=-180, 3-4=-210, 4-6=-210, 6-7=-180, 7-8=-180, 8-9=-210, 9-10=-180, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-150, 3-4=-180, 4-6=-180, 6-7=-150, 7-8=-150, 8-9=-180, 9-10=-150, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 4) Dead + 0.75 Snow (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-122, 3-4=-152, 4-6=-152, 6-7=-122, 7-8=-122, 8-9=-152, 9-10=-122, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-122, 3-4=-152, 4-6=-152, 6-20=-122, 7-20=-128, 7-8=-79, 8-9=-109, 9-10=-79, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-79, 3-4=-109, 4-6=-109, 6-7=-79, 7-8=-146, 8-9=-176, 9-10=-146, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-22, 3-4=-40, 4-6=-57, 6-7=-39, 7-8=21, 8-9=3, 9-10=21, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-14, 4-7=3, 7-10=57
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=22, 3-4=4, 4-6=3, 6-7=21, 7-8=-39, 8-9=-57, 9-10=-39, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-58, 4-7=-57, 7-10=-3
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-79, 3-4=-109, 4-6=-126, 6-7=-96, 7-8=-37, 8-9=-67, 9-10=-37, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=19, 4-7=36, 7-10=23
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-36, 3-4=-66, 4-6=-67, 6-7=-37, 7-8=-96, 8-9=-126, 9-10=-96, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-24, 4-7=-23, 7-10=-36
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=45, 3-4=27, 4-6=27, 6-7=45, 7-8=15, 8-9=3, 9-10=15, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-81, 4-7=-81, 7-10=51
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=15, 3-4=3, 4-6=3, 6-7=15, 7-8=45, 8-9=27, 9-10=45, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-51, 4-7=-51, 7-10=81
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=45, 3-4=27, 4-6=27, 6-7=45, 7-8=15, 8-9=3, 9-10=15, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-81, 4-7=-81, 7-10=51
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=15, 3-4=3, 4-6=3, 6-7=15, 7-8=45, 8-9=27, 9-10=45, 15-17=-136 (F=-100), 11-15=-36, 6-18=-18, 8-18=-18
 Horz: 1-4=-51, 4-7=-51, 7-10=81
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-13, 3-4=-43, 4-6=-43, 6-7=-13, 7-8=42, 8-9=-72, 9-10=-42, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-47, 4-7=-47, 7-10=18
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-42, 3-4=-72, 4-6=-72, 6-7=-42, 7-8=-13, 8-9=-43, 9-10=-13, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-18, 4-7=-18, 7-10=47
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 17) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (lb/ft)
 Vert: 1-3=-60, 3-4=-90, 4-6=-90, 6-7=-60, 7-8=-60, 8-9=-90, 9-10=-60, 15-17=-431 (F=-371), 13-15=-300, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 18) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-143, 3-4=-173, 4-6=-173, 6-20=-143, 7-20=-150, 7-8=-85, 8-9=-115, 9-10=-85, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 19) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-85, 3-4=-115, 4-6=-115, 6-7=-85, 7-8=-174, 8-9=-204, 9-10=-174, 15-17=-160 (F=-100), 11-15=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 20) Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (lb/ft)
 Vert: 1-3=-60, 3-4=-90, 4-6=-90, 6-7=-60, 7-8=-60, 8-9=-90, 9-10=-60, 15-17=-431 (F=-371), 13-15=-300, 11-13=-60, 6-18=-30, 8-18=-30
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 21) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-137, 3-4=-167, 4-6=-179, 6-7=-149, 7-8=-105, 8-9=-135, 9-10=-105, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
- Horz: 1-4=14, 4-7=27, 7-10=17
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 22) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-104, 3-4=-134, 4-6=-135, 6-7=-105, 7-8=-149, 8-9=-179, 9-10=-149, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-18, 4-7=-17, 7-10=-27
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 23) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-87, 3-4=-117, 4-6=-117, 6-7=-87, 7-8=-109, 8-9=-139, 9-10=-109, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-35, 4-7=-35, 7-10=13
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 24) Dead + 0.75 Snow (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-109, 3-4=-139, 4-6=-139, 6-7=-109, 7-8=-87, 8-9=-117, 9-10=-87, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-13, 4-7=-13, 7-10=35
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-164, 3-4=-194, 4-6=-207, 6-7=-177, 7-8=-133, 8-9=-163, 9-10=-133, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=14, 4-7=27, 7-10=17
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-132, 3-4=-162, 4-6=-163, 6-7=-133, 7-8=-177, 8-9=-207, 9-10=-177, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-18, 4-7=-17, 7-10=-27
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-115, 3-4=-145, 4-6=-145, 6-7=-115, 7-8=-137, 8-9=-167, 9-10=-137, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-35, 4-7=-35, 7-10=13
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75 (0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.33
 Uniform Loads (lb/ft)
 Vert: 1-3=-137, 3-4=-167, 4-6=-167, 6-7=-137, 7-8=-115, 8-9=-145, 9-10=-115, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
 Horz: 1-4=-13, 4-7=-13, 7-10=35
 Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 29) 3rd Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)

Continued on page 3

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	MIKE SHEAN / FRANK RESIDENCE	E14115623
20010112	G6	Attic Girder	1	2	Job Reference (optional)	

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

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:11

Page: 3

ID:mlydF_cq2w3nMyWx0GB4IDzhKdf-als4vzQ8U6BuSNlgSo1Xx9a5v2Fdy0X?yJzbzHPB

- Vert: 1-3=-79, 3-4=-109, 4-6=-152, 6-21=-122,
7-21=-136, 7-8=-79, 8-9=-109, 9-10=-79, 15-17=-363 (F=-303), 13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
- Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 30) 4th Dead + 0.75 Snow (Unbal. Left) + 0.75 Attic Floor:
Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-19=-122, 3-19=-135, 3-4=-165, 4-6=-109,
6-7=-79, 7-8=-79, 8-9=-109, 9-10=-79, 15-17=-363 (F=-303),
13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 31) 5th Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor:
Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-79, 3-4=-109, 4-6=-171, 6-7=-141,
7-8=-79, 8-9=-109, 9-10=-79, 15-17=-363 (F=-303),
13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 32) 6th Dead + 0.75 Snow (Unbal. Right) + 0.75 Attic Floor:
Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-79, 3-4=-109, 4-6=-109, 6-7=-79,
7-8=-183, 8-9=-213, 9-10=-122, 15-17=-363 (F=-303),
13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30,
8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 33) 7th Dead + Snow (Unbal. Left): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-85, 3-4=-115, 4-6=-173, 6-21=-143,
7-21=-161, 7-8=-85, 8-9=-115, 9-10=-85, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 34) 8th Dead + Snow (Unbal. Left): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-19=-143, 3-19=-160, 3-4=-190, 4-6=-115,
6-7=-85, 7-8=-85, 8-9=-115, 9-10=-85, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 35) 9th Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-85, 3-4=-115, 4-6=-198, 6-7=-168,
7-8=-85, 8-9=-115, 9-10=-85, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 36) 10th Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-85, 3-4=-115, 4-6=-115, 6-7=-85,
7-8=-224, 8-9=-254, 9-10=-143, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 37) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-180, 3-4=-210, 4-6=-210, 6-7=-180,
7-8=-60, 8-9=-90, 9-10=-60, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 38) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-90, 4-6=-90, 6-7=-60, 7-8=-180,
8-9=-210, 9-10=-180, 15-17=-160 (F=-100),
11-15=-60, 6-18=-30, 8-18=-30
Drag: 5-15=-30, 3-5=-30, 9-13=-30
- 39) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-150, 3-4=-180, 4-6=-180, 6-7=-150,
7-8=-60, 8-9=-90, 9-10=-60, 15-17=-363 (F=-303),
13-15=-240, 11-13=-60, 6-18=-30, 8-18=-30

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MI TEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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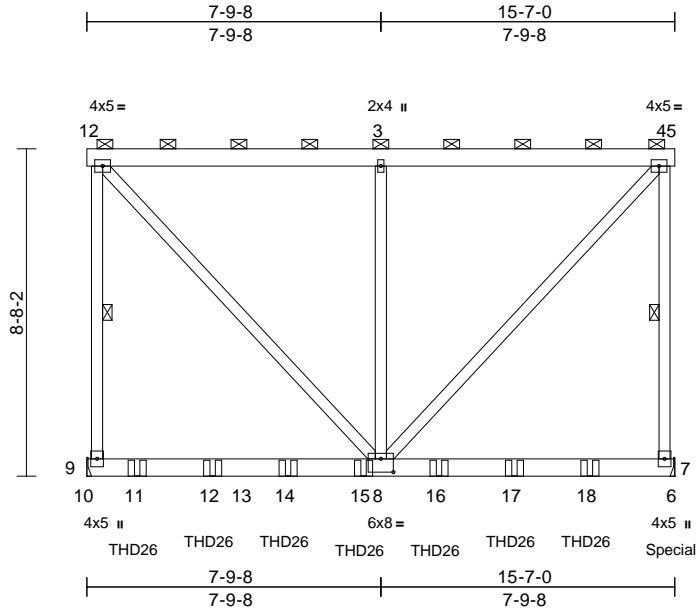
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss GR1	Truss Type Flat Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115624
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Scale = 1:61.1

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.08	8-9	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.14	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 278 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-9, 4-7

REACTIONS

(size) 7= Mechanical, 9= Mechanical
Max Uplift 7=-524 (LC 8), 9=-460 (LC 7)
Max Grav 7=2431 (LC 3), 9=2177 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-9=-1454/327, 1-2=0/0, 2-3=-1207/261, 3-4=-1207/261, 4-5=0/0, 4-7=-1456/327
BOT CHORD 9-10=0/0, 9-11=-5/25, 11-12=-5/25, 12-13=-5/25, 13-14=-5/25, 14-15=-5/25, 8-15=-5/25, 8-16=-5/23, 16-17=-5/23, 17-18=-5/23, 7-18=-5/23, 6-7=0/0
WEBS 2-8=-378/1752, 3-8=-511/148, 4-8=-379/1755

NOTES

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

- 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); Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 460 lb uplift at joint 9 and 524 lb uplift at joint 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-4-0 from the left end to 13-4-0 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 437 lb down and 119 lb up at 15-7-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-56, 2-4=-56, 4-5=-56, 6-10=-19
Concentrated Loads (lb)
Vert: 7=-321 (B), 11=-313 (B), 12=-313 (B), 14=-313 (B), 15=-313 (B), 16=-313 (B), 17=-313 (B), 18=-313 (B)



February 26, 2020

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818 Soundside Road
Edenton, NC 27932

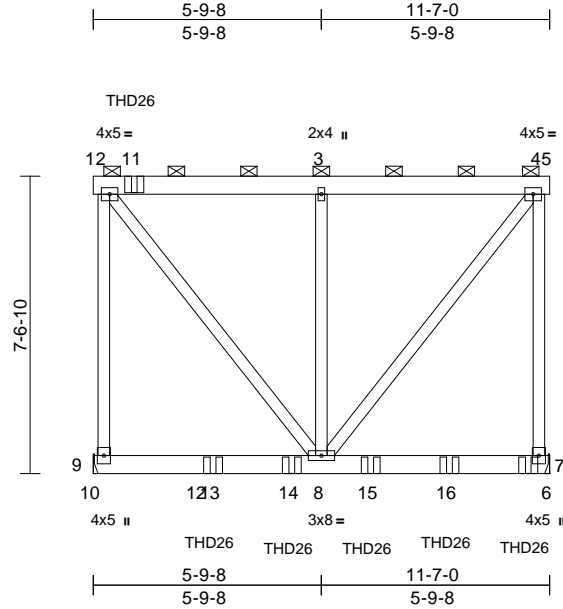
Job 20010112	Truss GR2	Truss Type Flat Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115625
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Carter Components (Sanford), Sanford, NC - 27332,

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Scale = 1:58.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.04	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 218 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 7= Mechanical, 9= Mechanical
 Max Uplift 7=-344 (LC 8), 9=-290 (LC 7)
 Max Grav 7=1536 (LC 3), 9=1419 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-9=-1189/280, 1-2=0/0, 2-11=-634/140, 3-11=-634/140, 3-4=-634/140, 4-5=0/0, 4-7=-915/212

BOT CHORD 9-10=0/0, 9-12=-3/13, 12-13=-3/13, 13-14=-3/13, 8-14=-3/13, 8-15=-2/11, 15-16=-2/11, 7-16=-2/11, 6-7=0/0

WEBS 2-8=-224/1011, 3-8=-434/111, 4-8=-225/1015

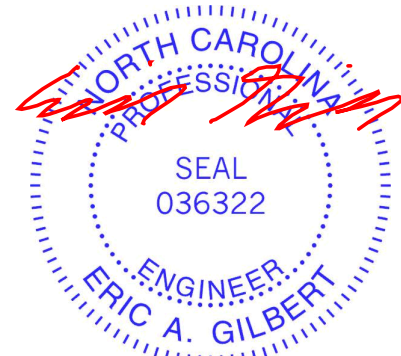
NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- 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); Lumber DOL=1.60 plate grip DOL=1.33

- 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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 9 and 344 lb uplift at joint 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent at 1-0-8 from the left end to connect truss(es) to front face of top chord.
- 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 3-0-8 from the left end to 11-0-8 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-2=-58, 2-4=-58, 4-5=-58, 6-10=-20
 Concentrated Loads (lb)
 Vert: 7=-266 (F), 11=-223 (F), 13=-261 (F), 14=-261 (F), 15=-261 (F), 16=-261 (F)



February 26, 2020

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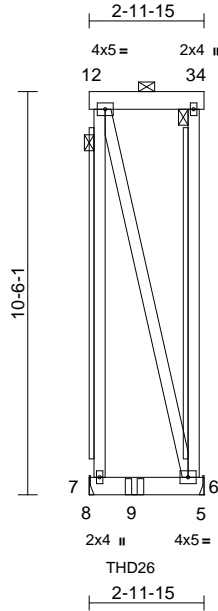
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss GR3	Truss Type Flat Girder	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115626
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:12
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Page: 1



Scale = 1:60

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	0.00	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.17	0.00	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0										
											Weight: 114 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD 2-0-0 oc purlins: 1-4, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS T-Brace: 2x4 SPF No.2 - 2-7, 3-6
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS (size) 6= Mechanical, 7= Mechanical
Max Uplift 6=-51 (LC 8), 7=-85 (LC 7)
Max Grav 6=302 (LC 2), 7=437 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-90/21, 1-2=0/0, 2-3=0/0, 3-4=0/0, 3-6=-90/21
BOT CHORD 7-8=0/0, 7-9=0/0, 6-9=0/0, 5-6=0/0
WEBS 2-6=0/0

NOTES

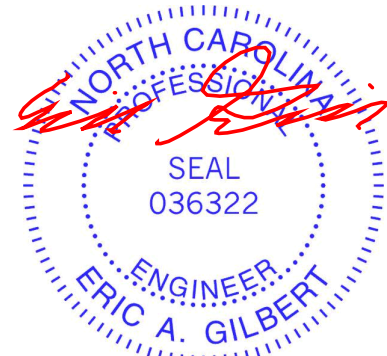
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All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

- 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); Lumber DOL=1.60 plate grip DOL=1.33
- 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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 7 and 51 lb uplift at joint 6.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent at 1-2-3 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

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

Vert: 1-2=-58, 2-3=-58, 3-4=-58, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-447 (B)



February 26, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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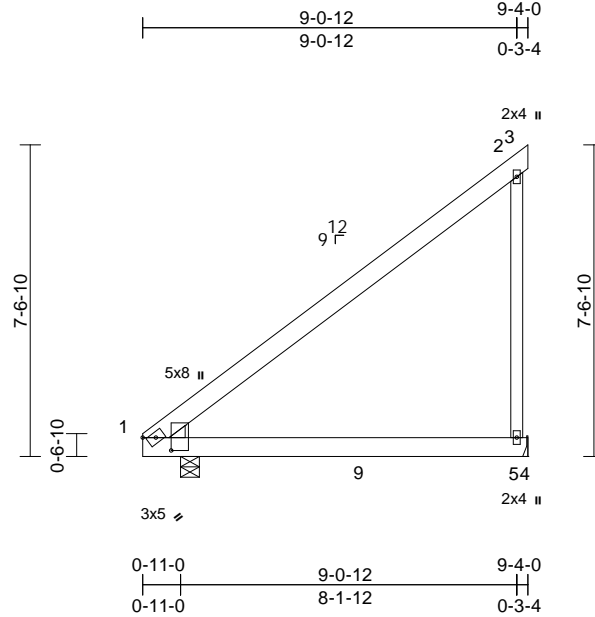
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss J09	Truss Type Jack-Closed	Qty 6	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115627
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:13
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Page: 1



Scale = 1:55.8

Plate Offsets (X, Y): [1:0-5-9,0-0-13], [1:0-3-12,0-8-4]

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	0.47	Vert(LL)	0.06	5-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.12	5-8	>942	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 59 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 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=0-5-8, 5= Mechanical
Max Horiz 1=188 (LC 13)
Max Uplift 5=-94 (LC 13)
Max Grav 1=415 (LC 2), 5=432 (LC 25)

FORCES

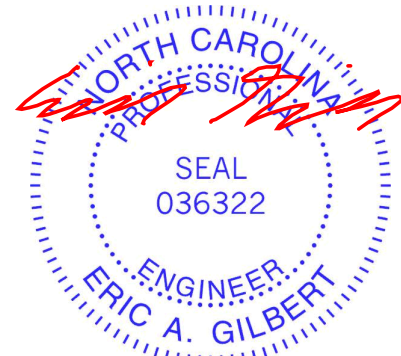
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-514/469, 2-3=-8/0
BOT CHORD 1-9=-224/279, 5-9=0/0, 4-5=0/0
WEBS 2-5=-278/196

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 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) * 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.
- 4) Refer to girder(s) for truss to truss connections.

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 5.
- 6) 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.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



February 26, 2020

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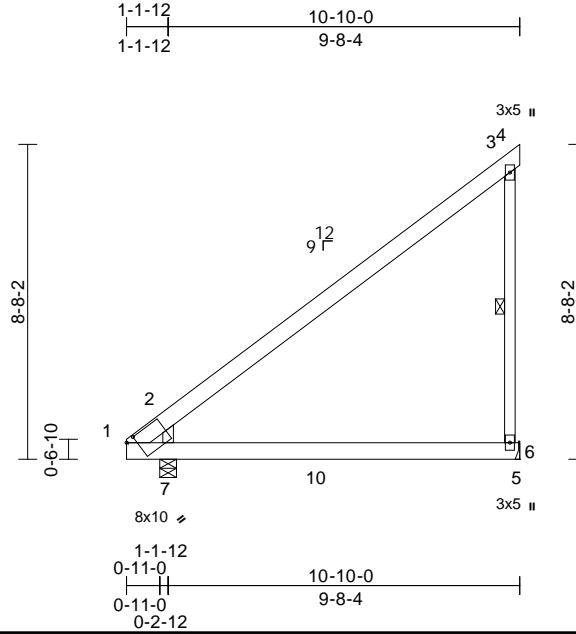
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss J10	Truss Type Jack-Closed	Qty 8	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115629
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:13
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Page: 1



Scale = 1:63.5

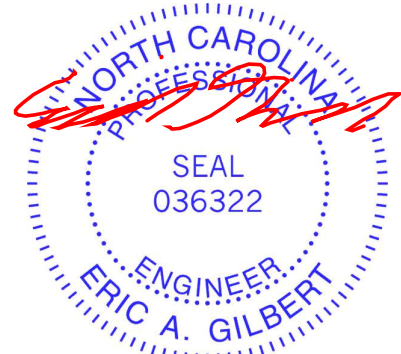
Plate Offsets (X, Y): [1:0-2-13,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.11	6-7	>995	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.22	6-7	>517	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 69 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x6 SP No.2
 - BOT CHORD 2x6 SP No.2
 - WEBS 2x4 SP No.2 *Except* 7-2:2x4 SP No.3
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 - WEBS 1 Row at midpt 3-6
- REACTIONS** (size) 6= Mechanical, 7=0-5-8
 Max Horiz 7=218 (LC 13)
 Max Uplift 6=-107 (LC 13)
 Max Grav 6=525 (LC 24), 7=474 (LC 2)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-658/540, 2-3=-223/158, 3-4=-8/0, 3-6=-311/215
 - BOT CHORD 1-7=-224/301, 7-10=-17/34, 6-10=-17/34, 5-6=0/0
 - WEBS 2-7=-829/784

- 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 6.
 - 6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
 - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- 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 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) * 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.



February 26, 2020

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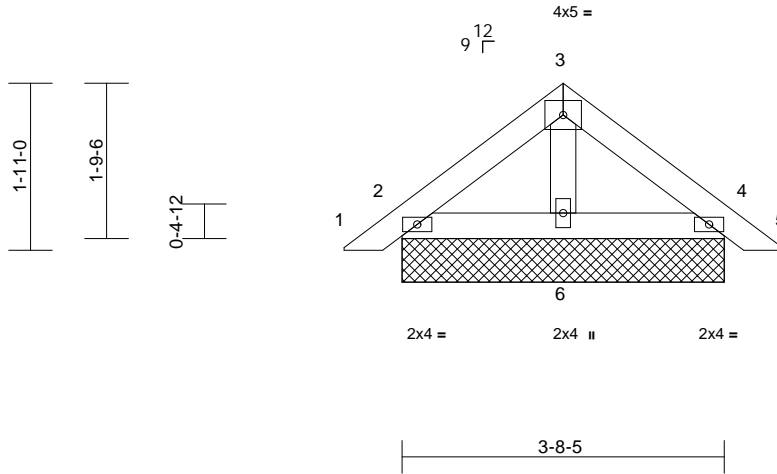
Job 20010112	Truss PB05	Truss Type Piggyback	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115631
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1

-0-8-0	1-10-3	3-8-5	4-4-5
0-8-0	1-10-3	1-10-3	0-8-0



Scale = 1:26.4

Loading (psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	Code	IRC2015/TPI2014	Matrix-MP								
BCDL										Weight: 17 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 5-1-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=3-8-5, 4=3-8-5, 6=3-8-5, 7=3-8-5, 11=3-8-5
Max Horiz 2=-33 (LC 11), 7=-33 (LC 11)
Max Uplift 2=-7 (LC 13), 4=-11 (LC 14), 7=-7 (LC 13), 11=-11 (LC 14)
Max Grav 2=108 (LC 2), 4=108 (LC 2), 6=121 (LC 2), 7=108 (LC 2), 11=108 (LC 2)

FORCES

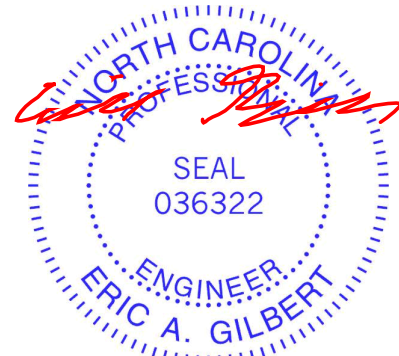
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-55/37, 3-4=-54/37, 4-5=0/19
BOT CHORD 2-6=-6/30, 4-6=-4/30
WEBS 3-6=-50/2

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

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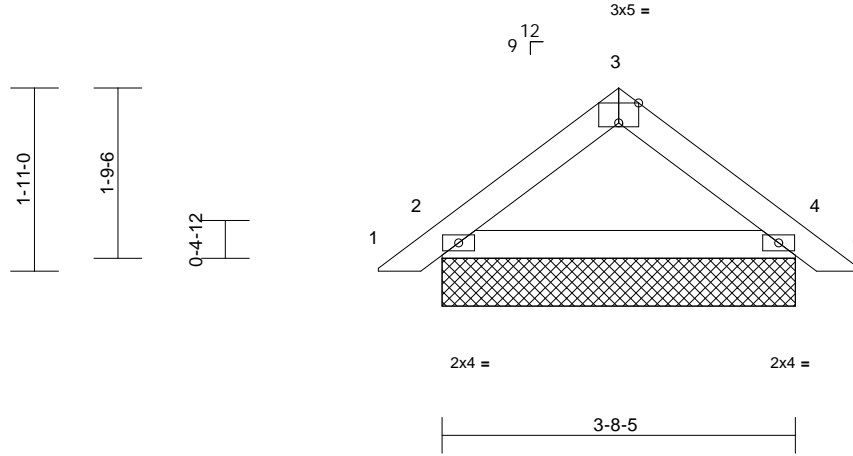
Job 20010112	Truss PB05A	Truss Type Piggyback	Qty 5	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115632
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:14
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Page: 1

-0-8-0	1-10-3	3-8-5	4-4-5
0-8-0	1-10-3	1-10-3	0-8-0



Scale = 1:24.1

Plate Offsets (X, Y): [3:0-2-8,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	0.06	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	0.00	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 15 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=3-8-5, 4=3-8-5, 6=3-8-5, 10=3-8-5
Max Horiz 2=-34 (LC 11), 6=-34 (LC 11)
Max Uplift 2=-2 (LC 13), 6=-2 (LC 13)
Max Grav 2=175 (LC 2), 4=181 (LC 2), 6=175 (LC 2), 10=181 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

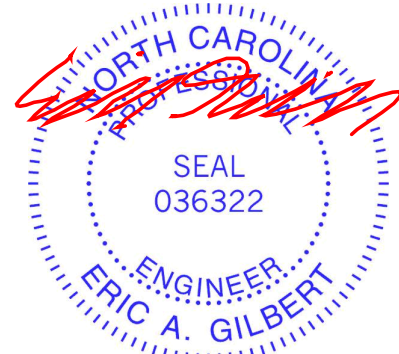
TOP CHORD 1-2=0/20, 2-3=-109/41, 3-4=-110/39, 4-5=0/20
BOT CHORD 2-4=-5/80

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
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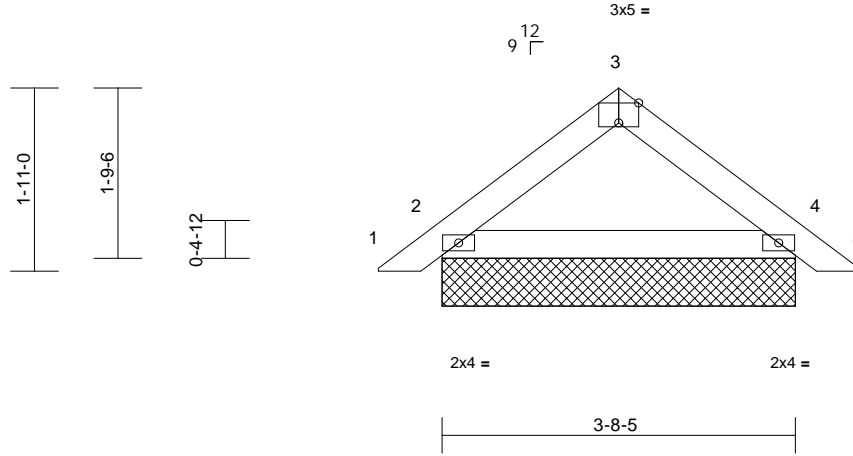
Job 20010112	Truss PB05B	Truss Type Piggyback	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115633
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:14
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Page: 1

-0-8-0	1-10-3	3-8-5	4-4-5
0-8-0	1-10-3	1-10-3	0-8-0



Scale = 1:24.1

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	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	0.00	Horz(CT)	0.00	10	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

BRACING

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

REACTIONS

(size) 2=3-8-5, 4=3-8-5, 6=3-8-5, 10=3-8-5
Max Horiz 2=33 (LC 12), 6=33 (LC 12)
Max Uplift 2=-2 (LC 13), 6=-2 (LC 13)
Max Grav 2=169 (LC 2), 4=175 (LC 2), 6=169 (LC 2), 10=175 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

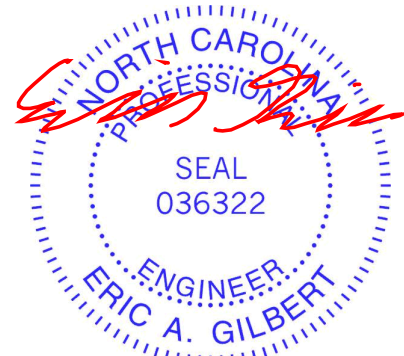
TOP CHORD 1-2=0/19, 2-3=-105/40, 3-4=-106/38, 4-5=0/19
BOT CHORD 2-4=-6/77

NOTES

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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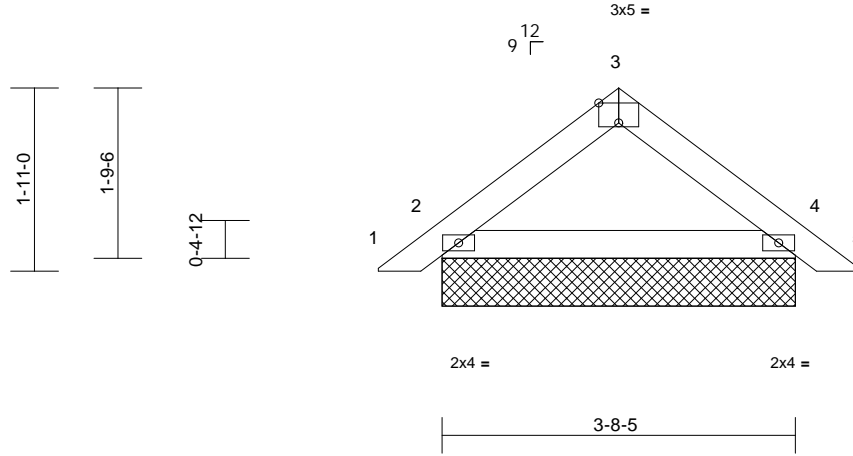
Job 20010112	Truss PB05C	Truss Type Piggyback	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115634
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:14
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Page: 1

-0-8-0	1-10-3	3-8-5	4-4-5
0-8-0	1-10-3	1-10-3	0-8-0



Scale = 1:24.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFLL	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	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 45 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 5-1-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=3-8-5, 4=3-8-5, 6=3-8-5, 10=3-8-5
Max Horiz 2=-34 (LC 11), 6=-34 (LC 11)
Max Uplift 2=-2 (LC 13), 6=-2 (LC 13)
Max Grav 2=175 (LC 2), 4=181 (LC 2), 6=175 (LC 2), 10=181 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

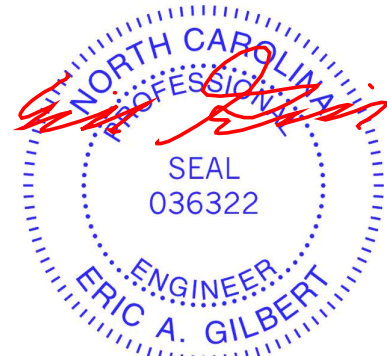
TOP CHORD 1-2=0/20, 2-3=-109/41, 3-4=-109/39, 4-5=0/20
BOT CHORD 2-4=-7/79

NOTES

- 3-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-10; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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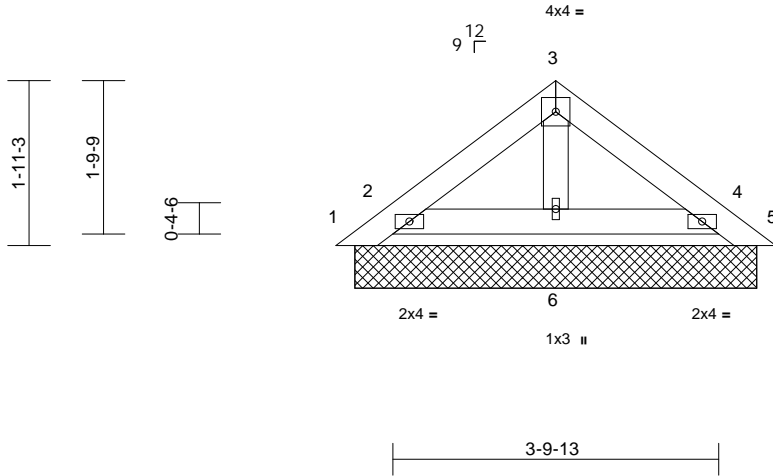
Job 20010112	Truss PB05D	Truss Type Piggyback	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115635
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:15
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Page: 1

0-8-0	1-10-15	3-9-13	4-5-13
0-8-0	1-10-15	1-10-15	0-8-0



Scale = 1:27

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0											
										Weight: 17 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 5-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=4-8-8, 2=4-8-8, 4=4-8-8, 5=4-8-8, 6=4-8-8
Max Horiz 1=34 (LC 12)
Max Uplift 1=55 (LC 25), 2=-47 (LC 13), 4=-39 (LC 14), 5=-39 (LC 26)
Max Grav 1=37 (LC 10), 2=171 (LC 25), 4=160 (LC 2), 5=24 (LC 14), 6=117 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-48/68, 2-3=-56/29, 3-4=-55/29, 4-5=-22/39
BOT CHORD 2-6=-17/28, 4-6=-17/28
WEBS 3-6=-70/14

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 2-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 1 and 39 lb uplift at joint 5.
- 9) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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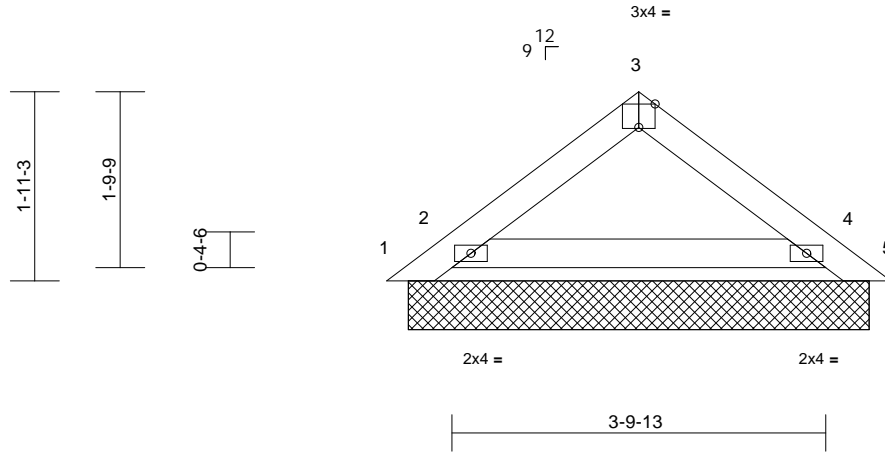
Job 20010112	Truss PB05E	Truss Type Piggyback	Qty 9	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115636
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1

-0-8-0	1-10-15	3-9-13	4-5-13
0-8-0	1-10-15	1-10-15	0-8-0



Scale = 1:23.5

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0											
											Weight: 15 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-8-8, 2=4-8-8, 4=4-8-8, 5=4-8-8
Max Horiz 1=-35 (LC 11)
Max Uplift 1=-59 (LC 25), 2=-36 (LC 13),
4=-24 (LC 14), 5=-42 (LC 26)
Max Grav 1=38 (LC 10), 2=236 (LC 25),
4=227 (LC 2), 5=25 (LC 14)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-49/72, 2-3=-116/42, 3-4=-116/42,
4-5=-23/41
BOT CHORD 2-4=-4/61

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=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
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 1 and 42 lb uplift at joint 5.
- One RT4 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

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ENGINEERING BY
TRENCO
A MITek Affiliate

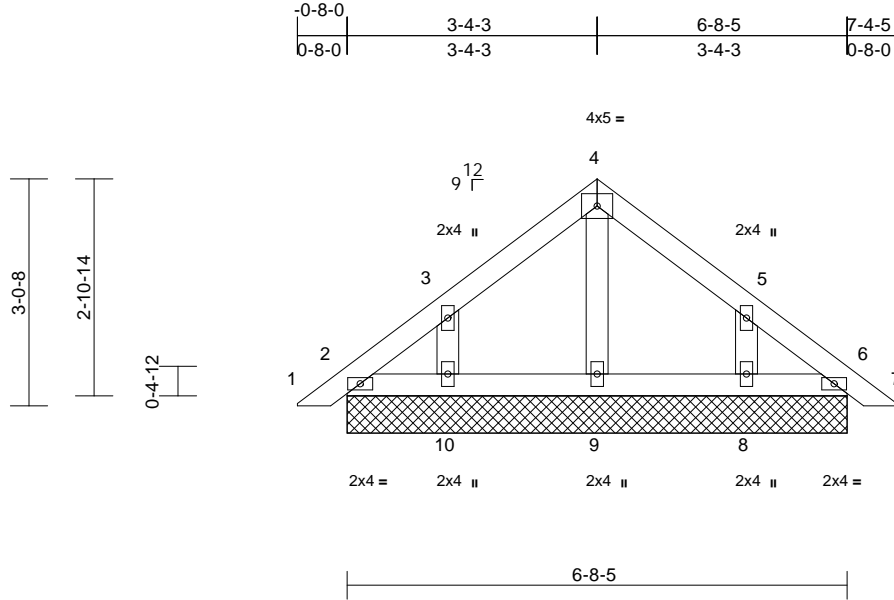
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss PB08	Truss Type Piggyback	Qty 2	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115637
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	15	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
OTHERS 2x4 SP No.3

BRACING

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

REACTIONS (size)

2=6-8-5, 6=6-8-5, 8=6-8-5,
9=6-8-5, 10=6-8-5, 11=6-8-5,
15=6-8-5

Max Horiz 2=-56 (LC 11), 11=-56 (LC 11)
Max Uplift 2=-7 (LC 9), 8=-42 (LC 14), 10=-43 (LC 13), 11=-7 (LC 9)
Max Grav 2=78 (LC 2), 6=78 (LC 2), 8=169 (LC 26), 9=116 (LC 2), 10=170 (LC 25), 11=78 (LC 2), 15=78 (LC 2)

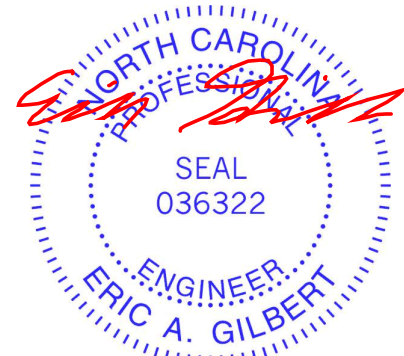
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-43/42, 3-4=-67/60,
4-5=-67/60, 5-6=-29/29, 6-7=0/20
BOT CHORD 2-10=-29/54, 9-10=-29/54, 8-9=-29/54,
6-8=-29/54
WEBS 4-9=-73/0, 3-10=-151/108, 5-8=-151/108

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 9, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



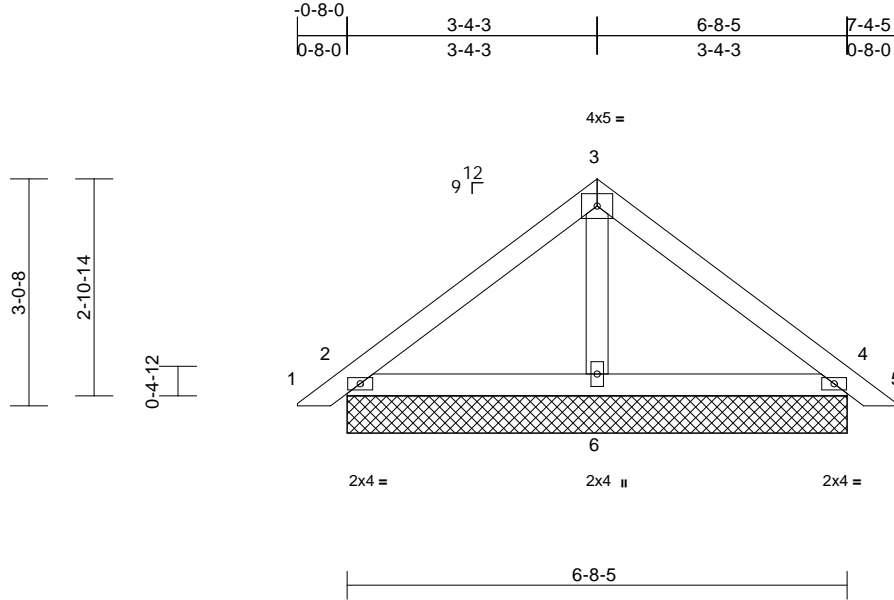
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss PB08A	Truss Type Piggyback	Qty 10	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115638
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:15
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Page: 1



Scale = 1:30.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.15	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	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
OTHERS 2x4 SP No.3

BRACING

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

REACTIONS

(size) 2=6-8-5, 4=6-8-5, 6=6-8-5, 7=6-8-5, 11=6-8-5
Max Horiz 2=-56 (LC 11), 7=-56 (LC 11)
Max Uplift 2=-14 (LC 13), 4=-19 (LC 14), 7=-14 (LC 13), 11=-19 (LC 14)
Max Grav 2=192 (LC 2), 4=192 (LC 2), 6=205 (LC 2), 7=192 (LC 2), 11=192 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-133/78, 3-4=-133/78, 4-5=0/20
BOT CHORD 2-6=-16/68, 4-6=-1/68
WEBS 3-6=-74/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

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TRENCO
A MITek Affiliate

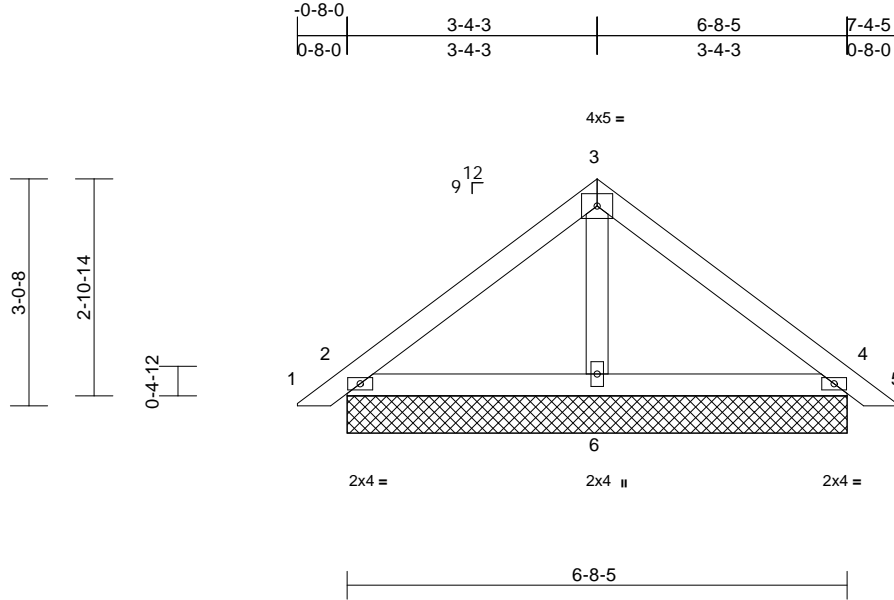
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss PB08B	Truss Type Piggyback	Qty 2	Ply 3	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115639
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1



Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 85 lb	FT = 20%

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

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

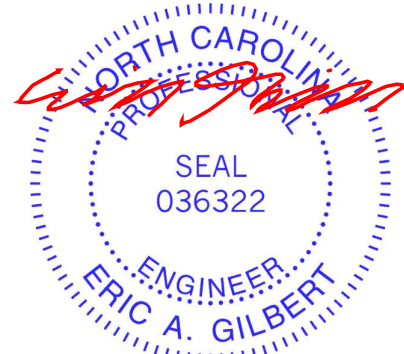
REACTIONS (size) 2=6-8-5, 4=6-8-5, 6=6-8-5, 7=6-8-5, 11=6-8-5
Max Horiz 2=-55 (LC 11), 7=-55 (LC 11)
Max Uplift 2=-14 (LC 13), 4=-19 (LC 14), 7=-14 (LC 13), 11=-19 (LC 14)
Max Grav 2=185 (LC 2), 4=185 (LC 2), 6=200 (LC 2), 7=185 (LC 2), 11=185 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-127/75, 3-4=-127/76, 4-5=0/19
BOT CHORD 2-6=-21/81, 4-6=-1/64
WEBS 3-6=-75/0

NOTES
1) 3-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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.

- 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



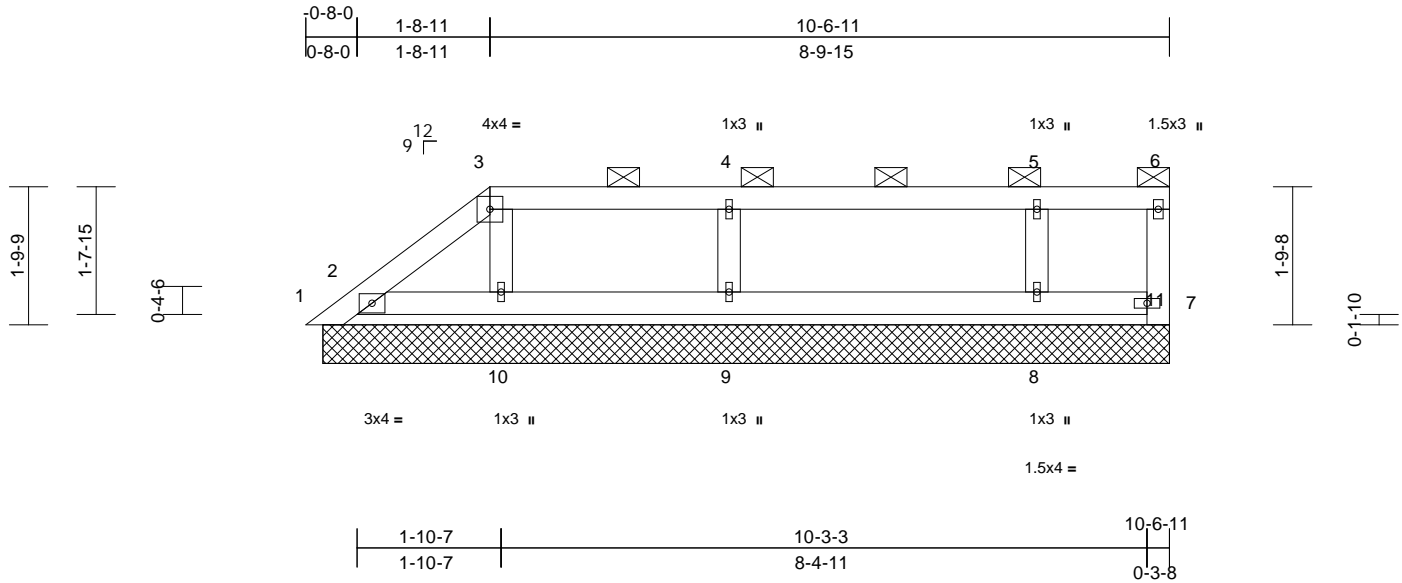
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss PB11	Truss Type Piggyback	Qty 1	Ply 2	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115640
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:16
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Page: 1



Scale = 1:29.9

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 80 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=11-0-0, 2=11-0-0, 7=11-0-0, 8=11-0-0, 9=11-0-0, 10=11-0-0, 11=11-0-0, 12=11-0-0
Max Horiz 1=49 (LC 14)
Max Uplift 1=43 (LC 39), 2=-17 (LC 15), 7=-1 (LC 11), 8=-8 (LC 12), 9=-14 (LC 11), 10=-9 (LC 12), 12=-17 (LC 15)
Max Grav 1=36 (LC 12), 2=188 (LC 35), 7=9 (LC 34), 8=375 (LC 34), 9=429 (LC 34), 10=180 (LC 34), 12=188 (LC 35)

FORCES

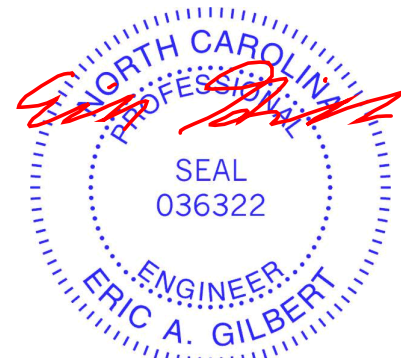
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-124/134, 2-3=-44/42, 3-4=-19/23, 4-5=-19/23, 5-6=-19/23, 7-11=0/0, 6-7=-8/5
BOT CHORD 2-10=-30/33, 9-10=-34/35, 8-9=-34/35, 7-8=-34/35
WEBS 4-9=-356/141, 5-8=-307/123, 3-10=-137/86

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * 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.
- Bearing at joint(s) 11, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1.

- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7, 2, 9, 8, and 10. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 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



February 26, 2020

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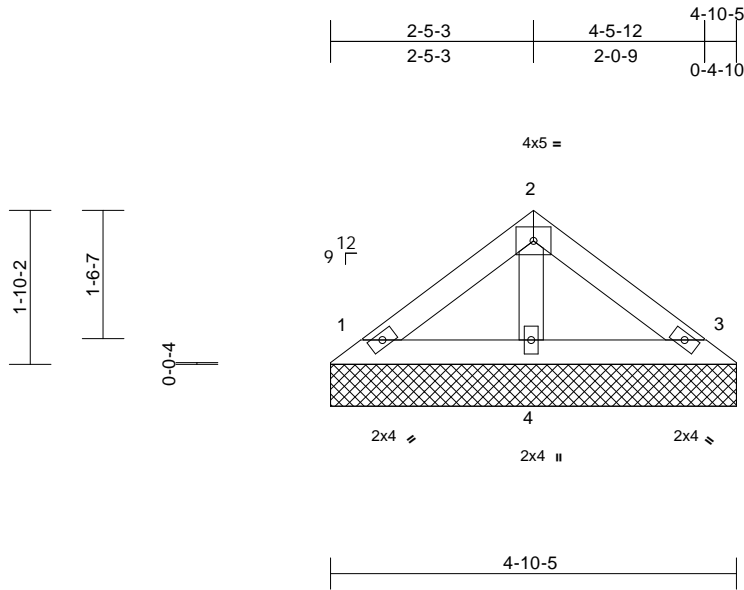
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss V04	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115641
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:16
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Page: 1



Scale = 1:27.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P							
BCDL	10.0									Weight: 17 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=4-10-5, 3=4-10-5, 4=4-10-5
Max Horiz 1=-30 (LC 11)
Max Uplift 1=-7 (LC 13), 3=-10 (LC 14)
Max Grav 1=89 (LC 2), 3=91 (LC 2), 4=143 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-55/28, 2-3=-54/29
BOT CHORD 1-4=-6/23, 3-4=-5/25
WEBS 2-4=-93/35

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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

- Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 3, and 4. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



February 26, 2020

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A MiTek Affiliate

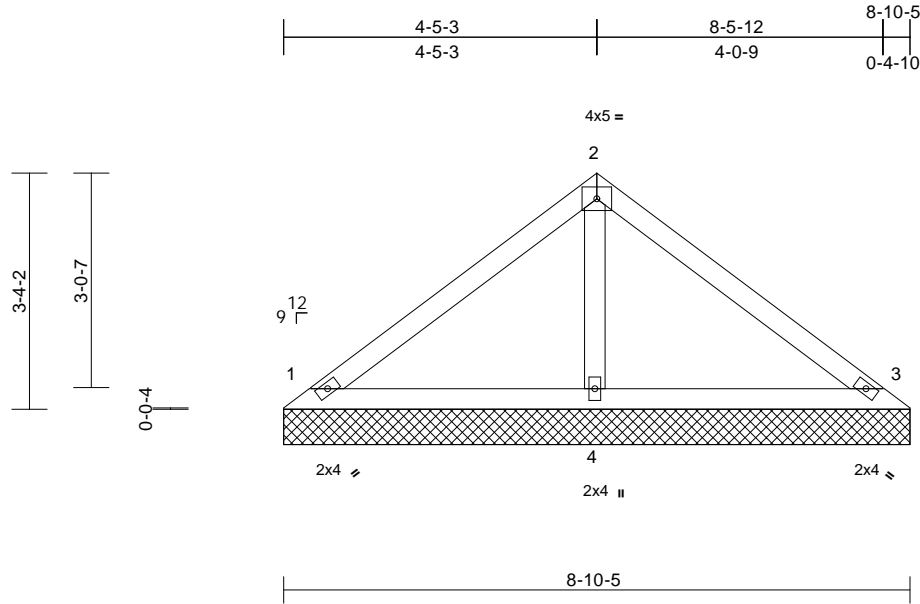
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss V08	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115642
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:16
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Page: 1



Scale = 1:32.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	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: 32 lb	FT = 20%	

LUMBER

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

BRACING

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

REACTIONS

(size) 1=8-10-5, 3=8-10-5, 4=8-10-5
Max Horiz 1=-60 (LC 11)
Max Uplift 1=-15 (LC 13), 3=-20 (LC 14)
Max Grav 1=178 (LC 2), 3=180 (LC 2), 4=285 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-110/53, 2-3=-106/54
BOT CHORD 1-4=-11/47, 3-4=-10/48
WEBS 2-4=-184/63

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, 3, and 4. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

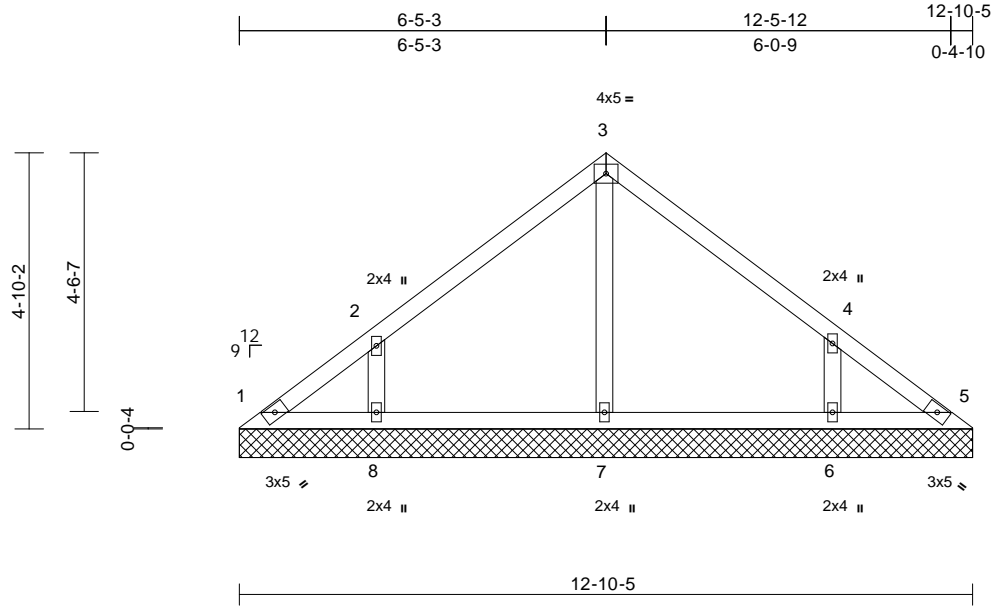
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss V12	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115643
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:17
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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	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 52 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=12-10-5, 5=12-10-5, 6=12-10-5, 7=12-10-5, 8=12-10-5
Max Horiz 1=-89 (LC 9)
Max Uplift 1=-19 (LC 9), 5=-1 (LC 10), 6=-73 (LC 14), 8=-75 (LC 13)
Max Grav 1=80 (LC 25), 5=71 (LC 24), 6=310 (LC 25), 7=255 (LC 2), 8=313 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-92/76, 2-3=-128/93, 3-4=-123/94, 4-5=-73/46
BOT CHORD 1-8=-26/54, 7-8=-26/54, 6-7=-25/55, 5-6=-25/55
WEBS 3-7=-170/3, 2-8=-259/179, 4-6=-255/176

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=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
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 7, 8, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



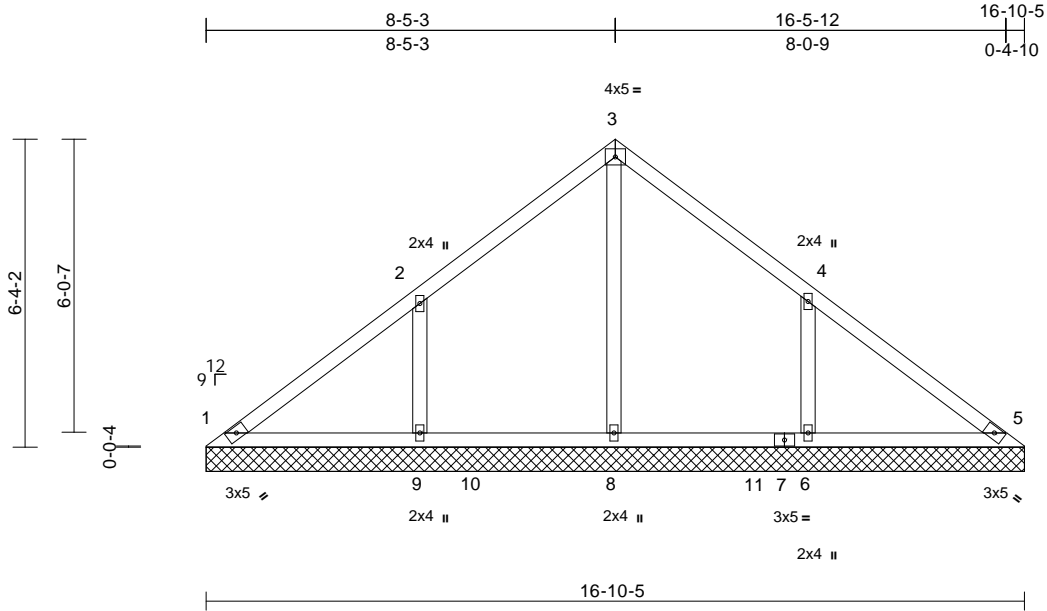
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss V16	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115644
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MITek Industries, Inc. Wed Feb 26 11:26:17
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Page: 1



Scale = 1:47.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 72 lb	FT = 20%

LUMBER

- TOP CHORD 2x4 SP No.2
- BOT CHORD 2x4 SP No.2
- OTHERS 2x4 SP No.3 *Except* 8-3:2x4 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=16-10-5, 5=16-10-5, 6=16-10-5, 8=16-10-5, 9=16-10-5
- Max Horiz 1=-119 (LC 9)
- Max Uplift 6=-90 (LC 14), 9=-91 (LC 13)
- Max Grav 1=150 (LC 25), 5=149 (LC 2), 6=429 (LC 25), 8=348 (LC 24), 9=427 (LC 24)

FORCES

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-140/97, 2-3=-140/124, 3-4=-141/125, 4-5=-113/67
- BOT CHORD 1-9=-53/82, 9-10=-53/82, 8-10=-53/82, 8-11=-52/82, 7-11=-52/82, 6-7=-52/82, 5-6=-52/82
- WEBS 3-8=-162/0, 2-9=-307/200, 4-6=-307/199

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=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
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, 9, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



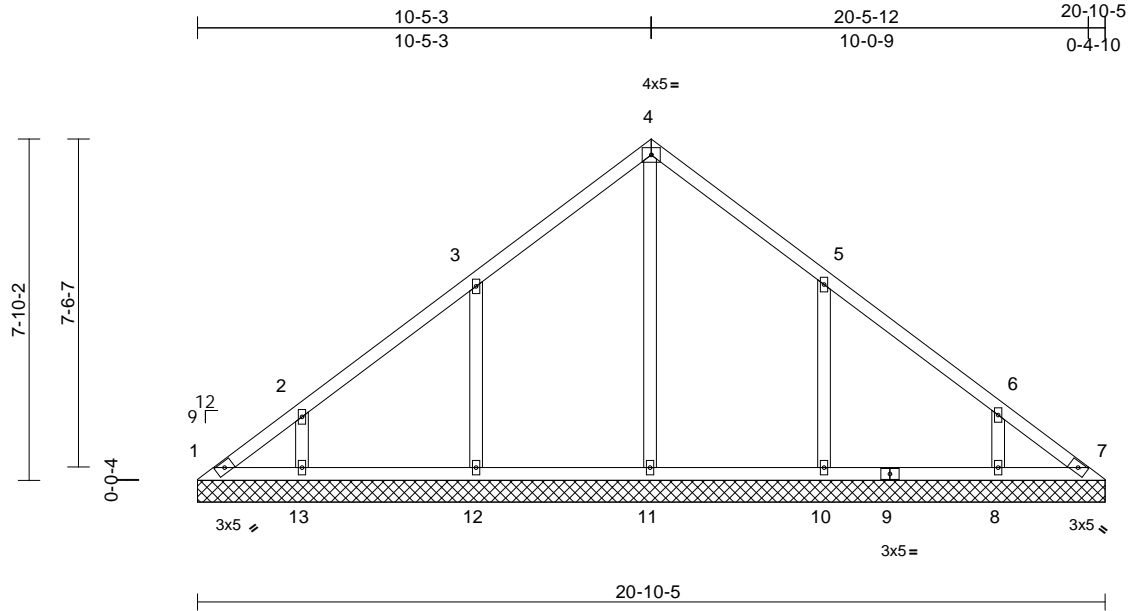
February 26, 2020

Job 20010112	Truss V20	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115645
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:17
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Page: 1



Scale = 1:53

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 96 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3 *Except* 11-4:2x4 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=20-10-5, 7=20-10-5, 8=20-10-5, 10=20-10-5, 11=20-10-5, 12=20-10-5, 13=20-10-5
 Max Horiz 1=-149 (LC 9)
 Max Uplift 1=-37 (LC 11), 7=-6 (LC 12), 8=-60 (LC 14), 10=-82 (LC 14), 12=-84 (LC 13), 13=-59 (LC 13)
 Max Grav 1=103 (LC 25), 7=84 (LC 24), 8=274 (LC 25), 10=423 (LC 25), 11=375 (LC 27), 12=426 (LC 24), 13=271 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension

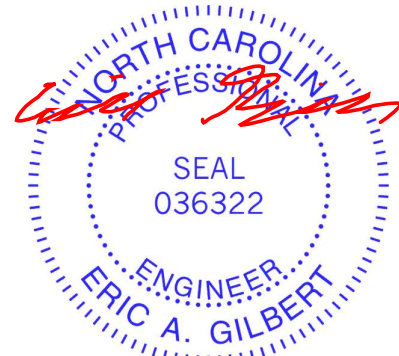
TOP CHORD 1-2=-150/123, 2-3=-151/94, 3-4=-170/161, 4-5=-170/161, 5-6=-115/54, 6-7=-117/92
 BOT CHORD 1-13=-72/107, 12-13=-72/107, 11-12=-72/107, 10-11=-72/107, 9-10=-72/107, 8-9=-72/107, 7-8=-72/107
 WEBS 4-11=-165/0, 3-12=-295/196, 2-13=-224/150, 5-10=-292/194, 6-8=-226/151

NOTES

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 7, 11, 12, 13, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



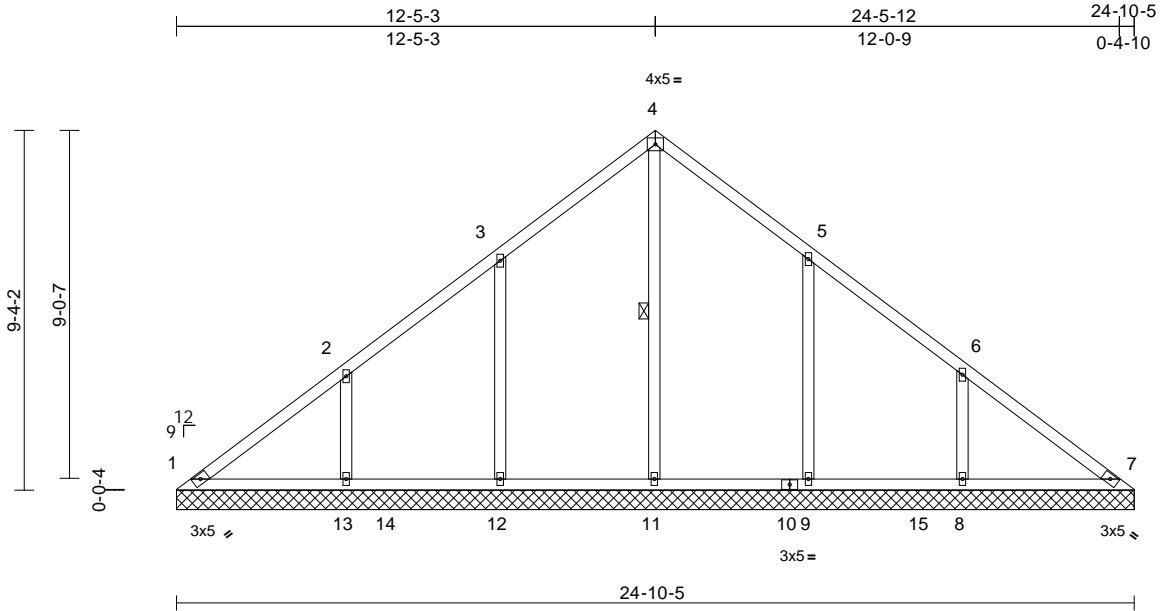
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss V24	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115646
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:17
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Page: 1



Scale = 1:59.8

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	0.19	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	0.17	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 120 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.2 *Except* 13-2,8-6:2x4 SP No.3

BRACING

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

WEBS 1 Row at midpt 4-11

REACTIONS (size) 1=24-10-5, 7=24-10-5, 8=24-10-5, 9=24-10-5, 11=24-10-5, 12=24-10-5, 13=24-10-5
 Max Horiz 1=178 (LC 10)
 Max Uplift 1=-16 (LC 9), 8=-81 (LC 14), 9=-77 (LC 14), 12=-79 (LC 13), 13=-80 (LC 13)
 Max Grav 1=172 (LC 25), 7=153 (LC 2), 8=409 (LC 25), 9=465 (LC 25), 11=376 (LC 27), 12=468 (LC 24), 13=403 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-175/144, 2-3=-160/103, 3-4=-198/195, 4-5=-198/195, 5-6=-117/55, 6-7=-134/94
 BOT CHORD 1-13=-94/133, 13-14=-94/133, 12-14=-94/133, 11-12=-94/133, 10-11=-94/133, 9-10=-94/133, 9-15=-94/133, 8-15=-94/133, 7-8=-94/133
 WEBS 4-11=-176/21, 3-12=-280/188, 2-13=-285/185, 5-9=-277/186, 6-8=-288/187

NOTES

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 7, 11, 12, 13, 9, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



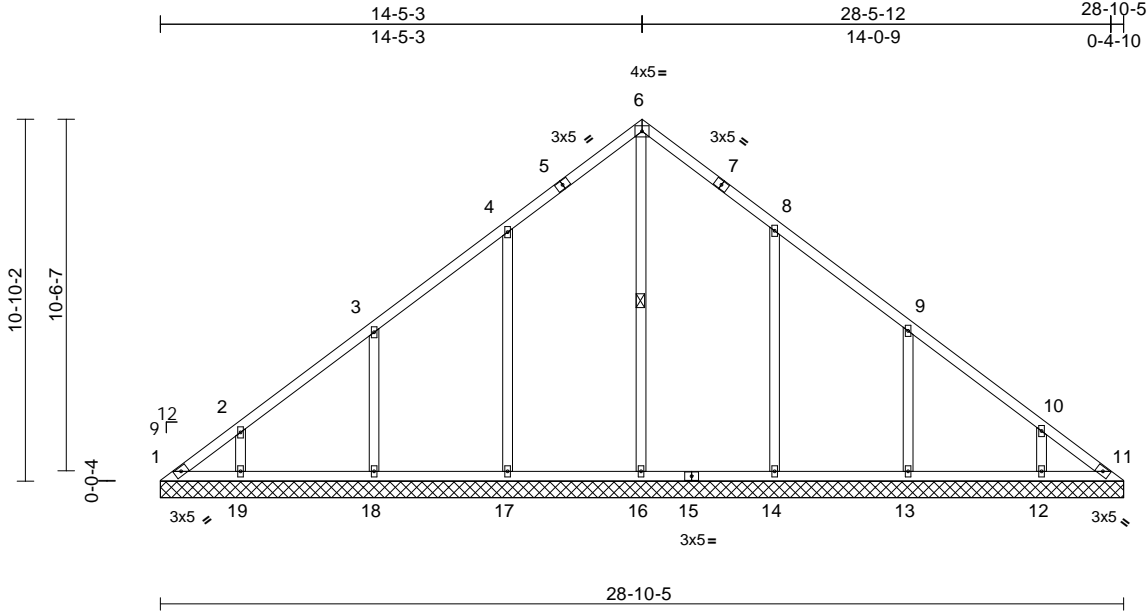
818 Soundside Road
 Edenton, NC 27932

Job 20010112	Truss V28	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115647
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:18
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Page: 1



Scale = 1:69

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	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	0.01	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 149 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3 *Except* 16-6,17-4,14-8:2x4 SP No.2

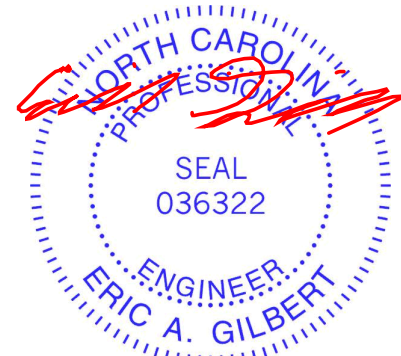
WEBS	
6-16	=-186/58, 4-17=-283/188,
3-18	=-274/183, 2-19=-231/154,
8-14	=-280/186, 9-13=-275/184,
10-12	=-231/154

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 16, 17, 18, 19, 14, 13, 12, and 11. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-16
REACTIONS	(size)
Max Horiz	1=208 (LC 9)
Max Uplift	1=-69 (LC 11), 11=-26 (LC 12), 12=-62 (LC 14), 13=-73 (LC 14), 14=-79 (LC 14), 17=-80 (LC 13), 18=-72 (LC 13), 19=-62 (LC 13)
Max Grav	1=129 (LC 10), 11=98 (LC 27), 12=280 (LC 25), 13=403 (LC 25), 14=479 (LC 25), 16=382 (LC 27), 17=482 (LC 24), 18=402 (LC 24), 19=279 (LC 24)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-213/175, 2-3=-185/142, 3-4=-165/118, 4-5=-228/214, 5-6=-202/231, 6-7=-202/231, 7-8=-228/214, 8-9=-114/91, 9-10=-134/74, 10-11=-183/147
BOT CHORD	1-19=-115/158, 18-19=-115/158, 17-18=-115/158, 16-17=-115/158, 15-16=-115/159, 14-15=-115/159, 13-14=-115/159, 12-13=-115/159, 11-12=-115/159

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



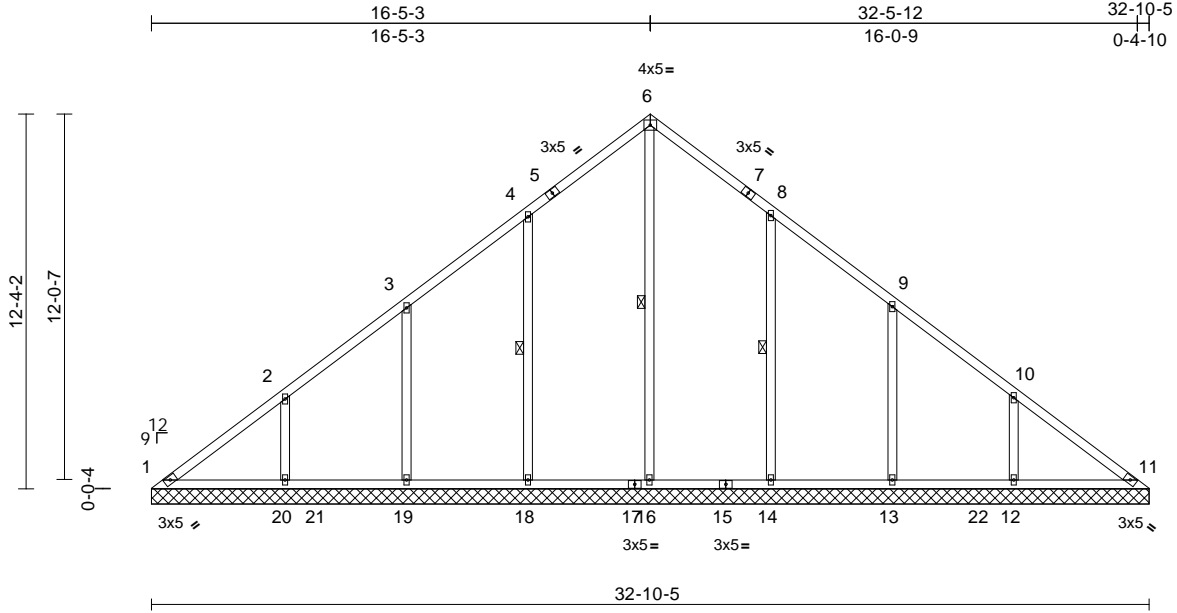
818 Soundside Road
Edenton, NC 27932

Job 20010112	Truss V32	Truss Type Valley	Qty 1	Ply 1	MIKE SHEAN / FRANK RESIDENCE Job Reference (optional)	E14115648
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Feb 13 2020 Print: 8.330 S Feb 13 2020 MiTek Industries, Inc. Wed Feb 26 11:26:18
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Page: 1



Scale = 1:75.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	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	0.16	Horiz(TL)	0.01	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 178 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.2 *Except* 20-2,12-10:2x4 SP No.3

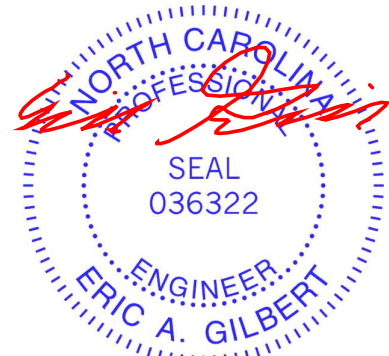
WEBS	
6-16	=-213/93, 4-18=-286/189,
3-19	=-261/176, 2-20=-290/188,
8-14	=-283/187, 9-13=-261/177,
10-12	=-292/189

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 16, 18, 19, 20, 14, 13, 12, and 11. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-16, 4-18, 8-14
REACTIONS (size)	
	1=32-10-5, 11=32-10-5, 12=32-10-5, 13=32-10-5, 14=32-10-5, 16=32-10-5, 18=32-10-5, 19=32-10-5, 20=32-10-5
Max Horiz	1=238 (LC 10)
Max Uplift	1=-35 (LC 9), 12=-83 (LC 14), 13=-68 (LC 14), 14=-80 (LC 14), 18=-81 (LC 13), 19=-68 (LC 13), 20=-82 (LC 13)
Max Grav	1=191 (LC 25), 11=158 (LC 24), 12=414 (LC 25), 13=444 (LC 25), 14=476 (LC 25), 16=398 (LC 27), 18=479 (LC 24), 19=443 (LC 24), 20=409 (LC 24)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-230/195, 2-3=-193/142, 3-4=-169/132, 4-5=-257/240, 5-6=-231/266, 6-7=-231/266, 7-8=-257/240, 8-9=-135/125, 9-10=-135/64, 10-11=-181/149
BOT CHORD	1-20=-138/185, 20-21=-138/185, 19-21=-138/185, 18-19=-138/185, 17-18=-138/185, 16-17=-138/185, 15-16=-138/186, 14-15=-138/186, 13-14=-138/186, 13-22=-138/186, 12-22=-138/186, 11-12=-138/186

LOAD CASE(S) Standard



February 26, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

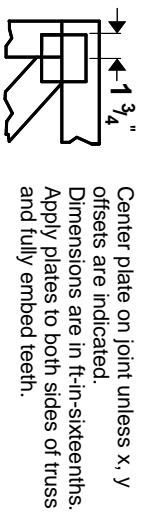
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



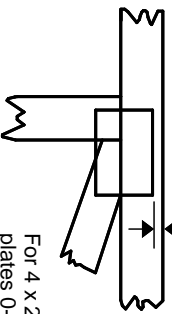
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



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

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

4 X 4

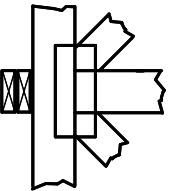
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

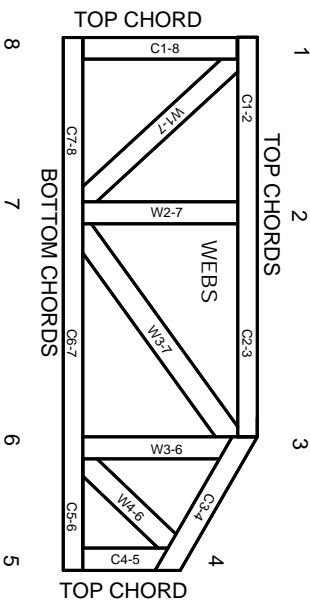


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
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.

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MITek Engineering Reference Sheet: MI-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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