

RE: 21020048-01
 184 Crossings at Anderson Creek-Kessler B-Roof

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Capitol City Homes Project Name: 21020048-01
 Lot/Block: 184 Model: Kessler B
 Address: 373 Lake Crest Drive Subdivision: Crossing at AC
 City: Spring Lake State: NC

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

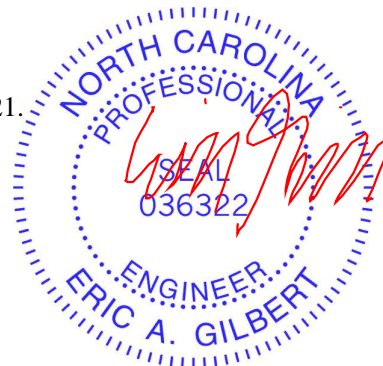
Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.2
 Wind Code: ASCE 7-10 Wind Speed: 130 mph
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E14527061	T4GE	2/5/2021
2	E14527062	T5SE	2/5/2021
3	E14527063	T5	2/5/2021
4	E14527064	T5A	2/5/2021
5	E14527065	T5GE	2/5/2021
6	E14527066	T1GR	2/5/2021
7	E14527067	T1GRA	2/5/2021
8	E14527068	T1	2/5/2021
9	E14527069	T1A	2/5/2021
10	E14527070	J2GR	2/5/2021
11	E14527071	J3	2/5/2021
12	E14527072	J2GRA	2/5/2021
13	E14527073	J1	2/5/2021
14	E14527074	CJ1	2/5/2021
15	E14527075	PB1	2/5/2021
16	E14527076	T2GE	2/5/2021
17	E14527077	T2	2/5/2021
18	E14527078	T3GE	2/5/2021
19	E14527079	T3	2/5/2021

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).
 Truss Design Engineer's Name: Gilbert, Eric
 My license renewal date for the state of North Carolina is December 31, 2021.
 North Carolina COA: C-0844

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

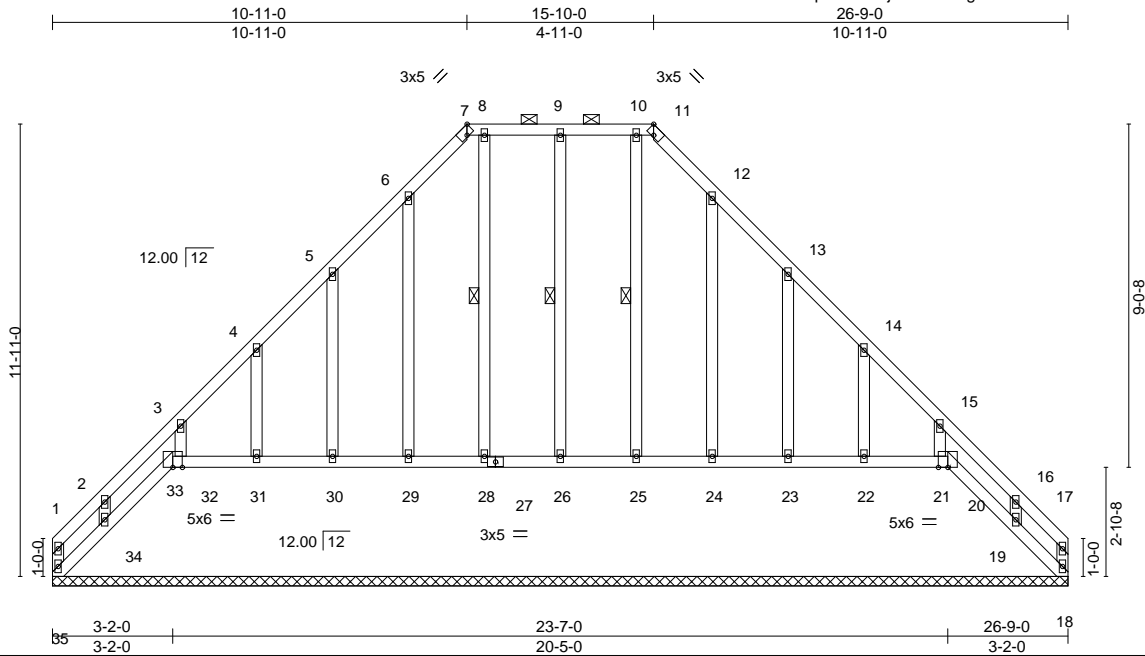


Job 21020048-01	Truss T4GE	Truss Type GABLE	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527061
--------------------	---------------	---------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:29 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-70j6LhYzSOgKQV1a0hYEWrY94howJ0aSFxHVdz539C



Scale = 1:60.7

Plate Offsets (X,Y)-- [7:0-2-8,Edge], [11:0-2-8,Edge], [20:0-0-0,0-1-12], [21:0-1-12,0-0-0], [32:0-1-12,0-0-0], [33:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	1-11-4	TC 0.19	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 18.9/20.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.11	Horz(CT) 0.01	18	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 187 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3 *Except*
 9-26,8-28,6-29,10-25,12-24: 2x4 SP No.2

BRACING-

TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-11.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 9-26, 8-28, 10-25

REACTIONS.

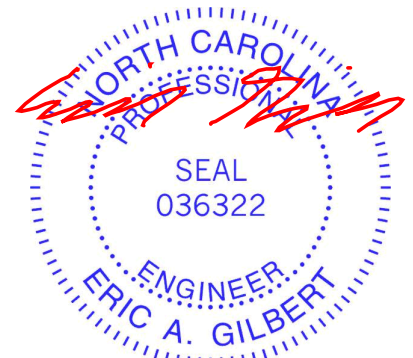
All bearings 26-9-0.
 (lb) - Max Horz 35=-232(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 18, 33, 26, 29, 30, 31, 32, 24, 23, 22, 21 except 35=-299(LC 9), 20=-118(LC 12), 34=-170(LC 10), 19=-142(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 18, 33, 20, 26, 28, 29, 30, 31, 32, 34, 25, 24, 23, 22, 21, 19 except 35=340(LC 12)

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

TOP CHORD 5-6=-272/310, 6-7=-320/366, 7-8=-252/298, 8-9=-252/298, 9-10=-252/298, 10-11=-252/298, 11-12=-320/366, 12-13=-272/310

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=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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 33, 26, 29, 30, 31, 32, 24, 23, 22, 21 except (jt=lb) 35=299, 20=118, 34=170, 19=142.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 33, 20, 26, 28, 29, 30, 31, 32, 34, 25, 24, 23, 22, 21, 19.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 18, 2020

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

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



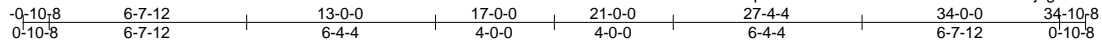
818 Soundside Road
 Edenton, NC 27932

Job 21020048-01	Truss T5SE	Truss Type Roof Special Structural Gable	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527062
--------------------	---------------	---	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:38 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-Mlm5?QoBrDXOwhmcPLf5QjzgbXXCAvW9cGJcz5393



4x6 ||

Scale = 1:77.5

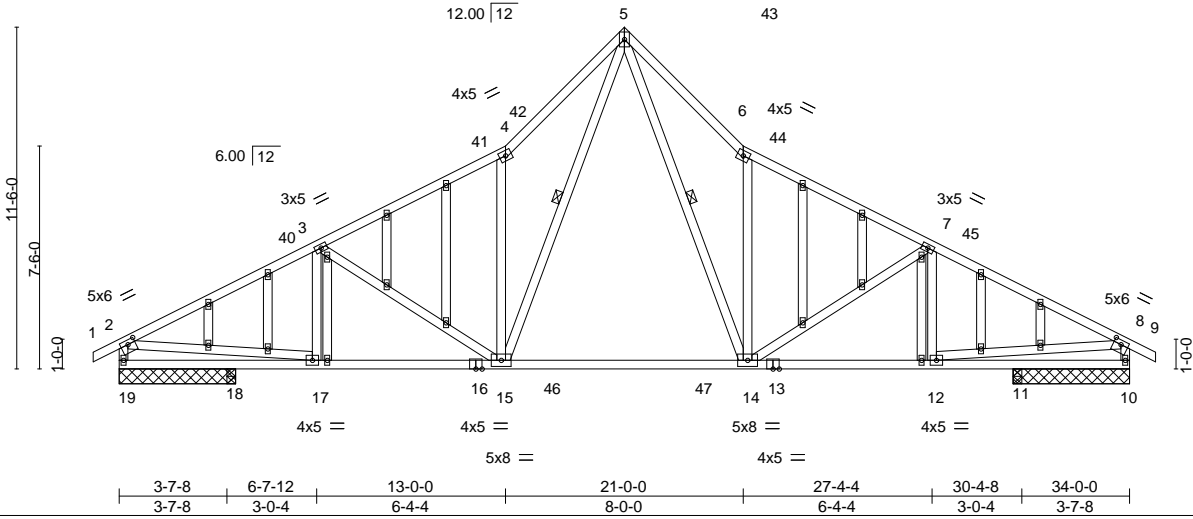


Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [8:0-3-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.65	Vert(LL) -0.26	14-15	>999	240	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.78	Vert(CT) -0.46	14-15	>694	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.89	Horz(CT) 0.05	10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 266 lb	FT = 20%

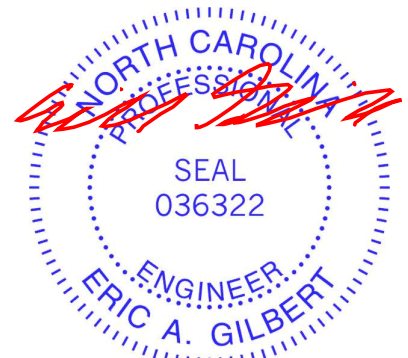
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
7-12,3-17,2-19,8-10: 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Sheathed or 3-7-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 5-15

REACTIONS. All bearings 3-11-0 except (jt=length) 18=0-3-8, 11=0-3-8.
(lb) - Max Horz 19=175(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 19, 10
Max Grav All reactions 250 lb or less at joint(s) 18, 11 except 19=1210(LC 2), 10=1210(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1893/475, 3-4=-1679/457, 4-5=-2104/770, 5-6=-2104/771, 6-7=-1679/457,
7-8=-1893/475, 2-19=-1228/381, 8-10=-1228/381
BOT CHORD 18-19=-175/272, 17-18=-175/272, 15-17=-321/1617, 14-15=0/982, 12-14=-317/1617
WEBS 5-14=-514/1408, 6-14=-997/466, 7-14=-301/194, 5-15=-513/1406, 4-15=-997/465,
3-15=-301/194, 2-17=-231/1449, 8-12=-232/1449

- 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 10.



June 18, 2020

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

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



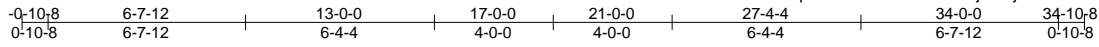
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss T5	Truss Type Roof Special	Qty 10	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527063
--------------------	-------------	----------------------------	-----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:31 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-3PrSX0ioV4eOajfQirj0Jxwn?CPO0ltvZQOaVz539A



4x6 ||

Scale = 1:77.5

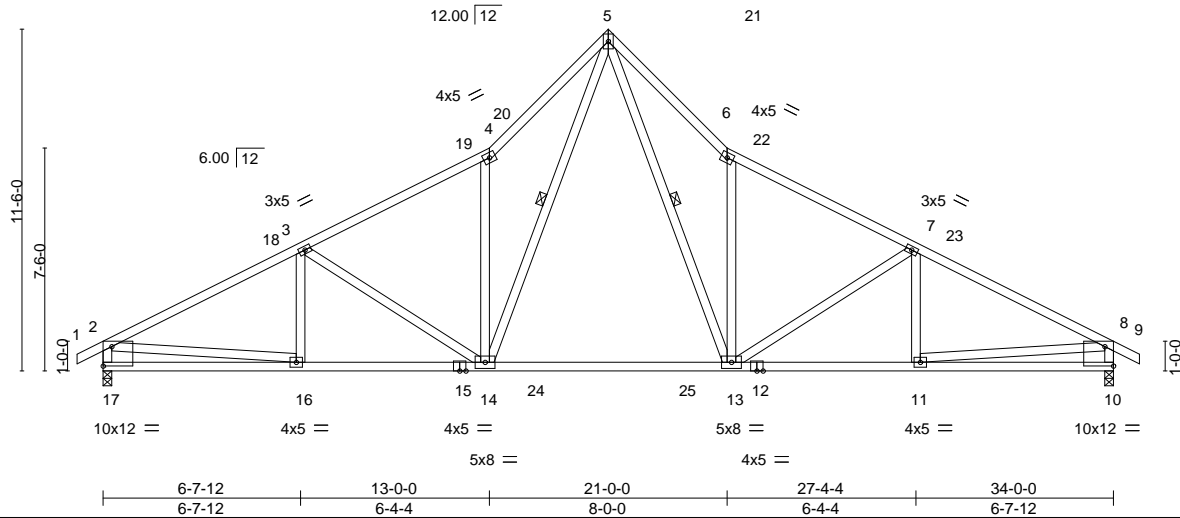


Plate Offsets (X,Y)-- [10:Edge,0-7-13], [10:0-1-12,0-0-0], [17:0-1-12,0-0-0], [17:Edge,0-7-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.68	Vert(LL) -0.29	13-14	>999	240	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.82	Vert(CT) -0.52	13-14	>784	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.93	Horz(CT) 0.06	10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH						
BCDL 10.0	Code IRC2015/TPI2014						Weight: 222 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
7-11,3-16,2-17,8-10: 2x4 SP No.3

BRACING-
TOP CHORD Sheathed or 3-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 5-14

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=175(LC 13)
Max Grav 17=1410(LC 2), 10=1410(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2123/478, 3-4=-1790/459, 4-5=-2244/772, 5-6=-2244/772, 6-7=-1790/459,
7-8=-2123/478, 2-17=-1341/382, 8-10=-1341/382
BOT CHORD 16-17=-148/409, 14-16=-324/1823, 13-14=0/1049, 11-13=-320/1823, 10-11=-97/307
WEBS 5-13=-515/1517, 6-13=-1046/466, 7-13=-411/195, 5-14=-515/1517, 4-14=-1046/466,
3-14=-411/195, 2-16=-227/1526, 8-11=-228/1526

- 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
 - 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 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



June 18, 2020

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

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



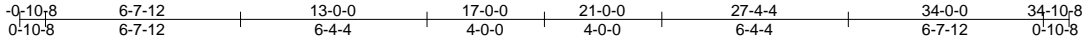
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss T5A	Truss Type Roof Special	Qty 8	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527064
--------------------	--------------	----------------------------	----------	----------	--	-----------

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

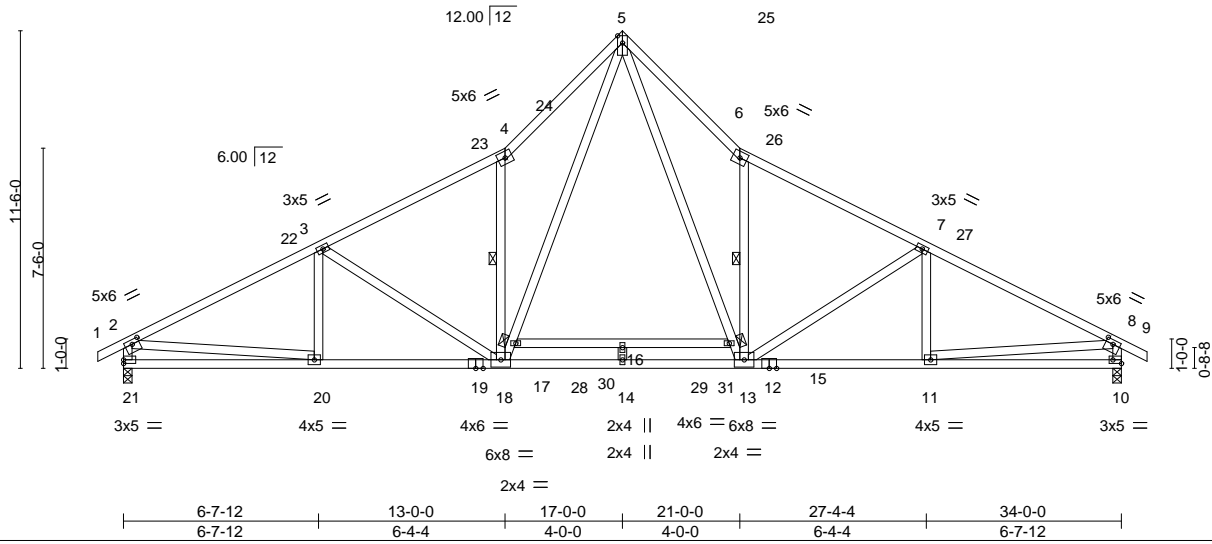
8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:33 2020 Page 1

ID:hvcBhN021MZmZDW2EtV1bpzbl2v-?ozCxik21hu5p1popsmUOM0r5hsGs1uANtvVeOz5398



4x8 ||

Scale = 1:78.5



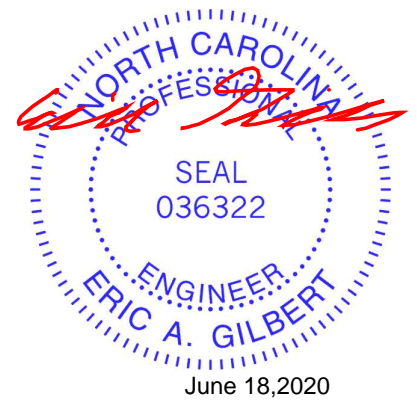
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.33 16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.50	Vert(CT) -0.71 16 >568 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.06 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 233 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 12-19: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-11,3-20,2-21,8-10,14-16: 2x4 SP No.3	WEBS 1 Row at midpt 6-13, 4-18

REACTIONS. (size) 21=0-3-8, 10=0-3-8
 Max Horz 21=-175(LC 13)
 Max Grav 21=1585(LC 2), 10=1585(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2434/221, 3-4=-2245/156, 4-5=-2824/389, 5-6=-2824/389, 6-7=-2245/156,
 7-8=-2434/221, 2-21=-1512/242, 8-10=-1512/242
 BOT CHORD 20-21=-130/438, 18-20=-94/2205, 14-18=0/1166, 13-14=0/1166, 11-13=-91/2107,
 10-11=-78/328
 WEBS 5-15=-228/1997, 13-15=-296/1949, 6-13=-1236/333, 7-13=-355/244, 17-18=-296/1950,
 5-17=-228/1997, 4-18=-1236/333, 3-18=-355/244, 2-20=-15/1809, 8-11=-15/1813

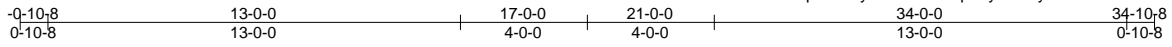
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 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 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.
 - 200.0lb AC unit load placed on the bottom chord, 17-0-0 from left end, supported at two points, 5-0-0 apart.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



Job 21020048-01	Truss T5GE	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527065
--------------------	---------------	--	----------	----------	--	-----------

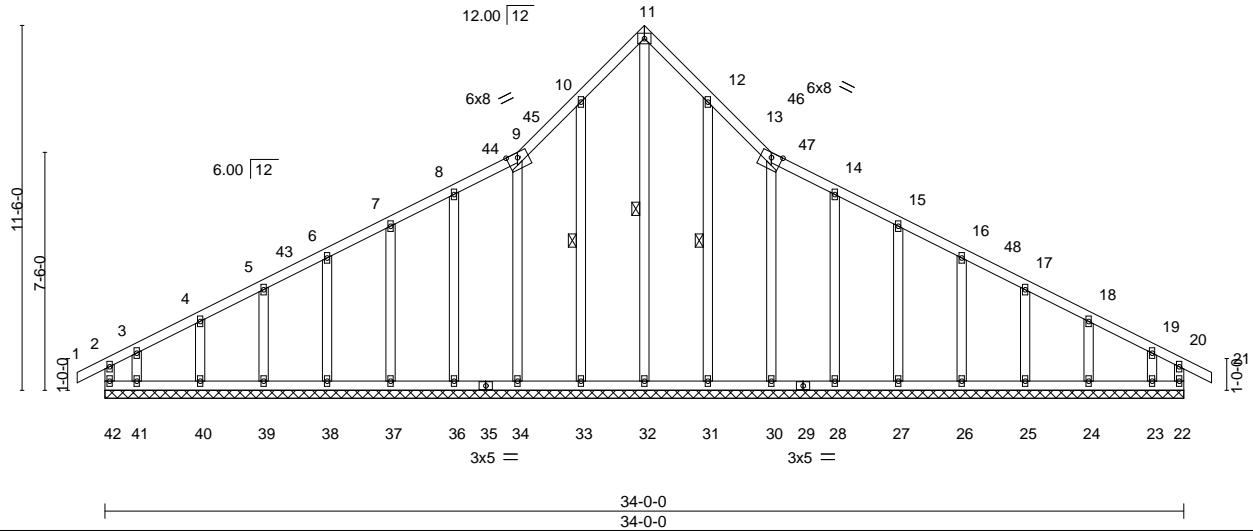
Carter Components (Sanford), Sanford, NC - 27332,

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:35 2020 Page 1
ID:hvcBhN021MZmzDW2E1V1bpzbl2v-yA4zMOIJZ19p3LyBxHoyUn5aYVkdK?ZTqBOcjHz5396



4x5 =

Scale = 1:72.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.00 21 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.00 21 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 22 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 241 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 11-32, 10-33, 12-31
OTHERS 2x4 SP No.3 *Except*	
11-32,10-33,9-34,8-36,12-31,13-30,14-28: 2x4 SP No.2	

REACTIONS. All bearings 34-0-0.
 (lb) - Max Horz 42=175(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 42, 22, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24 except 41=160(LC 15), 23=143(LC 16)
 Max Grav All reactions 250 lb or less at joint(s) 42, 22, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 28, 27, 26, 25, 24, 23 except 32=271(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 9-10=-104/252, 10-11=-194/349, 11-12=-194/349, 12-13=-104/252
 WEBS 11-32=-423/153

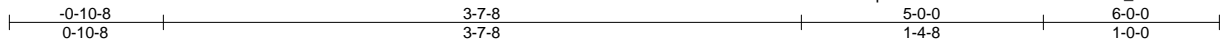
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 42, 22, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24 except (jt=lb) 41=160, 23=143.



Job 21020048-01	Truss T1GR	Truss Type Roof Special Girder	Qty 1	Ply 2	184 Crossings at Anderson Creek-Kessler B-Roof	E14527066
--------------------	---------------	-----------------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:23 2020 Page 1
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-ItMRrHcnOceWcV2tEma8_FbVUfUAWcvi3JUzIzz539l



Scale = 1:13.1

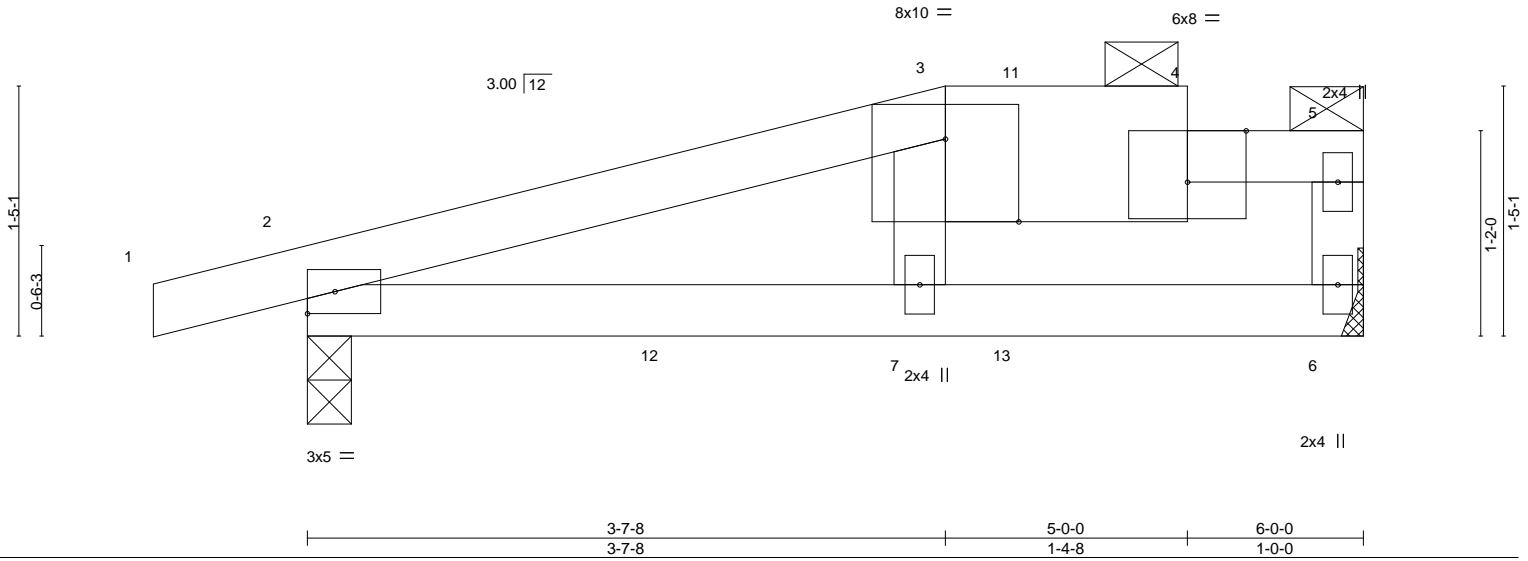


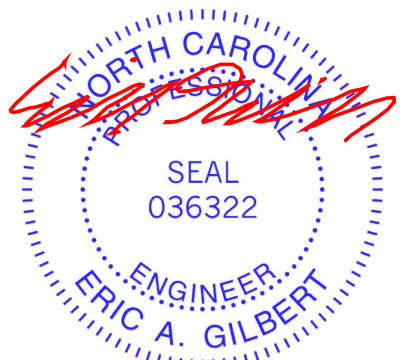
Plate Offsets (X,Y)-- [3:0-5-0,Edge], [4:0-4-0,Edge]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.09	7-10	>766	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.18	7-10	>393		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.02	2	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 50 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 3-4: 2x10 SP 2400F 2.0E	TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 6=Mechanical, 2=0-3-0
 Max Horz 2=26(LC 10)
 Max Uplift 6=9(LC 8), 2=-41(LC 7)
 Max Grav 6=376(LC 29), 2=428(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-7=-264/41

- 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, 2x10 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Webs 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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 6, 2.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 61 lb down and 33 lb up at 4-0-12 on top chord, and 118 lb down and 23 lb up at 2-0-12, and 24 lb down at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



LOAD CASE(S) Standard
 Continued on page 2

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

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

Job 21020048-01	Truss T1GR	Truss Type Roof Special Girder	Qty 1	Ply 2	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527066
--------------------	---------------	-----------------------------------	----------	-----------------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:23 2020 Page 2
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-ItMRrHcnOceWcV2tEma8_FbVUfUAWcvi3JUzIzz539!

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-48, 3-4=-58, 4-5=-138, 6-8=-20

Concentrated Loads (lb)

Vert: 11=-38(B) 12=-118(B) 13=-24(B)

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

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



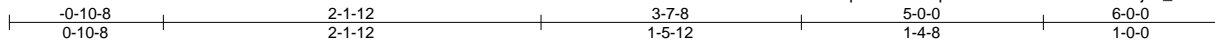
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss T1GRA	Truss Type Roof Special Girder	Qty 1	Ply 2	184 Crossings at Anderson Creek-Kessler B-Roof	E14527067
--------------------	----------------	-----------------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:24 2020 Page 1

ID:hvcBhN021MZmzDW2EtV1bpzbl2v-m3wp3ddP8wmNEfd4nT5NXT8j53_mF3FrizDWqPz539H



Scale = 1:13.1

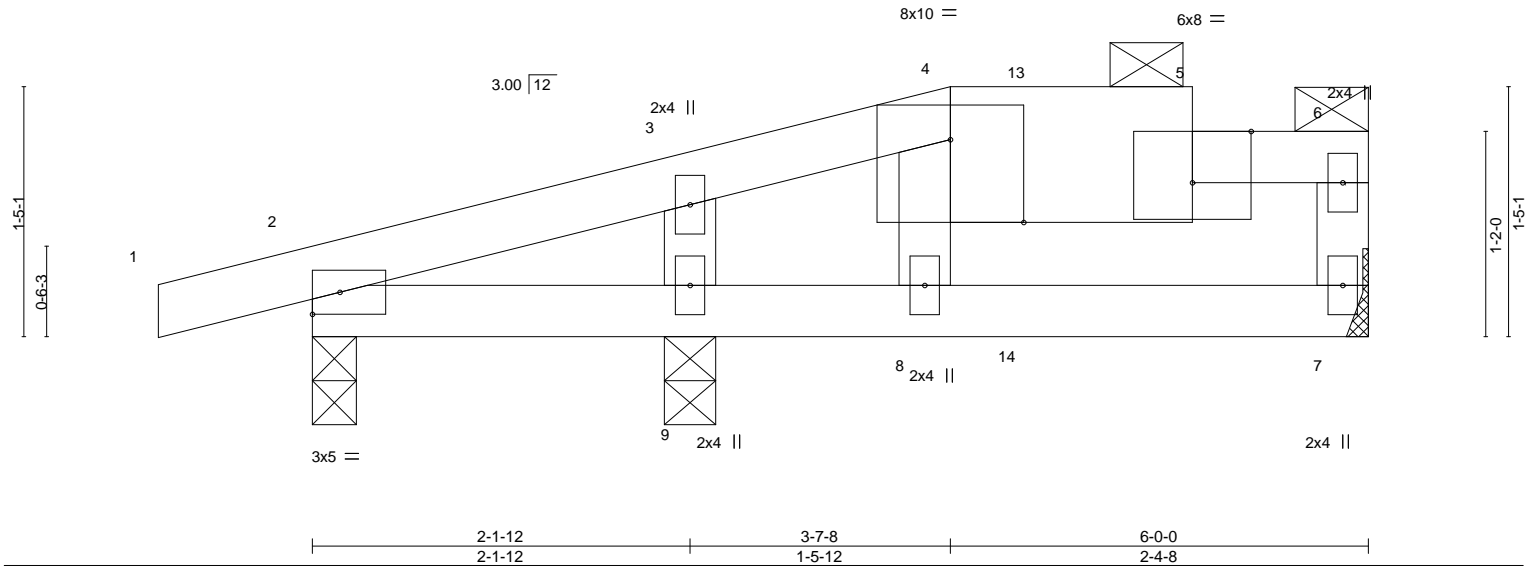


Plate Offsets (X,Y)--	[4:0-5-0,Edge], [5:0-4-0,Edge]				
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 18.9/20.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) -0.01 8 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.01 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MP	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 51 lb	FT = 20%

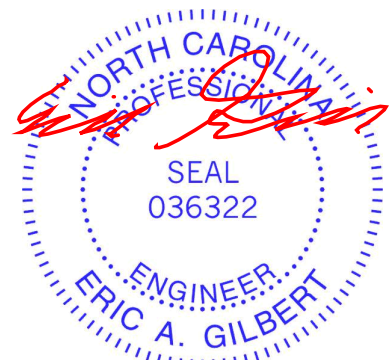
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except*	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-6.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 7=Mechanical, 2=0-3-0, 9=0-3-8
 Max Horz 2=26(LC 10)
 Max Uplift 7=6(LC 12), 2=48(LC 48), 9=5(LC 11)
 Max Grav 7=201(LC 30), 2=104(LC 31), 9=390(LC 31)

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

- 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, 2x10 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Webs 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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 7, 2, 9.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 61 lb down and 33 lb up at 4-0-12 on top chord, and 24 lb down at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
 Continued on page 2



Job 21020048-01	Truss T1GRA	Truss Type Roof Special Girder	Qty 1	Ply 2	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527067
--------------------	----------------	-----------------------------------	----------	-----------------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:24 2020 Page 2
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-m3wp3ddP8wmNEfd4nT5NXT8j53_mF3FrizDWqPz539H

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-48, 4-5=-58, 5-6=-138, 7-10=-20

Concentrated Loads (lb)

Vert: 13=-38(F) 14=-24(F)

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

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



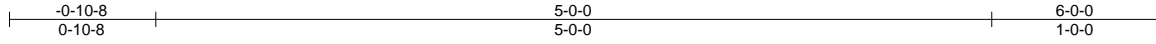
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss T1	Truss Type Half Hip	Qty 4	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527068
--------------------	-------------	------------------------	----------	----------	--	-----------

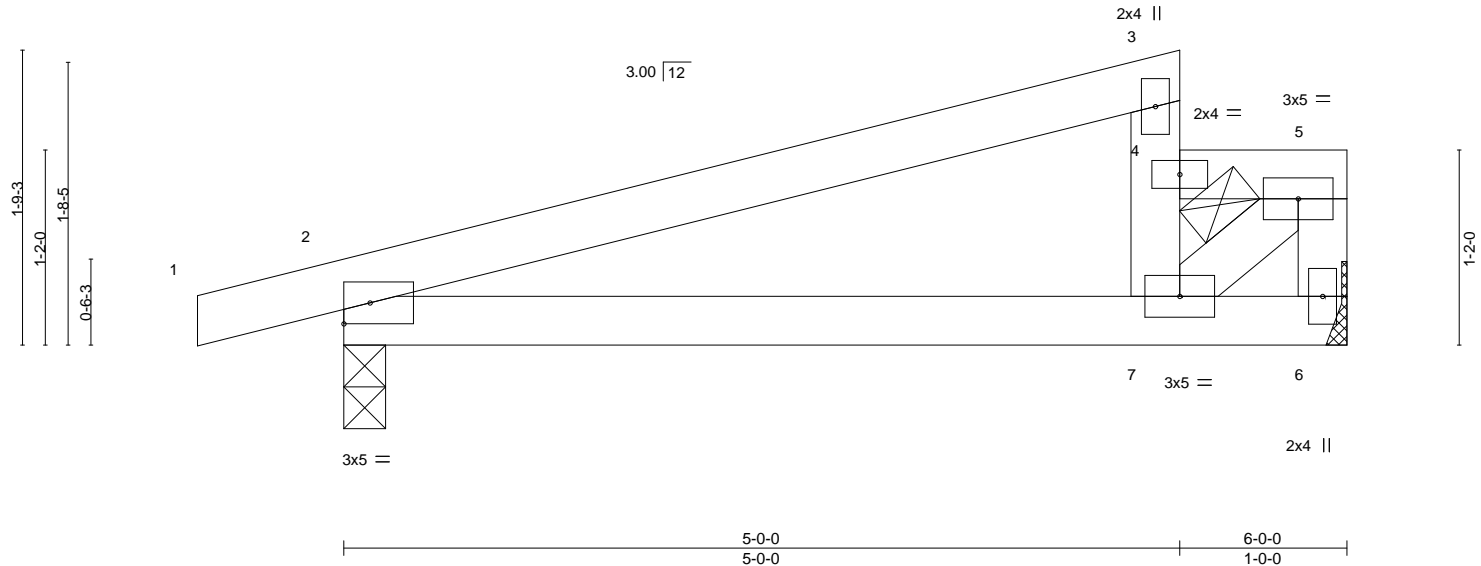
Carter Components (Sanford), Sanford, NC - 27332,

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:21 2020 Page 1

ID:hvcBhN021MZmZDW2EtV1bpzbl2v-MUEgQcbXs?OoNBuV6LYgvgqW5frw62fPPc??sD5z539K



Scale = 1:13.8



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	0.55	Vert(LL)	-0.02	7-10	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.04	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 23 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 6=Mechanical, 2=0-3-0
 Max Horz 2=49(LC 12)
 Max Uplift 6=-10(LC 15), 2=-31(LC 11)
 Max Grav 6=345(LC 2), 2=356(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-295/87, 4-5=-396/162, 5-6=-387/177
 WEBS 5-7=-218/526

- 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) -0-10-8 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 6, 2.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 101 lb down and 41 lb up at 4-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-48, 4-5=-98, 6-8=-20
 Concentrated Loads (lb)
 Vert: 3=-90

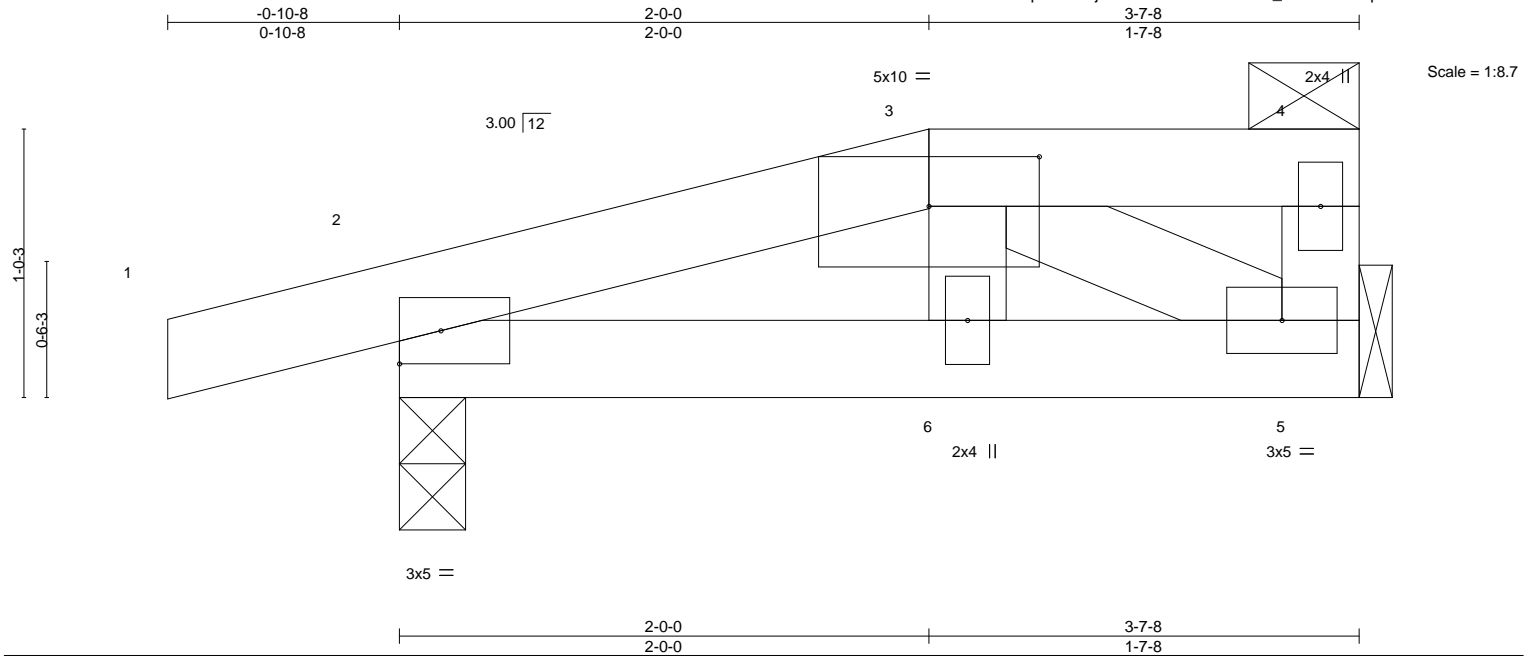


June 18, 2020

Job 21020048-01	Truss J2GR	Truss Type Half Hip Girder	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527070
--------------------	---------------	-------------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:17 2020 Page 1
ID:hvcBhN021MzMzDW2EtV1bpzbl2v-Tj?9bEX0omtNuaaktVTKL_LX3EcZ6vGphO1f4Jz539O



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.07	Vert(LL)	-0.00	9	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Sheathed or 3-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

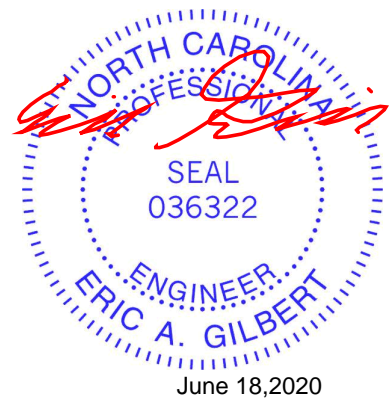
REACTIONS. (size) 2=0-3-0, 5=Mechanical
 Max Horz 2=23(LC 10)
 Max Uplift 2=-32(LC 7), 5=-3(LC 7)
 Max Grav 2=224(LC 31), 5=138(LC 30)

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

- NOTES-**
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); 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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2, 5.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 37 lb down and 36 lb up at 2-0-0 on top chord, and 14 lb down and 14 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-48, 3-4=-58, 5-7=-20
 Concentrated Loads (lb)
 Vert: 6=-7(F)



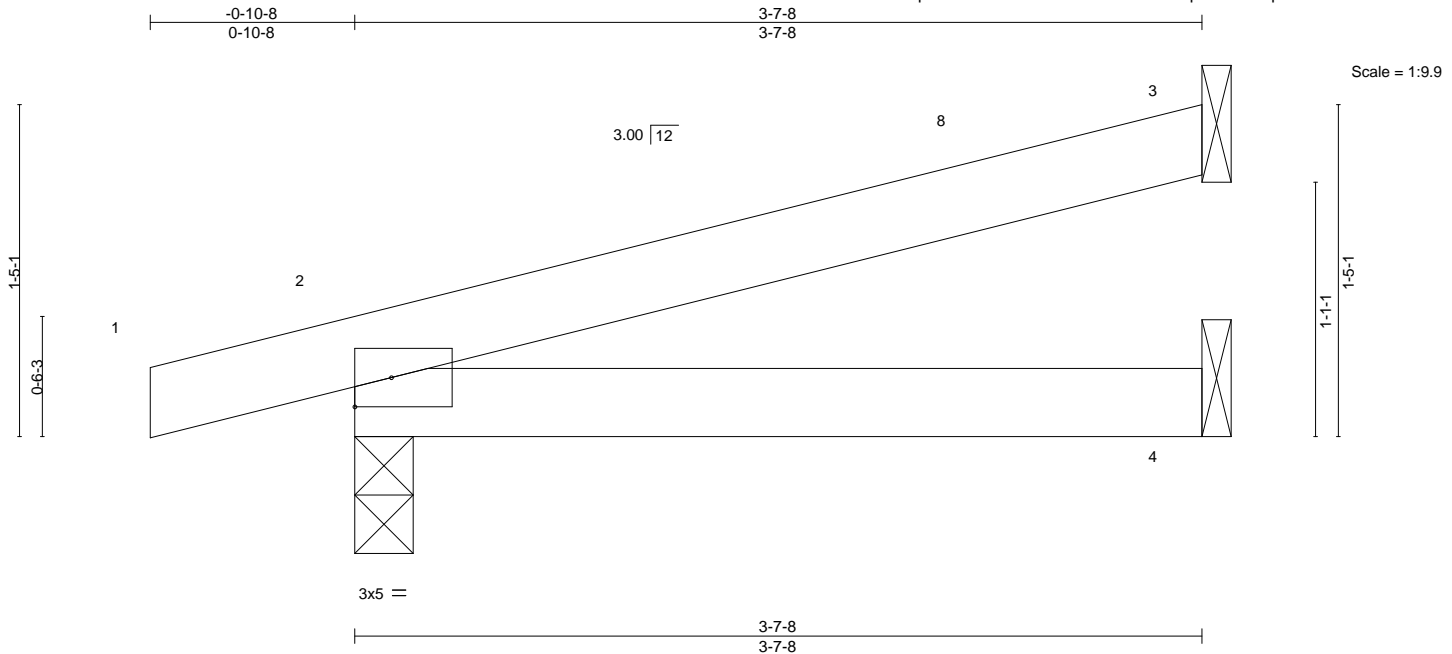
Job 21020048-01	Truss J3	Truss Type Jack-Open	Qty 2	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527071
--------------------	-------------	-------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:19 2020 Page 1

ID:hvcBhN021MZMzDW2EV1bpzbl2v-Q57w?wZGKO858tk6?wWCqPQst2HTapl69hWl8Cz539M

Job Reference (optional)



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.01 4-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 12 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 3-7-8 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical
 Max Horz 2=33(LC 11)
 Max Uplift 3=22(LC 15), 2=28(LC 11)
 Max Grav 3=92(LC 2), 2=201(LC 2), 4=44(LC 2)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.

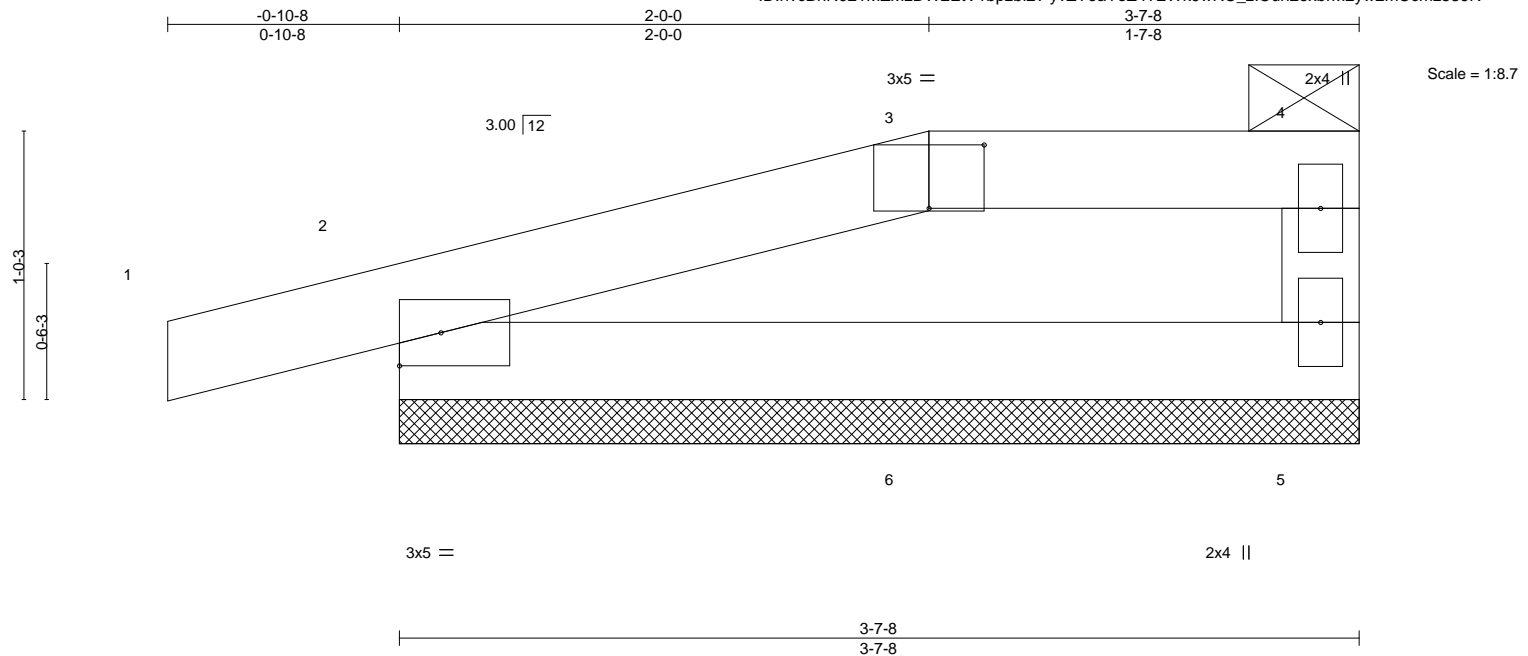


Job 21020048-01	Truss J2GRA	Truss Type Half Hip Girder	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527072
--------------------	----------------	-------------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:18 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-yvZYoaYeZ4?EWk9wRC_zlCuh2exbrM2yw2mCcmz539N



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.19	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-R								
BCDL	10.0										Weight: 13 lb	FT = 20%

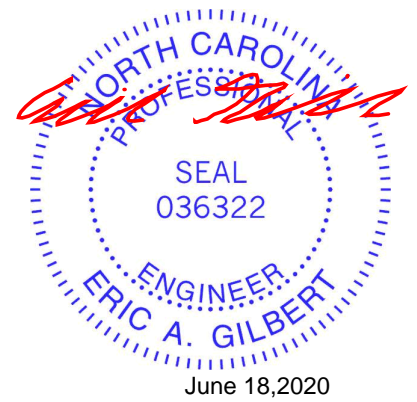
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Sheathed or 3-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 5=3-7-8, 2=3-7-8
 Max Horz 2=22(LC 8)
 Max Uplift 5=-3(LC 7), 2=-32(LC 7)
 Max Grav 5=138(LC 30), 2=224(LC 31)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; 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; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 37 lb down and 36 lb up at 2-0-0 on top chord, and 14 lb down and 14 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-48, 3-4=-58, 2-5=-20



Continued on page 2

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

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

Job 21020048-01	Truss J2GRA	Truss Type Half Hip Girder	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527072
--------------------	----------------	-------------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:18 2020 Page 2
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-yvZYoaYeZ4?EWk9wRC_zlCuh2exbrM2yw2mCcmz539N

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6--7(B)

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

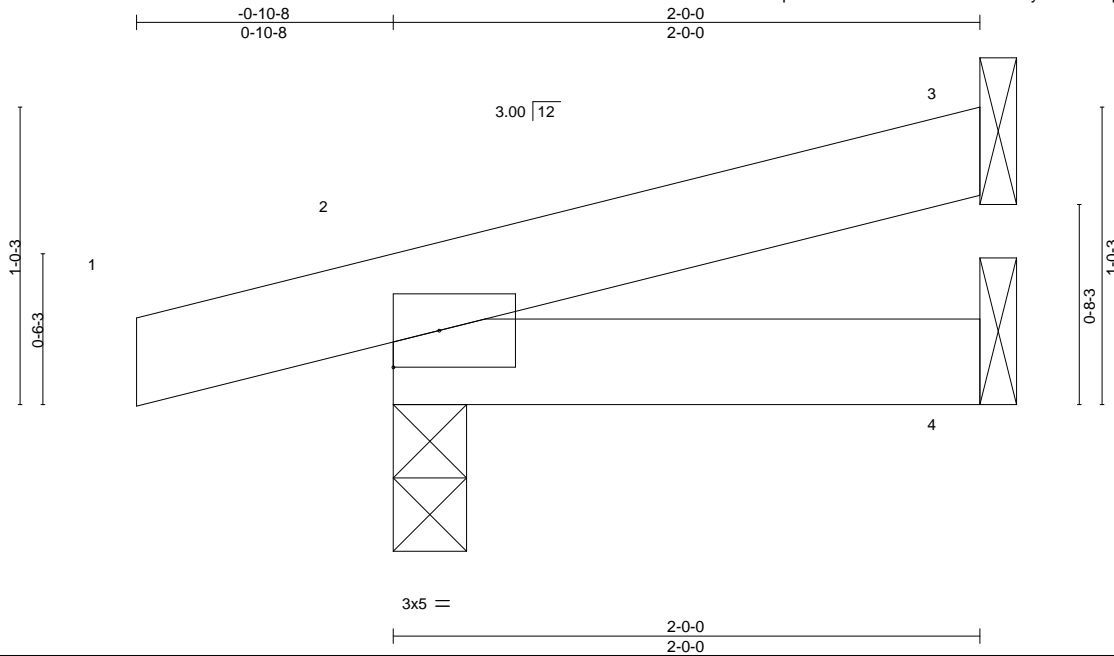
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss J1	Truss Type Jack-Open	Qty 2	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527073
--------------------	-------------	-------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:16 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-WRnNuXO1TIWHQ?XJoyVCnoMPqGENSZgSkH5Ytz539P



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 7 lb	FT = 20%

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

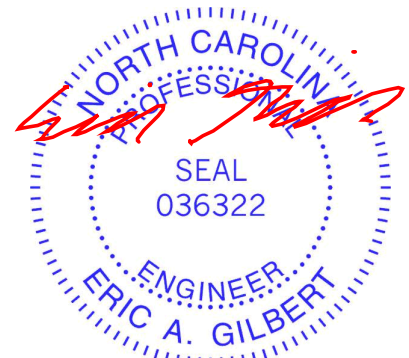
BRACING-
TOP CHORD Sheathed or 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical
Max Horz 2=22(LC 11)
Max Uplift 3=-11(LC 15), 2=-29(LC 11)
Max Grav 3=47(LC 2), 2=144(LC 2), 4=21(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



June 18, 2020

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

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



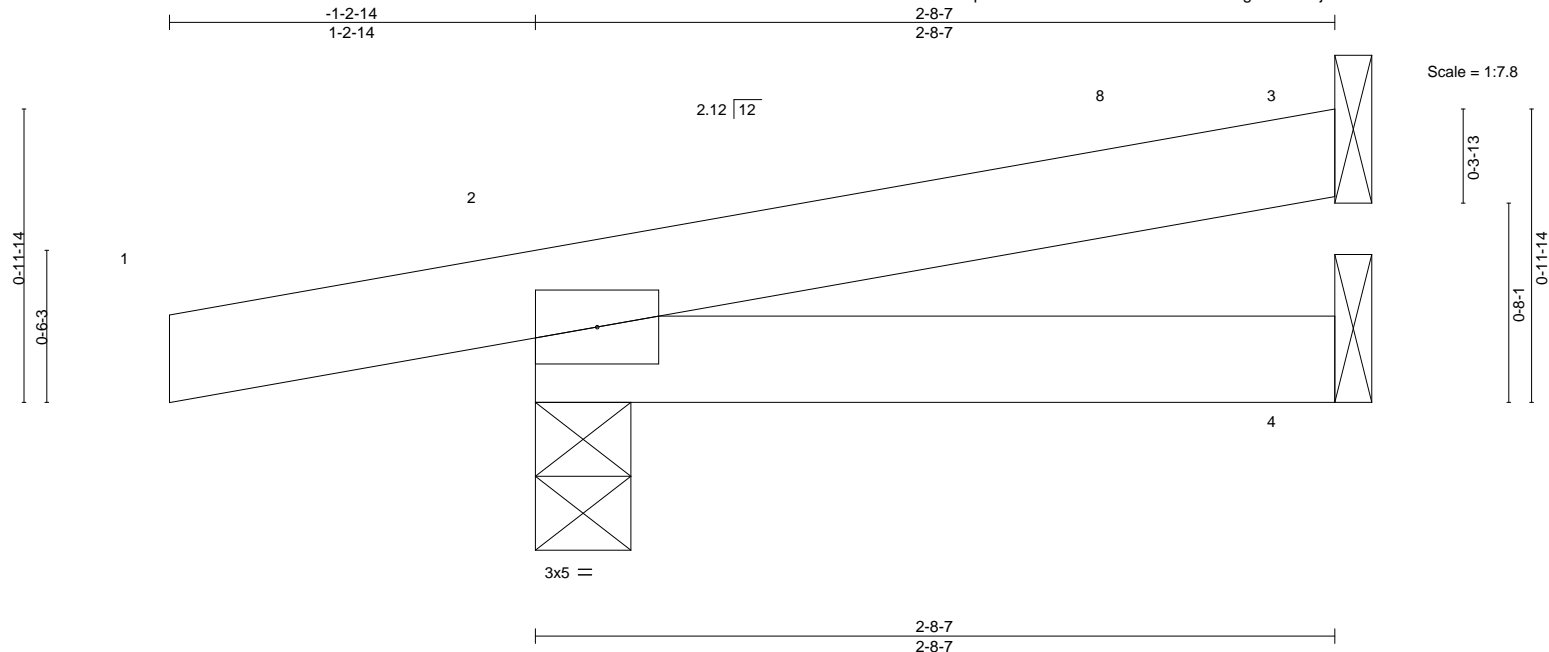
818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss CJ1	Truss Type Jack-Open	Qty 2	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527074
--------------------	--------------	-------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:15 2020 Page 1

ID:hvcBhN021MZMzDW2EIV1bpzbl2v-XKtPAYWmG9dffGQLm4RGgZGAhRwje?JWE4YY?Rz539Q



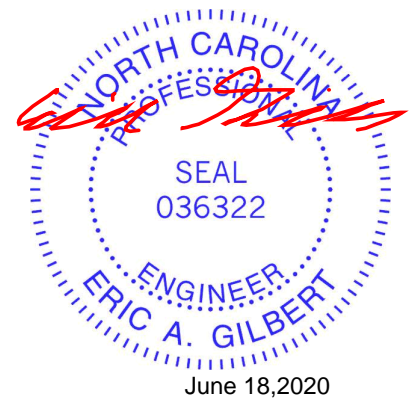
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 10 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 2-8-7 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-14, 4=Mechanical
 Max Horz 2=21(LC 11)
 Max Uplift 3=-14(LC 15), 2=-44(LC 11)
 Max Grav 3=61(LC 2), 2=197(LC 2), 4=27(LC 2)

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

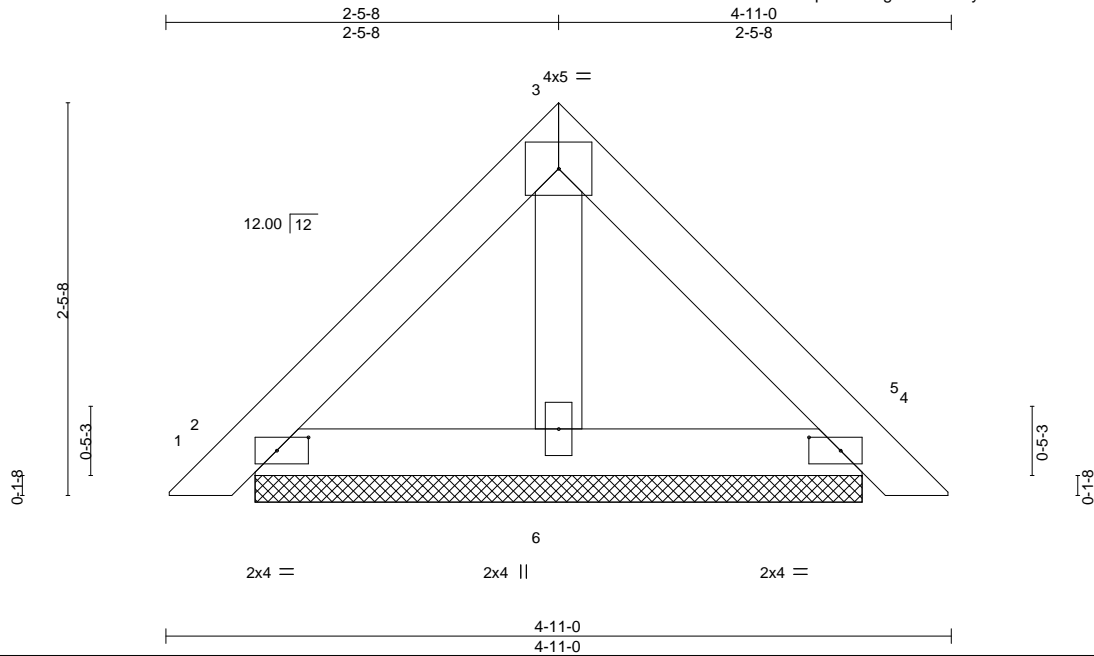
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



Job 21020048-01	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527075
--------------------	--------------	-------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:20 2020 Page 1
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-ulGI DGav5hGyl1JJYd1RNdz2LSe9JGKFNLFJhez539L



Scale = 1:14.4

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-11-4	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 4 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Vert(CT) 0.00 5 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 18 lb	FT = 20%

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

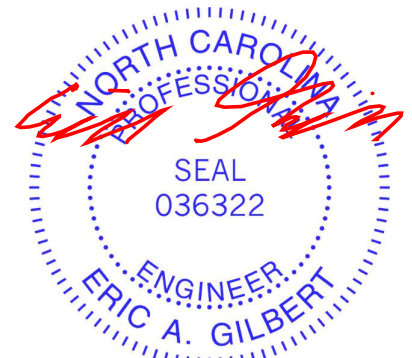
BRACING-
TOP CHORD Sheathed or 4-11-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-9-10, 4=3-9-10, 6=3-9-10
Max Horz 2=-43(LC 11)
Max Uplift 2=-10(LC 14), 4=-13(LC 14)
Max Grav 2=110(LC 2), 4=110(LC 2), 6=113(LC 2)

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

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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



June 18, 2020

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 21020048-01	Truss T2GE	Truss Type GABLE	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof Job Reference (optional)	E14527076
--------------------	---------------	---------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:26 2020 Page 1

ID:hvcBhN021MZMzDW2EtV1bpzbl2v-jR2ZTJefgX05TymSvu8rcuD1ZsgTjzP8mHidulz539F

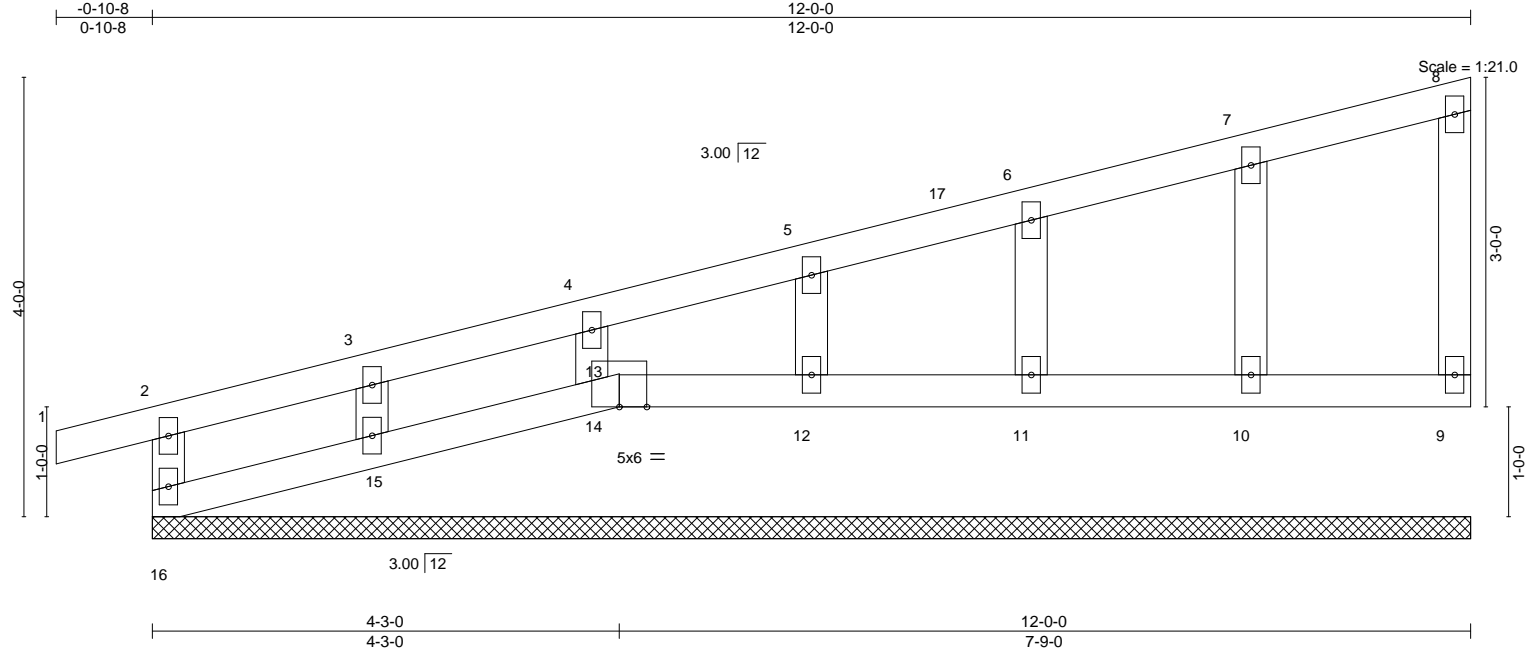


Plate Offsets (X,Y)-- [13:0-0-0,0-1-12], [14:0-1-12,0-0-7]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) -0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 50 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 15-16,13-14.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 12-0-0.
 (lb) - Max Horz 16=103(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 9, 13, 10, 11, 12, 15
 Max Grav All reactions 250 lb or less at joint(s) 16, 9, 13, 10, 11, 12, 14, 15

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable requires continuous bottom chord bearing.
 - 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9, 13, 10, 11, 12, 15.
 - 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 13, 10, 11, 12, 14, 15.

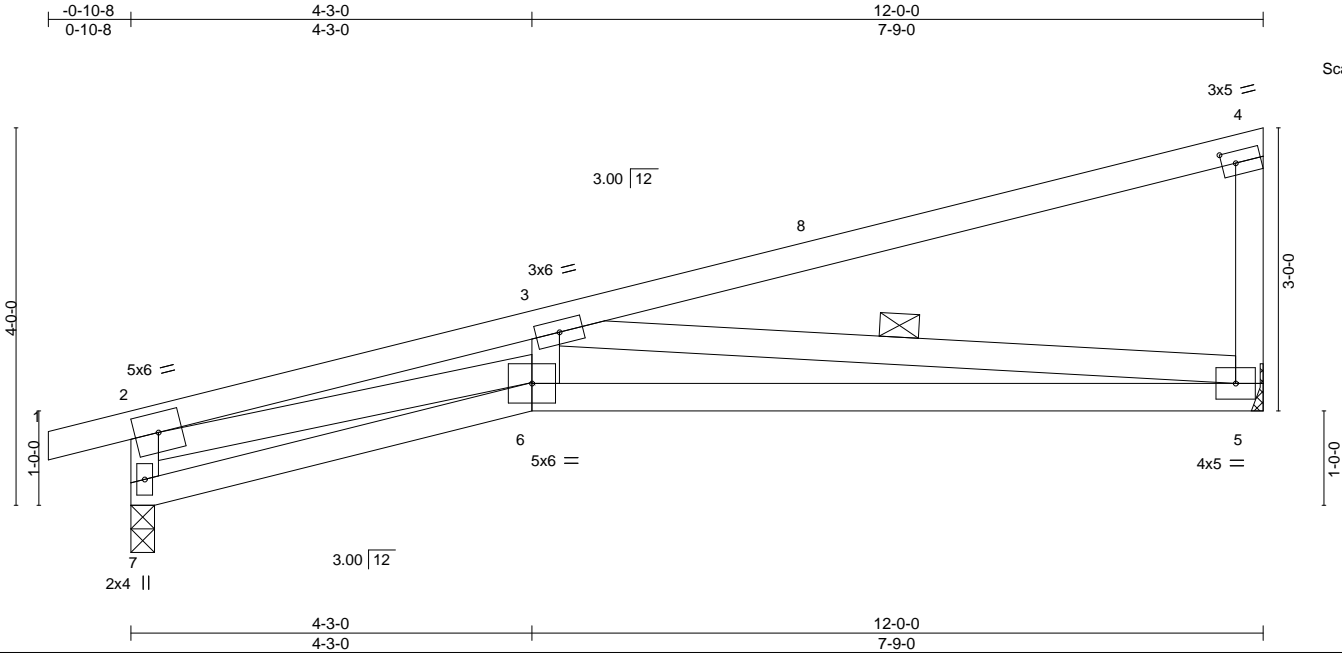


June 18, 2020

Job 21020048-01	Truss T2	Truss Type Monopitch	Qty 6	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527077
--------------------	-------------	-------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:25 2020 Page 1
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-EFUBGze1vEuEsoBGLAcc4ggj9TAX_M5_Xdz4Msz539G



Scale = 1:24.4

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

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	0.77	Vert(LL)	-0.12	6	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.28	5-6	>498	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.08	5	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MSH							Weight: 60 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD Sheathed or 4-0-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-5-11 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS.

(size) 7=0-3-0, 5=Mechanical
Max Horz 7=103(LC 12)
Max Uplift 7=40(LC 11), 5=-24(LC 15)
Max Grav 7=532(LC 2), 5=466(LC 2)

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

TOP CHORD 2-7=-508/215, 2-3=-1854/634
BOT CHORD 5-6=-786/1732
WEBS 2-6=-548/1652, 3-5=-1656/736

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.



June 18, 2020

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

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

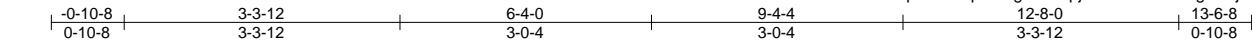


818 Soundside Road
Edenton, NC 27932

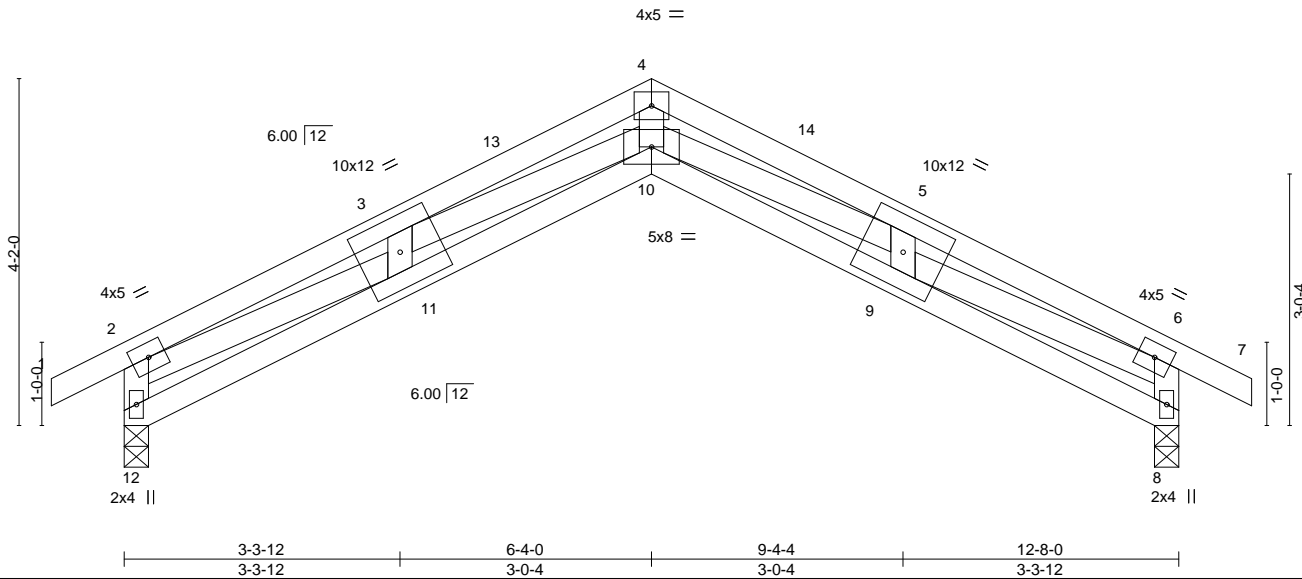
Job 21020048-01	Truss T3GE	Truss Type ROOF SPECIAL	Qty 1	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527078
--------------------	---------------	----------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:28 2020 Page 1
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-fq9Ku?gwC9GpjGwr0JAJhJIM9gF7Bj1RDbBkzBz539D



Scale = 1:27.7



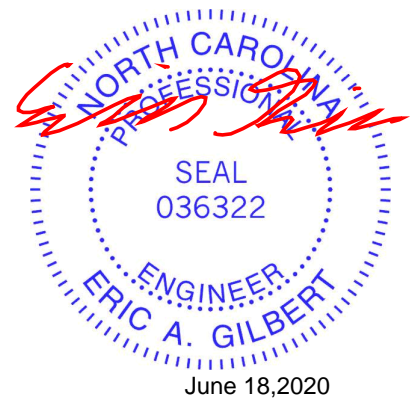
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.47	Vert(LL) -0.11 10 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.22 10 >678 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.24 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 69 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 3-11-2 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 12=0-3-8, 8=0-3-8
 Max Horz 12=-62(LC 13)
 Max Uplift 12=-7(LC 15), 8=-7(LC 16)
 Max Grav 12=556(LC 2), 8=556(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-12=-569/207, 2-3=-1566/406, 3-4=-2048/363, 4-5=-2047/364, 5-6=-1549/379,
 6-8=-566/223
 BOT CHORD 10-11=-308/1471, 9-10=-297/1483
 WEBS 4-10=-216/1623, 5-10=0/500, 6-9=-257/1240, 3-10=0/500, 2-11=-259/1250

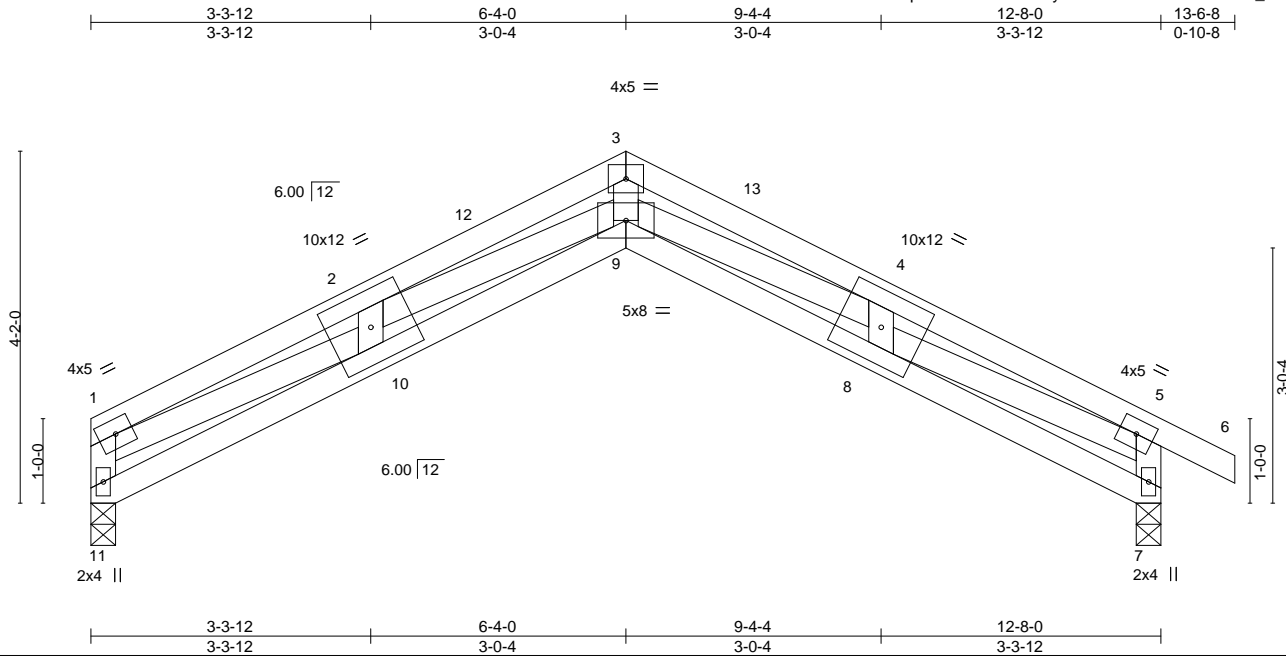
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - 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 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 12, 8 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 100 lb uplift at joint(s) 12, 8.



Job 21020048-01	Truss T3	Truss Type Roof Special	Qty 5	Ply 1	184 Crossings at Anderson Creek-Kessler B-Roof	E14527079
--------------------	-------------	----------------------------	----------	----------	--	-----------

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

8.330 s May 6 2020 MiTek Industries, Inc. Thu Jun 18 11:43:27 2020 Page 1
ID:hvcBhN021MZMzDW2EtV1bpzbl2v-BebxhffRr8y56LfTbI495mBdGwoSGfH_xSBRkz539E



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 13.9/20.0	Plate Grip DOL 1.15	BC 0.47	Vert(LL) -0.11 9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.22 9 >668 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.24 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014			Weight: 68 lb	FT = 20%

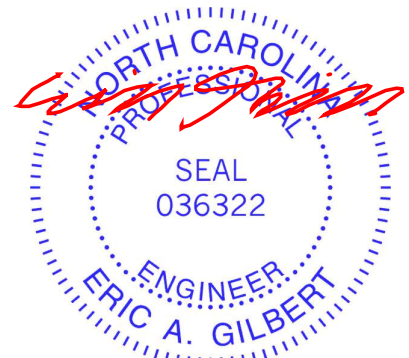
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Sheathed or 3-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=-64(LC 13)
Max Uplift 7=-7(LC 16)
Max Grav 11=492(LC 2), 7=559(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-497/164, 1-2=-1615/417, 2-3=-2069/366, 3-4=-2068/366, 4-5=-1559/380,
5-7=-569/224
BOT CHORD 9-10=-313/1504, 8-9=-298/1493
WEBS 3-9=-218/1642, 4-9=0/507, 4-8=-251/109, 5-8=-258/1248, 2-9=0/488, 1-10=-292/1317

- 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
 - 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 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 7.



June 18, 2020

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MITteK® All Rights Reserved



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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.