

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 22040116
DRB GROUP - 78 FARM AT NEILLS CREEK

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: I51987068 thru I51987098

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



May 17, 2022

Gilbert, Eric

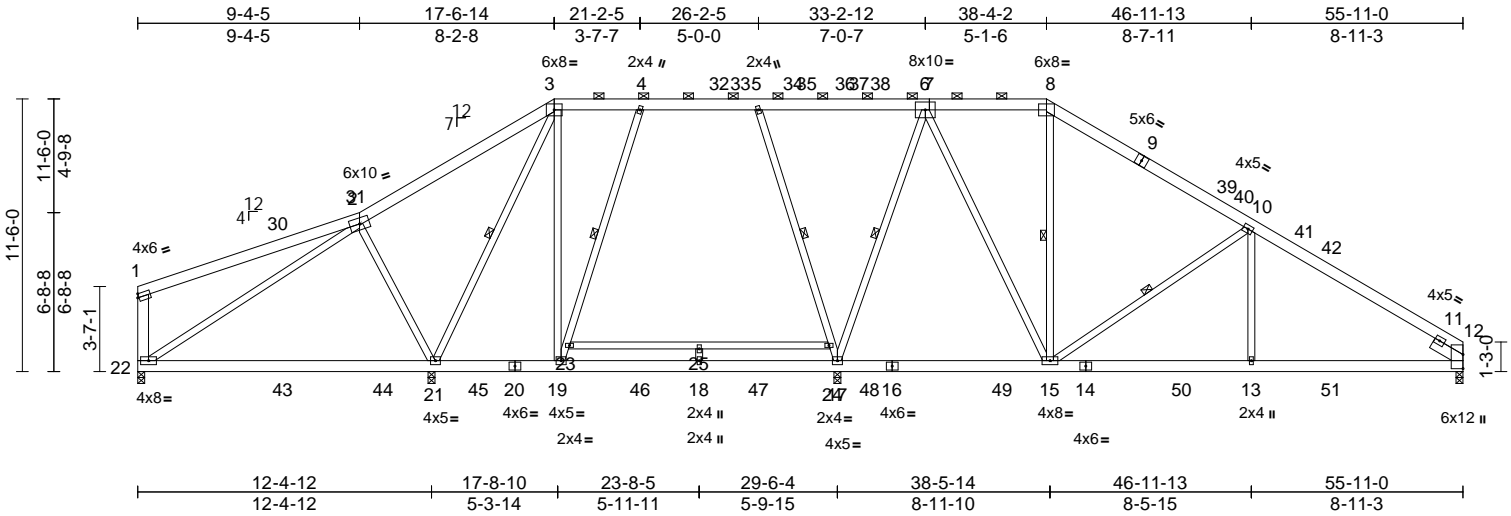
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 22040116	Truss A01	Truss Type Piggyback Base	Qty 6	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987068
-----------------	--------------	------------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:32
ID:vmWSYkxMeSKeeaoGnh3QrczhvSE-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWRcDoi7J4zJC?f

Page: 1



Scale = 1:97.2

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	0.75	Vert(LL)	-0.22	21-22	>663	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.39	21-22	>383	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.04	12	n/a	n/a
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH						
BCDL	10.0									
										Weight: 465 lb FT = 20%

LUMBER	WEBS	SLIDER
TOP CHORD 2x6 SP No.2	2-21=529/343, 3-21=1131/0, 3-19=0/557, 19-23=289/142, 4-23=278/158, 5-24=569/188, 17-24=580/174, 6-17=1043/333, 6-15=151/966, 8-15=166/159, 10-15=958/304, 10-13=0/427, 2-22=84/404, 23-25=7/13, 24-25=7/13, 18-25=0/45	Right 2x6 SP No.2 -- 1-6-0
BOT CHORD 2x6 SP No.2		
WEBS 2x4 SP No.2 *Except* 21-2,15-10,10-13,25-18:2x4 SP No.3, 22-1:2x6 SP No.2		

BRACING	REACTIONS	FORCES
TOP CHORD Structural wood sheathing directly applied or 5-0-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-8.	(lb/size) 12=1060/0-3-8, 17=1716/0-3-8, 21=1582/0-3-8, 22=297/0-3-8 Max Horiz 22=265 (LC 11) Max Uplift 12=-134 (LC 15), 17=-111 (LC 15), 21=-151 (LC 14), 22=-118 (LC 10) Max Grav 12=1293 (LC 52), 17=1988 (LC 6), 21=1796 (LC 34), 22=498 (LC 43)	(lb) - Maximum Compression/Maximum Tension 1-2=-291/151, 2-3=-116/17, 3-4=-203/231, 4-5=-287/261, 5-6=-137/205, 6-8=-693/376, 8-10=-982/347, 10-12=-1762/371, 1-22=-466/188
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.		21-22=-276/109, 19-21=-77/292, 18-19=-92/351, 17-18=-92/351, 15-17=-42/467, 13-15=-182/1435, 12-13=-182/1435
WEBS 1 Row at midpt 3-21, 4-19, 5-17, 6-17, 8-15, 10-15		

NOTES	LOAD CASE(S)
1) Unbalanced roof live loads have been considered for this design.	Standard
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 8-0-0 to 13-11-14, Interior (1) 13-11-14 to 17-1-9, Exterior(2R) 17-1-9 to 33-10-11, Interior (1) 33-10-11 to 37-7-11, Exterior(2R) 37-7-11 to 54-9-1, Interior (1) 54-9-1 to 57-8-6, Exterior(2E) 57-8-6 to 63-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10	
4) Unbalanced snow loads have been considered for this design.	
5) 200.0lb AC unit load placed on the bottom chord, 23-8-8 from left end, supported at two points, 5-0-0 apart.	
6) Provide adequate drainage to prevent water ponding.	
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	



May 17, 2022

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



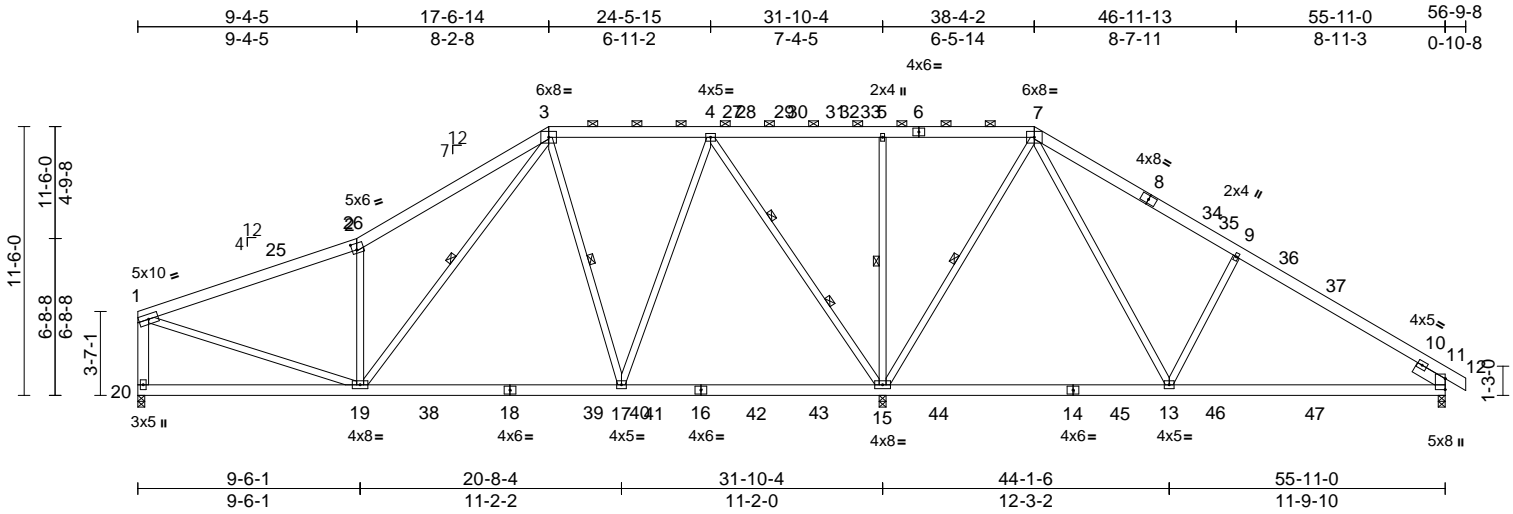
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss A02	Truss Type Piggyback Base	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987069
-----------------	--------------	------------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:35
ID:vmWSYKxMeSKeeaoGnh3QrczhvSE-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoi7J4zJC?f

Page: 1



Scale = 1:98.5

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

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	0.84	Vert(LL)	-0.14	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.21	17-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.01	15	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 441 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* 18-16:2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 19-1,19-2,13-9:2x4 SP No.3, 20-1:2x6 SP No.2
SLIDER Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 13-15.
WEBS 1 Row at midpt 5-15, 7-15, 3-19, 3-17
WEBS 2 Rows at 1/3 pts 4-15

REACTIONS (lb/size) 11=766/0-3-8, 15=2818/0-3-8, 20=1124/0-3-8
Max Horiz 20=261 (LC 13)
Max Uplift 11=-161 (LC 15), 20=-117 (LC 14)
Max Grav 11=1005 (LC 53), 15=3260 (LC 3), 20=1295 (LC 36)

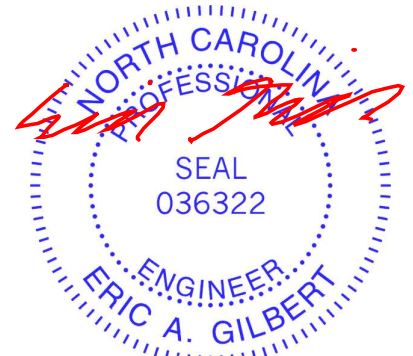
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1542/279, 2-3=-1778/496, 3-4=-755/245, 4-5=0/626, 5-7=0/626, 7-9=-920/346, 9-11=-1089/272, 11-12=0/26, 1-20=-1154/264
BOT CHORD 19-20=-236/236, 17-19=-75/889, 15-17=-83/557, 13-15=-61/194, 11-13=-104/874
WEBS 1-19=-105/1416, 2-19=-878/418, 5-15=-589/198, 7-15=-1285/291, 9-13=-725/353, 7-13=-213/1214, 3-19=-323/962, 3-17=-530/269, 4-17=0/1158, 4-15=-1620/220

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 8-0-0 to 13-11-14, Interior (1) 13-11-14 to 17-1-9, Exterior(2R) 17-1-9 to 33-9-13, Interior (1) 33-9-13 to 37-7-11, Exterior(2R) 37-7-11 to 54-10-6, Interior (1) 54-10-6 to 58-6-14, Exterior(2E) 58-6-14 to 64-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 23-11-12 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 11. This connection is for uplift only and does not consider lateral forces.

- This truss is designed in accordance with the 2018 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



May 17, 2022

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 22040116	Truss A03	Truss Type Piggyback Base	Qty 3	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987070
-----------------	--------------	------------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:35
ID:aoRBENZ7FOPJ56leKnt1qPzFzyH-RFC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1

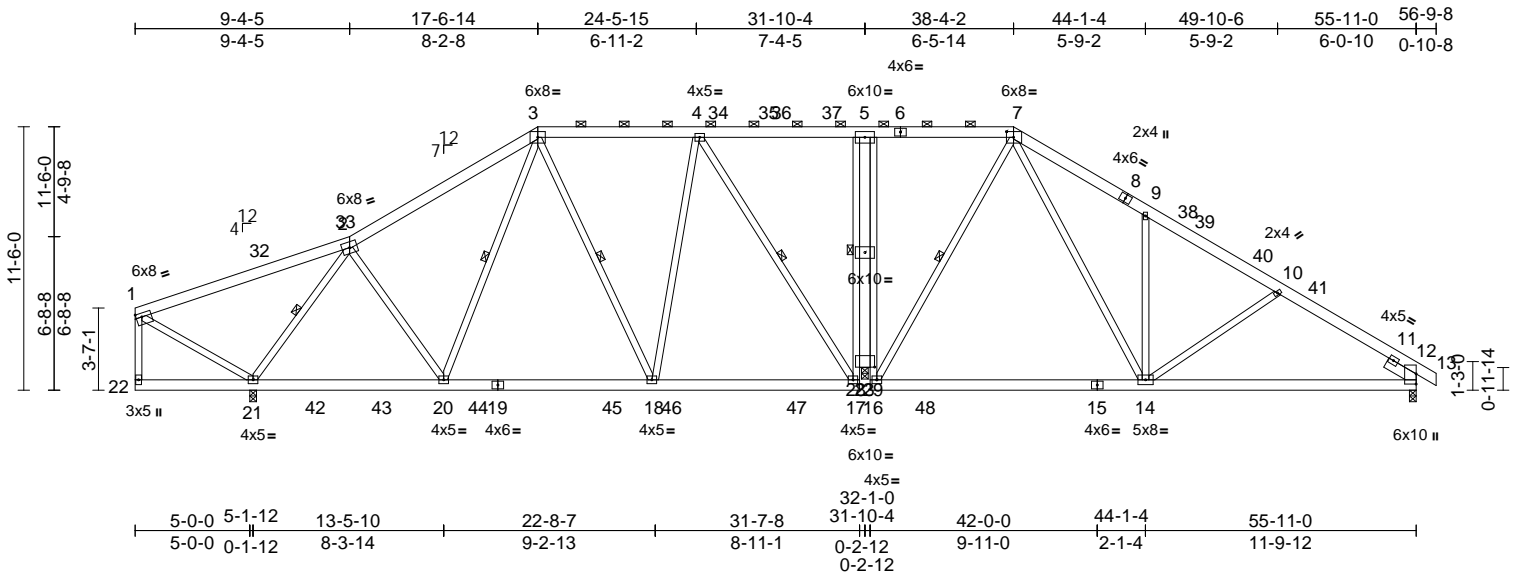


Plate Offsets (X, Y): [1:Edge,0-2-0], [7:0-3-12,0-3-0], [16:0-1-3,0-6-11]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.35	14-16	>826	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.53	14-16	>541	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 492 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except*
0-0,21-1,22-1,14-9,14-10,21-2,20-2:2x4 SP No.3
OTHERS 2x6 SP No.2
SLIDER Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
8-6-8 oc bracing: 14-16.
WEBS 1 Row at midpt 7-16, 2-21, 3-20, 3-18, 4-17, 5-23

REACTIONS (lb/size)
12=982/0-3-8, 21=1475/0-3-8, 23=2042/0-3-8
Max Horiz 21=262 (LC 13)
Max Uplift 12=243 (LC 15), 21=-245 (LC 14), 23=98 (LC 11)
Max Grav 12=1249 (LC 53), 21=1688 (LC 36), 23=2437 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-225/559, 2-3=-1056/352, 3-4=-676/438, 4-30=-146/436, 5-30=-136/432, 5-31=-136/432, 7-31=-144/438, 7-9=-1450/627, 9-10=-1347/448, 10-12=-1577/484, 12-13=0/26, 1-22=-142/62
BOT CHORD 21-22=-54/76, 20-21=-193/692, 18-20=-127/723, 17-18=-99/604, 14-16=-16/449, 12-14=-270/1260

WEBS 1-21=-567/406, 7-16=-974/90, 9-14=-677/285, 7-14=-243/1386, 10-14=-279/172, 2-21=-1455/576, 3-20=-41/252, 2-20=-7/372, 3-18=-292/85, 4-18=0/733, 4-17=-1140/168, 5-23=-1362/98, 17-23=-101/1107, 23-30=-101/1107, 16-23=-24/1067, 23-31=-24/1067

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 7-11-0 to 13-6-2, Interior (1) 13-6-2 to 17-5-3, Exterior(2R) 17-5-3 to 33-3-0, Interior (1) 33-3-0 to 38-2-8, Exterior(2R) 38-2-8 to 54-0-5, Interior (1) 54-0-5 to 58-11-10, Exterior(2E) 58-11-10 to 64-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21, 12, and 23. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 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



May 17, 2022

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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB GROUP - 78 FARM AT NEILLS CREEK
22040116	A04	Piggyback Base Supported Gable	1	1	I51987071
					Job Reference (optional)

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:36

Page: 2

ID:ACS0SGCfmETEJzgbpcWMMzhrbl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC7f

BOT CHORD 64-65=-238/161, 63-64=-238/161,
62-63=-238/161, 61-62=-238/161,
60-61=-238/161, 59-60=-238/161,
58-59=-238/161, 56-58=-238/161,
55-56=-238/161, 54-55=-238/161,
53-54=-238/161, 52-53=-238/161,
51-52=-238/161, 50-51=-238/161,
49-50=-238/161, 47-49=-238/161,
46-47=-238/161, 45-46=-238/161,
44-45=-238/161, 42-44=-238/161,
41-42=-237/161, 40-41=-237/161,
39-40=-237/161, 38-39=-237/161,
37-38=-237/161, 36-37=-237/161,
35-36=-237/161

WEBS 15-52=-171/58, 14-53=-179/93,
13-54=-179/84, 12-55=-139/6,
10-56=-185/56, 9-58=-200/143,
8-59=-199/111, 7-60=-166/90, 5-61=-166/65,
4-62=-176/56, 3-63=-174/56, 2-64=-184/73,
16-51=-151/48, 17-50=-138/48,
18-49=-152/48, 19-47=-173/67,
21-46=-179/97, 22-45=-179/74,
23-44=-143/10, 25-43=-190/79,
26-42=-199/141, 28-41=-195/99,
29-40=-197/72, 30-39=-179/72,
31-38=-123/73, 32-37=-117/65,
33-36=-178/126

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 7-11-0 to 13-10-2, Exterior (2N) 13-10-2 to 19-4-3, Corner(3R) 19-4-3 to 31-4-0, Exterior(2N) 31-4-0 to 39-10-2, Corner(3R) 39-10-2 to 51-10-2, Exterior(2N) 51-10-2 to 57-6-10, Corner(3E) 57-6-10 to 63-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) N/A
- 14) This truss is designed in accordance with the 2018 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.

LOAD CASE(S) Standard

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

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

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

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



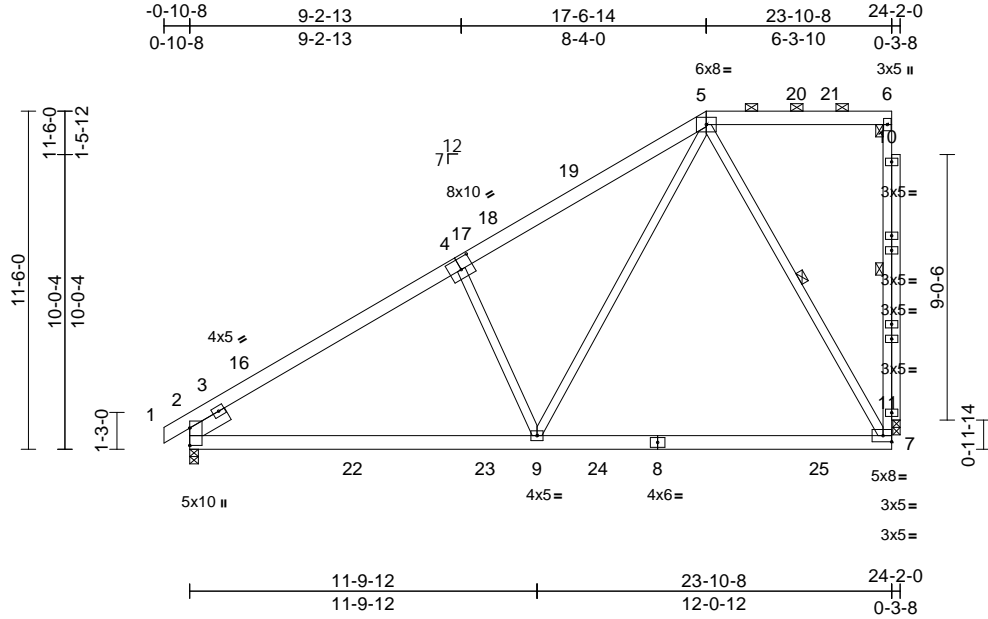
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss B01	Truss Type Piggyback Base	Qty 4	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987072
-----------------	--------------	------------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:38
ID:U0VysG?d9oeHisHgY8i761zFzil-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:78.4

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

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	0.63	Vert(LL)	-0.27	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.41	7-9	>695	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	-0.05	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 199 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except* 4-9:2x4 SP No.3
 OTHERS 2x4 SP No.2
 SLIDER Left 2x6 SP No.2 -- 1-6-0

BRACING

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

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

WEBS 1 Row at midpt 6-7, 5-7

REACTIONS (lb/size) 2=1003/0-3-8, 11=948/0-3-0
 Max Horiz 2=396 (LC 13)
 Max Uplift 2=-116 (LC 14), 11=-153 (LC 14)
 Max Grav 2=1244 (LC 40), 11=1116 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/26, 2-5=-1501/250, 5-6=-160/164, 7-11=-119/1109, 6-11=-261/86

BOT CHORD 2-9=-310/1366, 7-9=-156/545

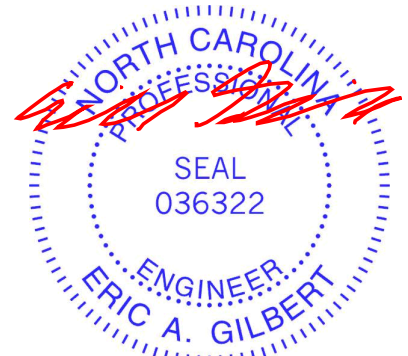
WEBS 5-7=-1007/216, 5-9=-165/1254, 4-9=-596/312

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 13-3-15, Exterior(2R) 13-3-15 to 21-9-12, Interior (1) 21-9-12 to 23-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 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



May 17, 2022

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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



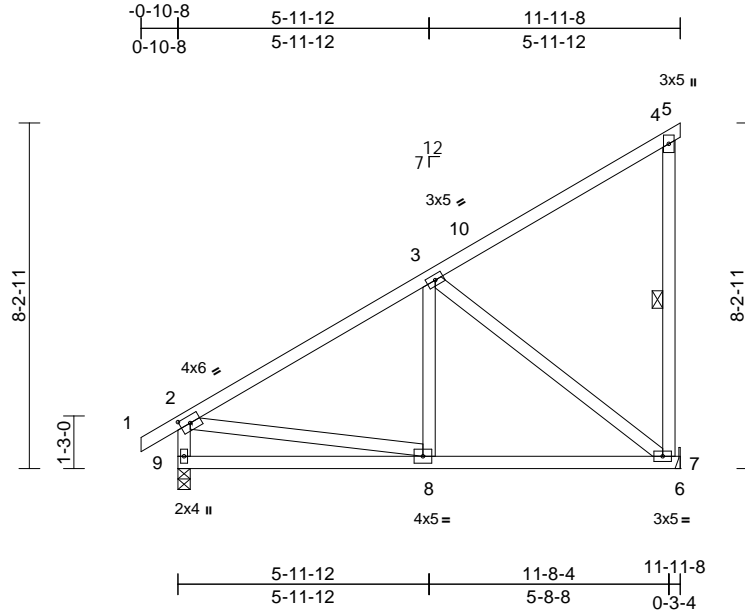
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss C01	Truss Type Monopitch	Qty 6	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987073
-----------------	--------------	-------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:38
ID:CLXxqOYYKtIC18TKvZ333yzFwJ8-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:54.9

Plate Offsets (X, Y): [2:0-2-14,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 77 lb	FT = 20%

LUMBER

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

BRACING

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

WEBS 1 Row at midpt 4-7

REACTIONS (lb/size) 7=481/ Mechanical, 9=525/0-3-8
Max Horiz 9=288 (LC 13)
Max Uplift 7=-126 (LC 14), 9=-43 (LC 14)
Max Grav 7=634 (LC 21), 9=561 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/31, 2-3=-559/107, 3-4=-186/106,

4-5=-13/0, 4-7=-264/64, 2-9=-508/151

BOT CHORD 8-9=-277/261, 7-8=-101/419, 6-7=0/0

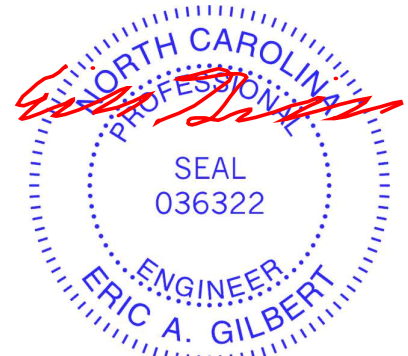
WEBS 3-8=0/233, 3-7=-510/172, 2-8=0/318

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 8-11-8, Exterior(2E) 8-11-8 to 11-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 7.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

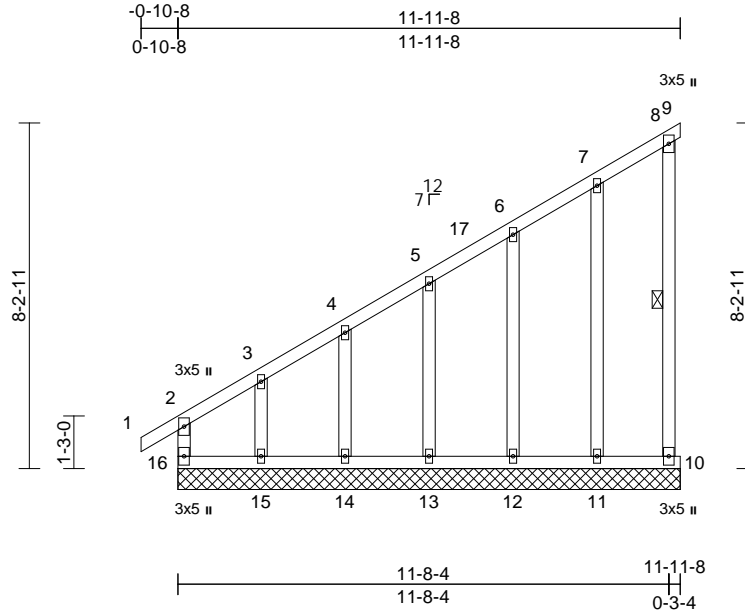
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss C02	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987074
-----------------	--------------	---	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:38
ID: cwD4SPaRdognucCvbmhmazFwJ5-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:54.9

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	0.69	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	-0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 84 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 1 Row at midpt 8-10

REACTIONS (lb/size)
9=12/11-11-8, 10=57/11-11-8,
11=156/11-11-8, 12=156/11-11-8,
13=154/11-11-8, 14=158/11-11-8,
15=141/11-11-8, 16=135/11-11-8
Max Horiz 16=280 (LC 11)
Max Uplift 9=-82 (LC 14), 10=-146 (LC 13),
11=-53 (LC 14), 12=-46 (LC 14),
13=-58 (LC 14), 14=-14 (LC 14),
15=-199 (LC 14), 16=-96 (LC 10)
Max Grav 9=93 (LC 13), 10=144 (LC 10),
11=232 (LC 21), 12=223 (LC 21),
13=165 (LC 24), 14=158 (LC 1),
15=237 (LC 24), 16=256 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-199/75, 1-2=0/30, 2-3=-259/166,
3-4=-184/120, 4-5=-170/109, 5-6=-154/98,
6-7=-145/99, 7-8=-109/117, 8-9=-87/66,
8-10=-145/105
BOT CHORD 15-16=-115/144, 14-15=-115/144,
13-14=-115/144, 12-13=-115/144,
11-12=-115/144, 10-11=-115/144
WEBS 5-13=-124/105, 4-14=-119/83,
3-15=-157/205, 6-12=-185/118, 7-11=-193/57

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-11-12, Exterior (2N) 1-11-12 to 11-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 16, 82 lb uplift at joint 9, 146 lb uplift at joint 10, 58 lb uplift at joint 13, 14 lb uplift at joint 14, 199 lb uplift at joint 15, 46 lb uplift at joint 12 and 53 lb uplift at joint 11.

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
LOAD CASE(S) Standard



May 17, 2022

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



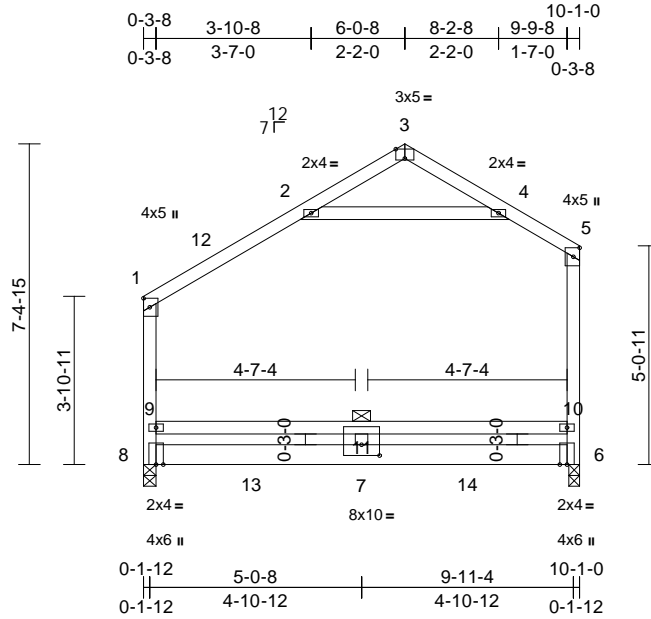
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss D01	Truss Type Common	Qty 4	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK I51987075 Job Reference (optional)
-----------------	--------------	----------------------	----------	----------	--

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:38
ID:1yqKdDM?oLU90fiheg7MINzTRGw-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:53.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.07	7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.20	7	>591	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 75 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except* 8-1,6-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 9-10

REACTIONS

(lb/size) 6=491/0-3-0, 8=493/0-3-8
 Max Horiz 8=218 (LC 11)
 Max Grav 6=561 (LC 21), 8=564 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-298/146, 2-3=-330/105, 3-4=-377/130,
 4-5=-259/173, 8-9=-394/144, 1-9=-381/155,
 6-10=-371/133, 5-10=-358/144

BOT CHORD

7-8=0/342, 6-7=0/342

WEBS

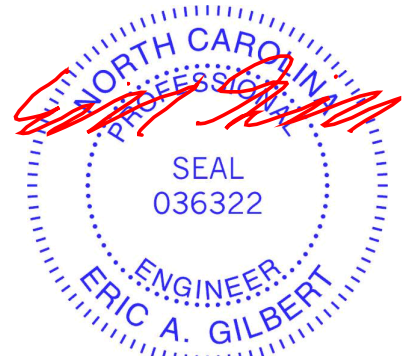
9-11=-305/115, 10-11=-305/115, 7-11=0/41,
 2-4=-2/218

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
 Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior (2R) 3-1-12 to 9-0-8, Interior (1) 9-0-8 to 9-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) 200.0lb AC unit load placed on the bottom chord, 5-0-0 from left end, supported at two points, 5-0-0 apart.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 8, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



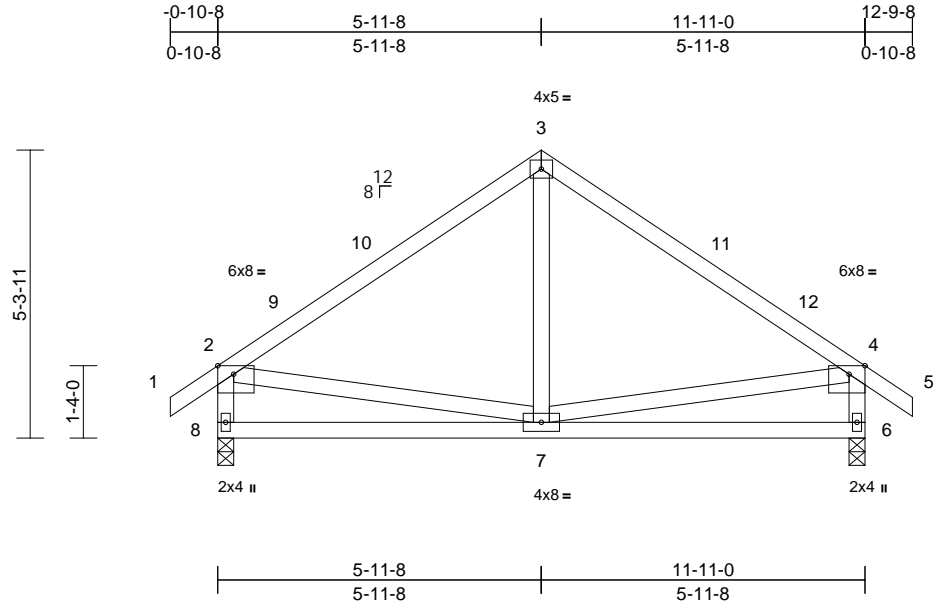
818 Soundside Road
 Edenton, NC 27932

Job 22040116	Truss E01	Truss Type Common	Qty 5	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987076
-----------------	--------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:39
ID: _chtVMf3J_GcW_b8at2KjIzFzYt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:42.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 69 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(lb/size) 6=526/0-3-8, 8=526/0-3-8
Max Horiz 8=145 (LC 13)
Max Uplift 6=-56 (LC 15), 8=-56 (LC 14)
Max Grav 6=619 (LC 22), 8=619 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

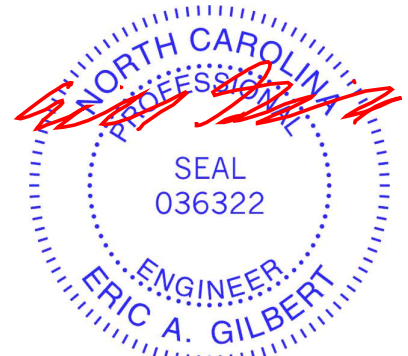
TOP CHORD 1-2=0/34, 2-3=-539/122, 3-4=-539/122, 4-5=0/34, 2-8=-566/164, 4-6=-566/164
BOT CHORD 7-8=-153/263, 6-7=-85/252
WEBS 3-7=0/208, 2-7=-36/249, 4-7=-39/249

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-11-8, Exterior(2R) 2-11-8 to 8-11-8, Interior (1) 8-11-8 to 9-9-8, Exterior(2E) 9-9-8 to 12-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



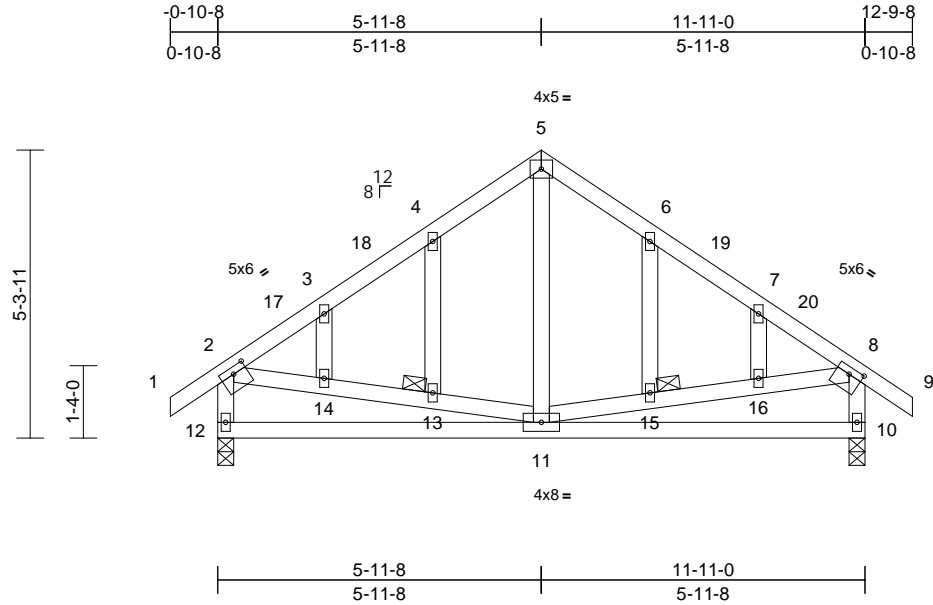
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss E02	Truss Type Common Structural Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987077
-----------------	--------------	---------------------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:39
ID:sNxOLkiaNCm2?cvvpi6Gu8zFzYp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwCrCDoi7J4zJC7f

Page: 1



Scale = 1:42.4

Plate Offsets (X, Y): [2:0-3-0, 0-1-8], [8:0-3-0, 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	0.69	Vert(LL)	-0.02	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 81 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 13, 15

REACTIONS

(lb/size) 10=526/0-3-8, 12=526/0-3-8
Max Horiz 12=-145 (LC 12)
Max Uplift 10=-56 (LC 15), 12=-56 (LC 14)
Max Grav 10=619 (LC 22), 12=619 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-511/79, 3-4=-436/98, 4-5=-380/134, 5-6=-380/134, 6-7=-436/98, 7-8=-511/79, 8-9=0/34, 2-12=-563/162, 8-10=-563/162
BOT CHORD 11-12=-135/232, 10-11=-57/206
WEBS 5-11=-11/209, 2-14=-22/253, 13-14=-22/250, 11-13=-27/254, 11-15=-31/254, 15-16=-26/250, 8-16=-25/253, 4-13=-82/43, 3-14=-23/13, 6-15=-82/43, 7-16=-23/13

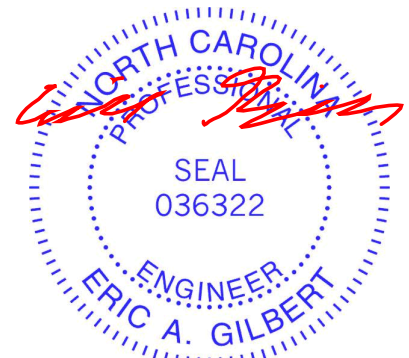
NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 1-11-8, Interior (1) 1-11-8 to 2-11-8, Exterior(2R) 2-11-8 to 8-11-8, Interior (1) 8-11-8 to 9-9-8, Exterior(2E) 9-9-8 to 12-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 10. This connection is for uplift only and does not consider lateral forces.

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



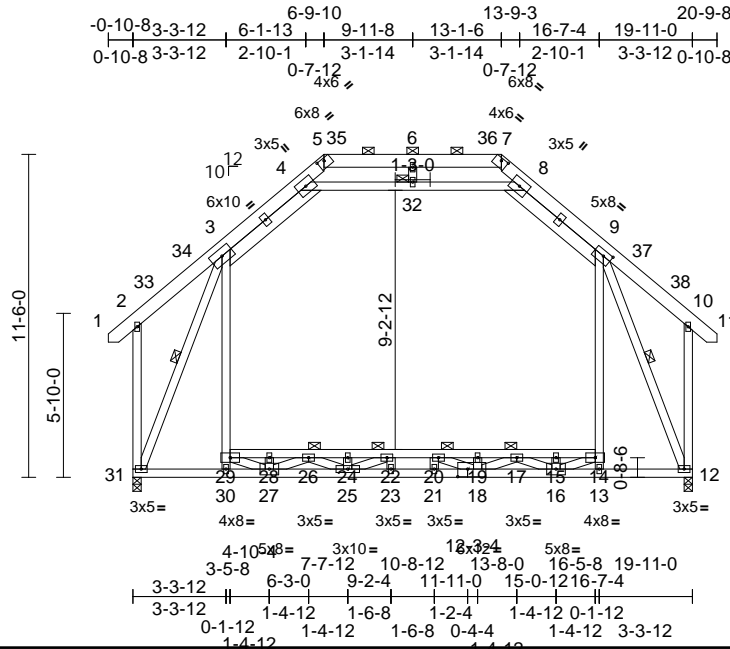
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss G01	Truss Type Attic	Qty 2	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987078
-----------------	--------------	---------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:39
ID:w:N9MV2a7ng00f5yKmtVehHzhpg9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?f

Page: 1



Scale = 1:82

Plate Offsets (X, Y): [5:0-3-0,0-1-1], [7:0-3-0,0-1-1], [9:0-3-8,0-2-4], [18:0-4-4,0-3-4]

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	0.37	Vert(LL)	-0.23	20-22	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.38	20-22	>617	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.20	14-29	>806	360		
BCDL	10.0											
											Weight: 226 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 31-18:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 3-30,9-13,4-8:2x4 SP No.2, 3-4,8-9:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 16-18.
3-1-0 oc bracing: 17-26
5-4-0 oc bracing: 26-29, 14-17
WEBS 1 Row at midpt 3-31, 9-12
JOINTS 1 Brace at Jt(s): 17, 26, 32

REACTIONS (lb/size) 12=1176/0-3-8, 31=1176/0-3-8
Max Horiz 31=337 (LC 12)
Max Grav 12=1584 (LC 46), 31=1584 (LC 46)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-304/232, 3-4=-698/162, 4-5=-806/248, 5-6=-774/224, 6-7=-774/224, 7-8=-807/251, 8-9=-698/162, 9-10=-302/233, 10-11=0/32, 2-31=-437/207, 10-12=-434/208
BOT CHORD 30-31=64/623, 27-30=-240/600, 25-27=0/2673, 23-25=0/3868, 21-23=0/3868, 16-21=0/3868, 13-16=-21/404, 12-13=-37/601, 28-29=-1200/57, 26-28=-1200/57, 24-26=-3005/0, 22-24=-3005/0, 20-22=-3400/0, 19-20=-3017/0, 17-19=-3017/0, 15-17=-1211/48, 14-15=-1211/48

WEBS 29-30=-98/396, 3-29=0/1028, 13-14=-91/374, 9-14=0/1022, 4-32=-645/369, 8-32=-645/369, 3-31=-1610/18, 9-12=-1606/14, 14-16=0/1452, 27-29=0/1424, 15-16=-191/0, 27-28=-183/0, 16-17=-1183/0, 26-27=-1204/0, 17-18=0/909, 25-26=0/894, 18-19=-165/0, 24-25=-156/0, 18-20=-450/39, 22-25=-474/52, 22-23=-13/46, 20-21=-12/42, 6-32=-1/59

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-5 to 2-3-11, Exterior(2R) 2-3-11 to 17-7-5, Exterior(2E) 17-7-5 to 20-7-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 10) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-32, 8-32; Wall dead load (5.0psf) on member(s).3-29, 9-14
 - 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-29, 26-28, 24-26, 22-24, 20-22, 19-20, 17-19, 15-17, 14-15
 - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard



May 17, 2022

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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



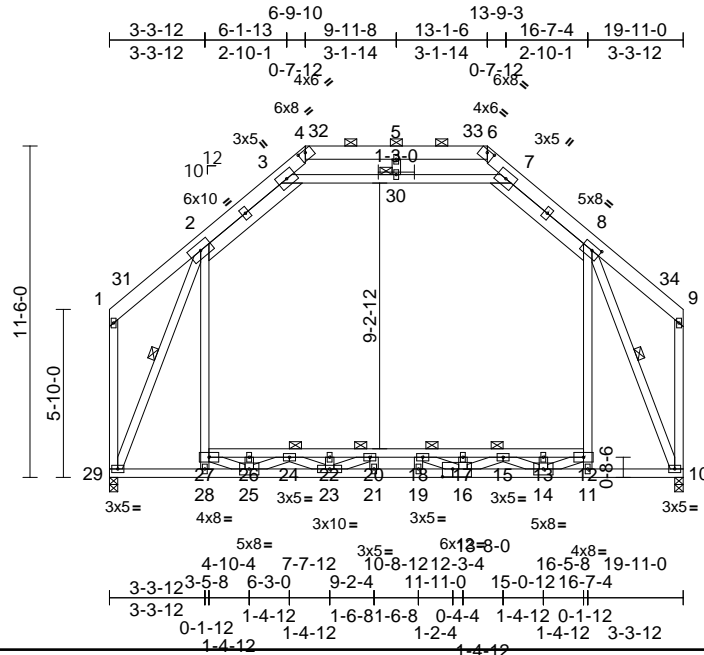
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss G02	Truss Type Attic	Qty 7	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987079
-----------------	--------------	---------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:40
ID:w:N9MV2a7ngO0fSyKmTVeHizhpg9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC7f

Page: 1



Scale = 1:80

Plate Offsets (X, Y): [4:0-3-0,0-1-1], [6:0-3-0,0-1-1], [8:0-3-8,0-2-4], [16:0-4-4,0-3-4]

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	0.36	Vert(LL)	-0.23	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.38	18-20	>617	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH		Attic	-0.20	12-27	>806	360		
BCDL	10.0											
											Weight: 221 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 29-16:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 2-28,8-11,3-7:2x4 SP No.2, 2-3,7-8:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 14-16.
3-1-0 oc bracing: 15-24
5-4-0 oc bracing: 24-27, 12-15
WEBS 1 Row at midpt 2-29, 8-10
JOINTS 1 Brace at Jt(s): 15, 24, 30

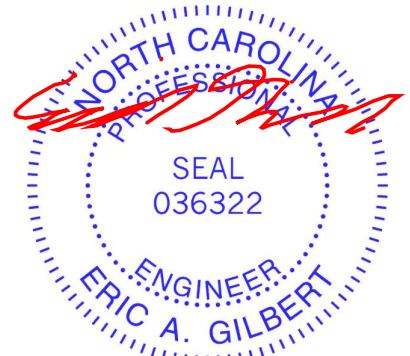
REACTIONS (lb/size) 10=1125/0-3-8, 29=1125/0-3-8
Max Horiz 29=321 (LC 10)
Max Grav 10=1542 (LC 45), 29=1542 (LC 45)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=290/178, 2-3=700/145, 3-4=804/252, 4-5=770/230, 5-6=770/230, 6-7=804/255, 7-8=701/144, 8-9=288/179, 1-29=375/161, 9-10=372/162
BOT CHORD 28-29=66/617, 25-28=240/591, 23-25=0/2674, 21-23=0/3869, 19-21=0/3869, 14-19=0/3869, 11-14=29/406, 10-11=38/596, 26-27=1192/54, 24-26=1192/54, 22-24=3006/0, 20-22=3006/0, 18-20=3400/0, 17-18=3017/0, 15-17=3017/0, 13-15=1202/44, 12-13=1202/44

WEBS 27-28=-96/391, 2-27=0/1028, 11-12=-90/368, 8-12=0/1022, 3-30=-655/364, 7-30=-655/364, 2-29=-1597/21, 8-10=-1593/17, 12-14=0/1452, 25-27=0/1424, 13-14=-191/0, 25-26=-183/0, 14-15=-1183/0, 24-25=-1204/0, 15-16=0/909, 23-24=0/894, 16-17=-165/0, 22-23=-156/0, 16-18=-447/37, 20-23=-470/51, 20-21=-13/45, 18-19=-12/41, 5-30=0/59

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-3-12, Exterior (2R) 3-3-12 to 16-7-4, Exterior(2E) 16-7-4 to 19-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-30, 7-30; Wall dead load (5.0psf) on member(s).2-27, 8-12
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-27, 24-26, 22-24, 20-22, 18-20, 17-18, 15-17, 13-15, 12-13
 - This truss is designed in accordance with the 2018 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



May 17, 2022

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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



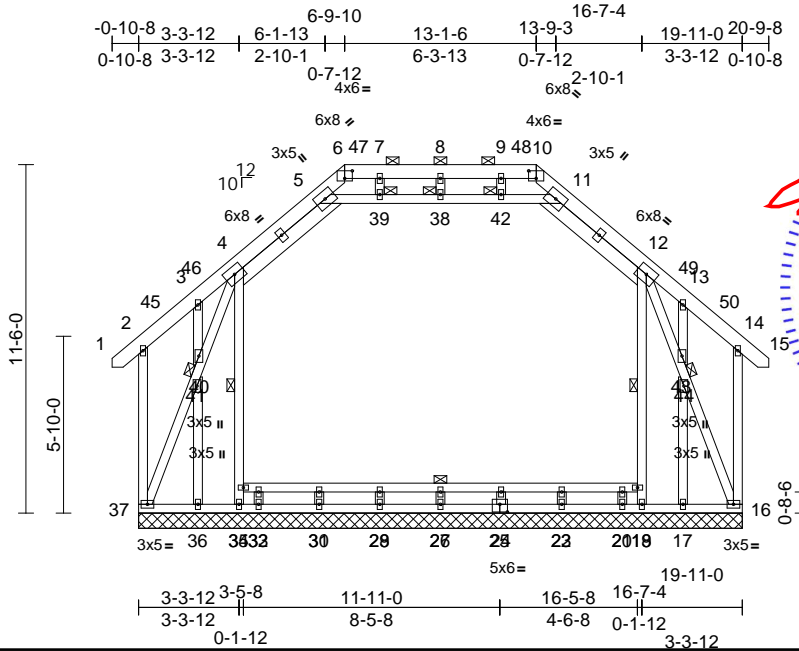
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss G03	Truss Type Attic Supported Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)
					I51987080

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:41
ID:mTC1KUI0mrxfallau1_zozhpVg-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:76

Plate Offsets (X, Y): [6:0-3-0,0-3-0], [10:0-3-0,0-3-0], [25:0-3-0,0-3-0]

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	16	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 231 lb	FT = 20%

LUMBER	TOP CHORD	BOT CHORD	WEBS	OTHERS	BRACING	TOP CHORD	BOT CHORD	WEBS	REACTIONS	FORCES
TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 *Except* 5-11:2x4 SP No.2, 4-5,11-12:2x6 SP No.2 OTHERS 2x4 SP No.3	TOP CHORD 2-37=-186/193, 1-2=0/31, 2-3=-138/207, 3-4=-125/268, 4-5=-543/203, 5-6=-884/123, 6-7=-874/112, 7-8=-874/112, 8-9=-874/112, 9-10=-874/112, 10-11=-884/134, 11-12=-543/203, 12-13=-128/268, 13-14=-138/207, 14-15=0/31, 14-16=-188/193	BOT CHORD 36-37=-142/275, 35-36=-142/275, 33-35=-138/259, 31-33=-138/259, 29-31=-138/259, 27-29=-138/259, 23-27=-138/265, 21-23=-137/265, 18-21=-137/265, 17-18=-142/276, 16-17=-142/275, 32-34=-4/19, 30-32=-4/19, 28-30=-4/19, 26-28=-4/19, 24-26=-4/19, 22-24=-6/17, 20-22=-6/17, 19-20=-6/17	WEBS 37-41=-713/308, 40-41=-655/280, 4-40=-748/319, 34-35=-397/221, 4-34=-399/289, 18-19=-368/185, 12-19=-370/253, 12-43=-741/284, 43-44=-629/244, 16-44=-702/274, 5-39=-57/616, 38-39=-57/616, 38-42=-57/616, 11-42=-57/616, 8-38=-71/29, 26-27=-117/0, 7-39=-6/63, 28-29=-115/0, 30-31=-120/0, 32-33=-97/0, 3-40=-42/181, 36-41=-39/144, 9-42=-6/63, 24-25=-115/0, 22-23=-120/0, 20-21=-97/0, 13-43=-44/181, 17-44=-41/144	REACTIONS (lb/size) 16=700/19-11-0, 17=-38/19-11-0, 18=159/19-11-0, 21=65/19-11-0, 23=80/19-11-0, 25=77/19-11-0, 27=77/19-11-0, 29=77/19-11-0, 31=79/19-11-0, 33=66/19-11-0, 35=159/19-11-0, 36=-38/19-11-0, 37=700/19-11-0 Max Horiz 37=-327 (LC 12) Max Uplift 16=-227 (LC 11), 17=-109 (LC 39), 18=-159 (LC 10), 35=-194 (LC 11), 36=-109 (LC 39), 37=-261 (LC 10) Max Grav 16=792 (LC 23), 17=134 (LC 50), 18=368 (LC 50), 21=192 (LC 21), 23=242 (LC 21), 25=230 (LC 21), 27=232 (LC 21), 29=231 (LC 21), 31=240 (LC 21), 33=193 (LC 21), 35=397 (LC 48), 36=132 (LC 48), 37=791 (LC 22)	BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-10. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 19-34 WEBS 1 Row at midpt 4-35, 12-18 JOINTS 1 Brace at Jt(s): 38, 39, 40, 42, 43	TOP CHORD 2-37=-186/193, 1-2=0/31, 2-3=-138/207, 3-4=-125/268, 4-5=-543/203, 5-6=-884/123, 6-7=-874/112, 7-8=-874/112, 8-9=-874/112, 9-10=-874/112, 10-11=-884/134, 11-12=-543/203, 12-13=-128/268, 13-14=-138/207, 14-15=0/31, 14-16=-188/193	BOT CHORD 36-37=-142/275, 35-36=-142/275, 33-35=-138/259, 31-33=-138/259, 29-31=-138/259, 27-29=-138/259, 23-27=-138/265, 21-23=-137/265, 18-21=-137/265, 17-18=-142/276, 16-17=-142/275, 32-34=-4/19, 30-32=-4/19, 28-30=-4/19, 26-28=-4/19, 24-26=-4/19, 22-24=-6/17, 20-22=-6/17, 19-20=-6/17	WEBS 37-41=-713/308, 40-41=-655/280, 4-40=-748/319, 34-35=-397/221, 4-34=-399/289, 18-19=-368/185, 12-19=-370/253, 12-43=-741/284, 43-44=-629/244, 16-44=-702/274, 5-39=-57/616, 38-39=-57/616, 38-42=-57/616, 11-42=-57/616, 8-38=-71/29, 26-27=-117/0, 7-39=-6/63, 28-29=-115/0, 30-31=-120/0, 32-33=-97/0, 3-40=-42/181, 36-41=-39/144, 9-42=-6/63, 24-25=-115/0, 22-23=-120/0, 20-21=-97/0, 13-43=-44/181, 17-44=-41/144	REACTIONS (lb/size) 16=700/19-11-0, 17=-38/19-11-0, 18=159/19-11-0, 21=65/19-11-0, 23=80/19-11-0, 25=77/19-11-0, 27=77/19-11-0, 29=77/19-11-0, 31=79/19-11-0, 33=66/19-11-0, 35=159/19-11-0, 36=-38/19-11-0, 37=700/19-11-0 Max Horiz 37=-327 (LC 12) Max Uplift 16=-227 (LC 11), 17=-109 (LC 39), 18=-159 (LC 10), 35=-194 (LC 11), 36=-109 (LC 39), 37=-261 (LC 10) Max Grav 16=792 (LC 23), 17=134 (LC 50), 18=368 (LC 50), 21=192 (LC 21), 23=242 (LC 21), 25=230 (LC 21), 27=232 (LC 21), 29=231 (LC 21), 31=240 (LC 21), 33=193 (LC 21), 35=397 (LC 48), 36=132 (LC 48), 37=791 (LC 22)	FORCES (lb) - Maximum Compression/Maximum Tension
NOTES 1) Unbalanced roof live loads have been considered for this design.										

May 17, 2022

Continued on page 2

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

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



818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss G03	Truss Type Attic Supported Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK I51987080 Job Reference (optional)
-----------------	--------------	-------------------------------------	----------	----------	--

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:41
ID:mTC1KUi0mxofallau1_zozhpVg-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 2

- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 14) Ceiling dead load (5.0 psf) on member(s). 4-5, 11-12, 5-39, 38-39, 38-42, 11-42; Wall dead load (5.0psf) on member(s).34-35, 4-34, 18-19, 12-19
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 37, 227 lb uplift at joint 16, 194 lb uplift at joint 35, 159 lb uplift at joint 18, 109 lb uplift at joint 36 and 109 lb uplift at joint 17.
- 16) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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. 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



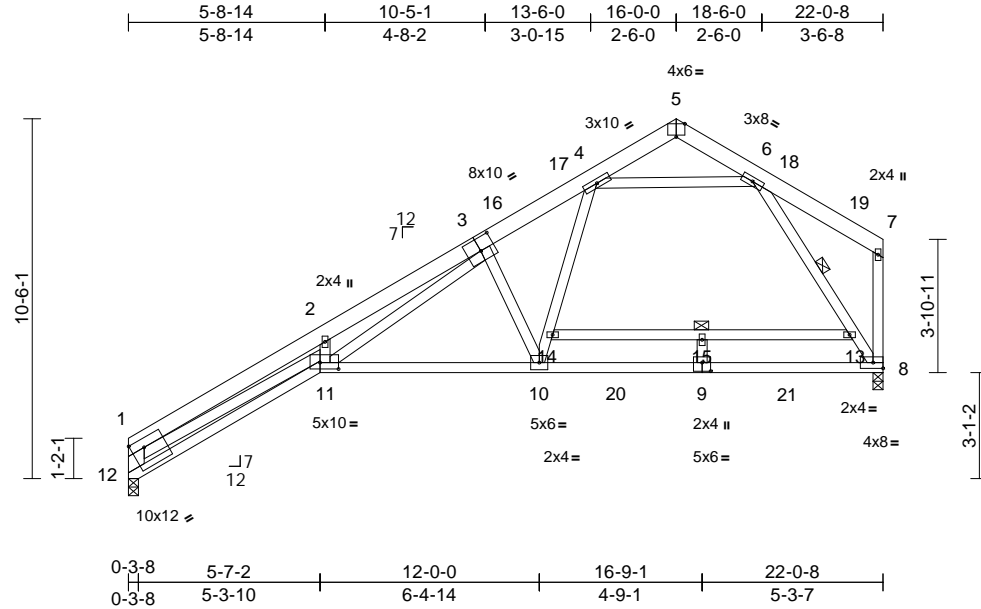
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss H01	Truss Type Roof Special	Qty 6	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987081
-----------------	--------------	----------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:42
ID:x3WhTBY6w3X0nFQ?ReWD6FzFwFG-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWRcDoi7J4zJC?f

Page: 1



Scale = 1:67.3

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

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	0.99	Vert(LL)	-0.39	10-11	>664	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.74	10-11	>351	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.44	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 164 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E *Except* 1-3:2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 12-1:2x6 SP No.2, 11-1,13-14:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-8, 13-14

REACTIONS (lb/size) 8=1019/0-3-8, 12=914/0-3-8
Max Horiz 12=272 (LC 11)
Max Uplift 12=34 (LC 14)
Max Grav 8=1019 (LC 1), 12=965 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-1177/217, 1-2=-4334/571, 2-4=-4068/694, 4-5=-33/119, 5-6=-527/66, 6-7=-94/169, 7-8=-61/259
BOT CHORD 11-12=-317/746, 10-11=-133/1726, 8-10=0/789
WEBS 1-11=-385/3332, 2-11=0/246, 3-11=-642/2452, 3-10=-1293/287, 10-14=-66/1450, 4-14=-27/1513, 6-13=-1249/115, 8-13=-1326/77, 14-15=-70/0, 13-15=-70/0, 9-15=0/131, 4-6=-511/82

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior (1) 3-2-12 to 13-0-0, Exterior(2R) 13-0-0 to 18-10-12, Exterior(2E) 18-10-12 to 21-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 200.0lb AC unit load placed on the bottom chord, 16-9-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



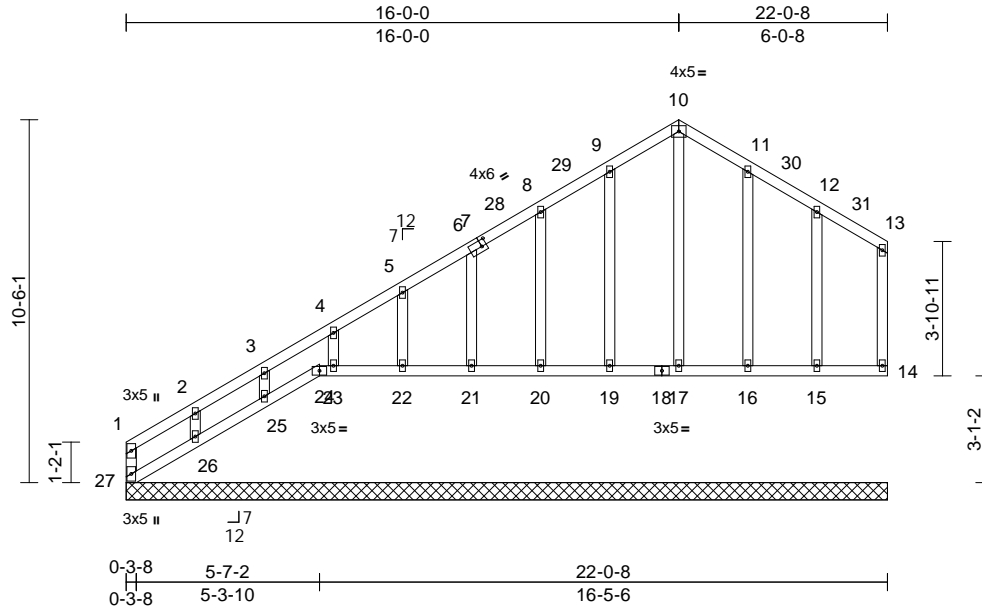
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss H02	Truss Type Roof Special Structural Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987082
-----------------	--------------	---	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:42
ID:DWIMNuBslfQvL2sTtV7yadzFwH0-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:66.7

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

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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 132 lb	FT = 20%

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

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, Except: 6-0-0 oc bracing: 24-25.

REACTIONS (lb/size)
14=64/22-0-8, 15=161/22-0-8, 16=160/22-0-8, 17=142/22-0-8, 19=161/22-0-8, 20=154/22-0-8, 21=155/22-0-8, 22=156/22-0-8, 23=149/22-0-8, 24=8/22-0-8, 25=151/22-0-8, 26=166/22-0-8, 27=57/22-0-8
Max Horiz 27=267 (LC 11)
Max Uplift 14=50 (LC 14), 15=41 (LC 15), 16=52 (LC 15), 17=10 (LC 13), 19=49 (LC 14), 20=50 (LC 14), 21=49 (LC 14), 22=47 (LC 14), 23=53 (LC 14), 24=32 (LC 13), 25=4 (LC 14), 26=230 (LC 14), 27=183 (LC 12)
Max Grav 14=68 (LC 21), 15=227 (LC 21), 16=243 (LC 21), 17=161 (LC 23), 19=245 (LC 20), 20=219 (LC 20), 21=162 (LC 23), 22=161 (LC 27), 23=155 (LC 23), 24=34 (LC 10), 25=151 (LC 1), 26=282 (LC 23), 27=292 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-27=-185/123, 1-2=-276/217, 2-3=-203/162, 3-4=-186/153, 4-5=-164/134, 5-6=-151/130, 6-8=-137/126, 8-9=-124/131, 9-10=-137/174, 10-11=-137/174, 11-12=-110/130, 12-13=-87/98, 13-14=-80/70
BOT CHORD 26-27=-100/77, 25-26=-67/70, 24-25=-73/60, 23-24=-53/51, 22-23=-53/51, 21-22=-53/51, 20-21=-53/51, 19-20=-53/51, 17-19=-53/51, 16-17=-53/51, 15-16=-53/51, 14-15=-53/51
WEBS 10-17=-123/52, 9-19=-206/72, 8-20=-180/73, 6-21=-123/72, 5-22=-121/71, 4-23=-126/78, 3-25=-115/51, 2-26=-183/163, 11-16=-205/72, 12-15=-187/78

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 13-0-0, Exterior(2R) 13-0-0 to 18-10-12, Exterior(2E) 18-10-12 to 21-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 24, 4 lb uplift at joint 25 and 230 lb uplift at joint 26.
- N/A

- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 24, 14, 17, 19, 20, 21, 22, 23, 25, 26, 16, 15.



May 17, 2022

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/TPI 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 22040116	Truss H02	Truss Type Roof Special Structural Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK I51987082 Job Reference (optional)
-----------------	--------------	---	----------	----------	--

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:42
ID:DWIMNuBslfQvL2sTt7VyadzFwH0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

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



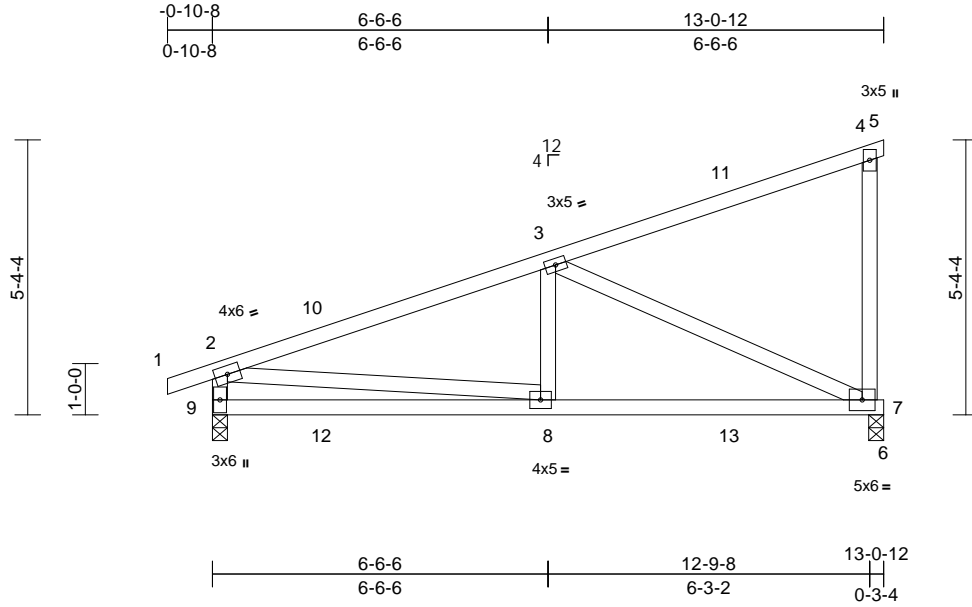
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss J01	Truss Type Monopitch	Qty 3	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987083
-----------------	--------------	-------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:43
ID:UxC8s1x5IH5xuuOcBwY_cFzFn_8-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:44.8

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	0.66	Vert(LL)	0.10	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	0.08	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 72 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-7-1 oc bracing.

REACTIONS

(lb/size) 7=525/0-3-8, 9=569/0-3-8
Max Horiz 9=203 (LC 11)
Max Uplift 7=209 (LC 10), 9=212 (LC 10)
Max Grav 7=670 (LC 21), 9=614 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-867/750, 3-4=-134/75, 4-5=-8/0, 4-7=-266/109, 2-9=-553/473
BOT CHORD 8-9=-320/242, 7-8=-687/772, 6-7=0/0
WEBS 3-8=-336/246, 3-7=-810/811, 2-8=-369/558

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-0-12, Exterior(2E) 10-0-12 to 13-0-12 zone; cantilever left and right exposed; end vertical 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 7. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

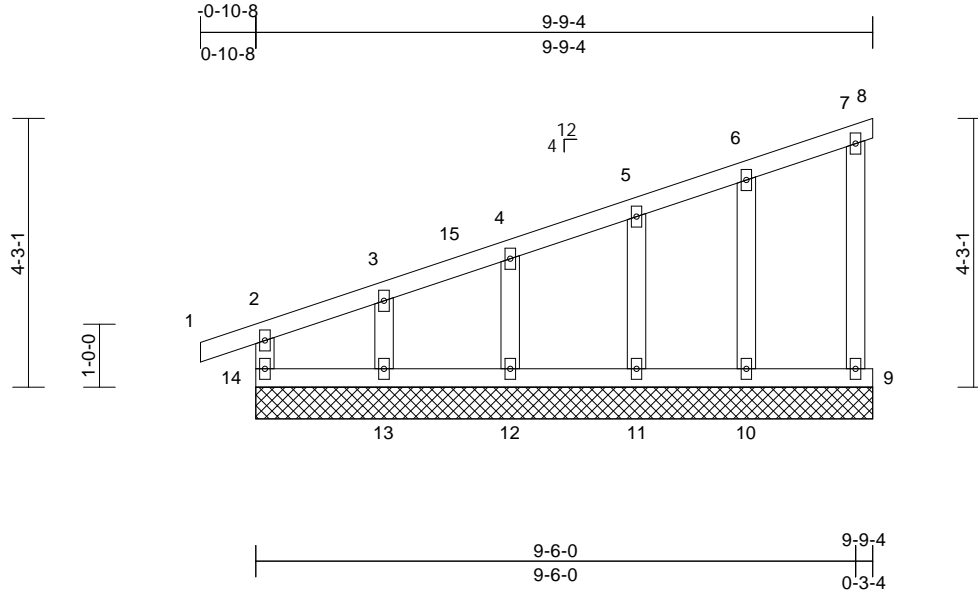
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss J02	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987084
-----------------	--------------	---	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:43
ID:Y58EzZK9l67Oipqj3e6Uv_zFmze-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 50 lb	FT = 20%

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

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

REACTIONS (lb/size)
8=2/9-9-4, 9=74/9-9-4,
10=148/9-9-4, 11=147/9-9-4,
12=166/9-9-4, 13=148/9-9-4,
14=142/9-9-4
Max Horiz 14=159 (LC 11)
Max Uplift 8=32 (LC 10), 9=33 (LC 11),
10=28 (LC 10), 11=35 (LC 14),
12=24 (LC 10), 13=80 (LC 14)
Max Grav 8=26 (LC 13), 9=102 (LC 21),
10=201 (LC 21), 11=203 (LC 21),
12=216 (LC 21), 13=149 (LC 21),
14=154 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-14=-124/58, 1-2=0/19, 2-3=-145/22,
3-4=-90/25, 4-5=-83/26, 5-6=-72/23,
6-7=-64/62, 7-8=-23/14, 7-9=-88/32
BOT CHORD 13-14=-59/73, 12-13=-59/73, 11-12=-59/73,
10-11=-59/73, 9-10=-59/73
WEBS 4-12=-175/127, 3-13=-109/181,
5-11=-166/134, 6-10=-163/104

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-0-6, Exterior(2N) 2-0-6 to 9-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 8, 33 lb uplift at joint 9, 24 lb uplift at joint 12, 80 lb uplift at joint 13, 35 lb uplift at joint 11 and 28 lb uplift at joint 10.

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
LOAD CASE(S) Standard



May 17, 2022

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



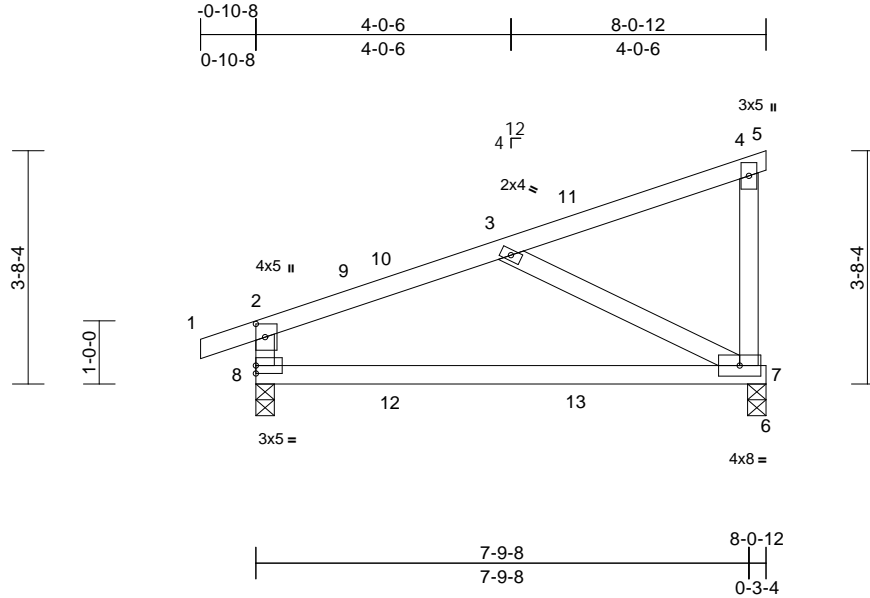
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss J03	Truss Type Monopitch	Qty 7	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987085
-----------------	--------------	-------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:43
ID:4A6HwRWC_187eG3q??PEYMzFmzO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.4

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

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	0.76	Vert(LL)	0.28	7-8	>328	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	0.22	7-8	>416	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 38 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7'-4-7 oc bracing.

REACTIONS

(lb/size) 7=324/0-3-8, 8=371/0-3-8
Max Horiz 8=136 (LC 11)
Max Uplift 7=-128 (LC 10), 8=-142 (LC 10)
Max Grav 7=439 (LC 21), 8=445 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-451/337, 3-4=-97/118, 4-5=-8/0, 4-7=-193/79, 2-8=-362/275
BOT CHORD 7-8=-330/375, 6-7=0/0
WEBS 3-7=-379/331

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-0-12, Exterior(2E) 5-0-12 to 8-0-12 zone; cantilever left and right exposed; end vertical 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=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 7. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



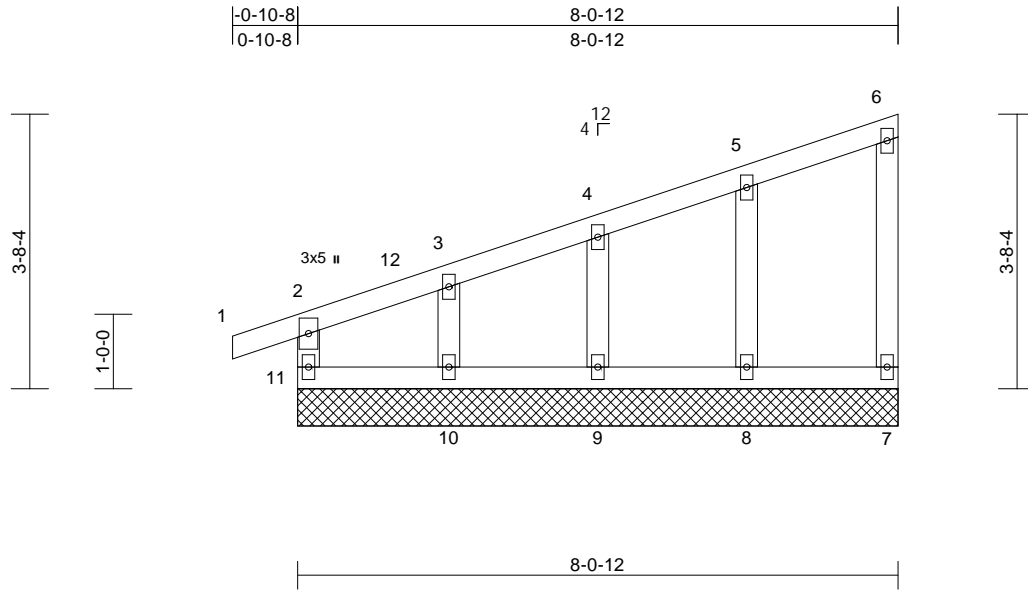
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss J04	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987086
-----------------	--------------	---	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:44
ID:R8vAz9aKpZnP12xonY_PfQzFmzJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:30.9

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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	n/a	-	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 39 lb	FT = 20%	

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

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

REACTIONS (lb/size)
7=58/8-0-12, 8=168/8-0-12,
9=155/8-0-12, 10=145/8-0-12,
11=136/8-0-12
Max Horiz 11=97 (LC 10)
Max Uplift 7=-12 (LC 10), 8=-38 (LC 14),
9=-20 (LC 10), 10=-86 (LC 14)
Max Grav 7=79 (LC 21), 8=228 (LC 21),
9=212 (LC 21), 10=190 (LC 21),
11=136 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-11=-120/37, 1-2=0/19, 2-3=-204/64,
3-4=-132/41, 4-5=-83/28, 5-6=-31/15
BOT CHORD 10-11=0/0, 9-10=0/0, 8-9=0/0, 7-8=0/0
WEBS 4-9=-174/130, 3-10=-151/211, 5-8=-186/163,
6-7=-64/54

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-0-6, Exterior(2N) 2-0-6 to 4-11-0, Corner(3E) 4-11-0 to 7-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 7, 20 lb uplift at joint 9, 86 lb uplift at joint 10 and 38 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



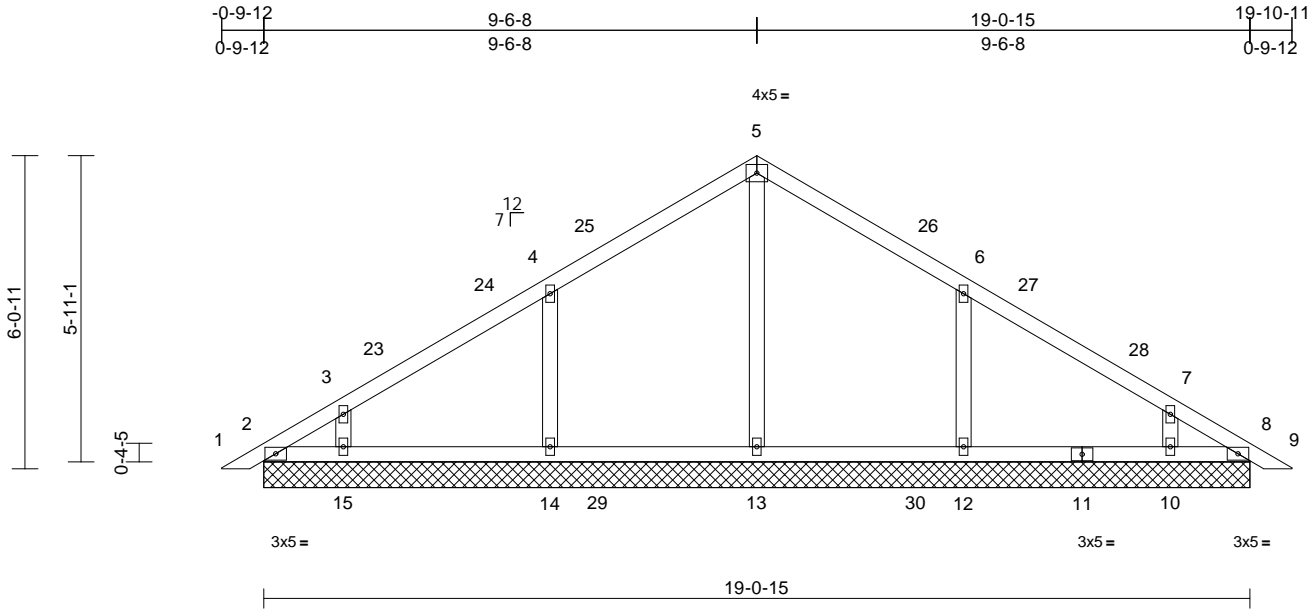
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss PB1	Truss Type Piggyback	Qty 10	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987087
-----------------	--------------	-------------------------	-----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:44
ID:UWNlgCZass9xdfRGAgasczFn54-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.6

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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 83 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 (lb/size)
2=67/19-0-15, 8=67/19-0-15,
10=253/19-0-15, 12=346/19-0-15,
13=260/19-0-15, 14=346/19-0-15,
15=253/19-0-15, 16=67/19-0-15,
19=67/19-0-15
Max Horiz 2=138 (LC 13), 16=138 (LC 13)
Max Uplift 2=-36 (LC 10), 8=-9 (LC 11),
10=-79 (LC 15), 12=-115 (LC 15),
14=-116 (LC 14), 15=-80 (LC 14),
16=-36 (LC 10), 19=-9 (LC 11)
Max Grav 2=89 (LC 25), 8=75 (LC 22),
10=310 (LC 25), 12=479 (LC 6),
13=374 (LC 24), 14=479 (LC 5),
15=311 (LC 24), 16=89 (LC 25),
19=75 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-127/108, 3-4=-130/87,
4-5=-147/128, 5-6=-147/111, 6-7=-90/52,
7-8=-91/55, 8-9=0/16
BOT CHORD 2-15=-39/90, 14-15=-39/90, 13-14=-39/90,
12-13=-39/90, 10-12=-39/90, 8-10=-39/90
WEBS 5-13=-203/0, 4-14=-395/165, 3-15=-206/129,
6-12=-395/164, 7-10=-206/128

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 7-4-10, Exterior(2R) 7-4-10 to 13-4-10, Interior (1) 13-4-10 to 17-5-10, Exterior(2E) 17-5-10 to 20-5-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- N/A

14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
LOAD CASE(S) Standard

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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



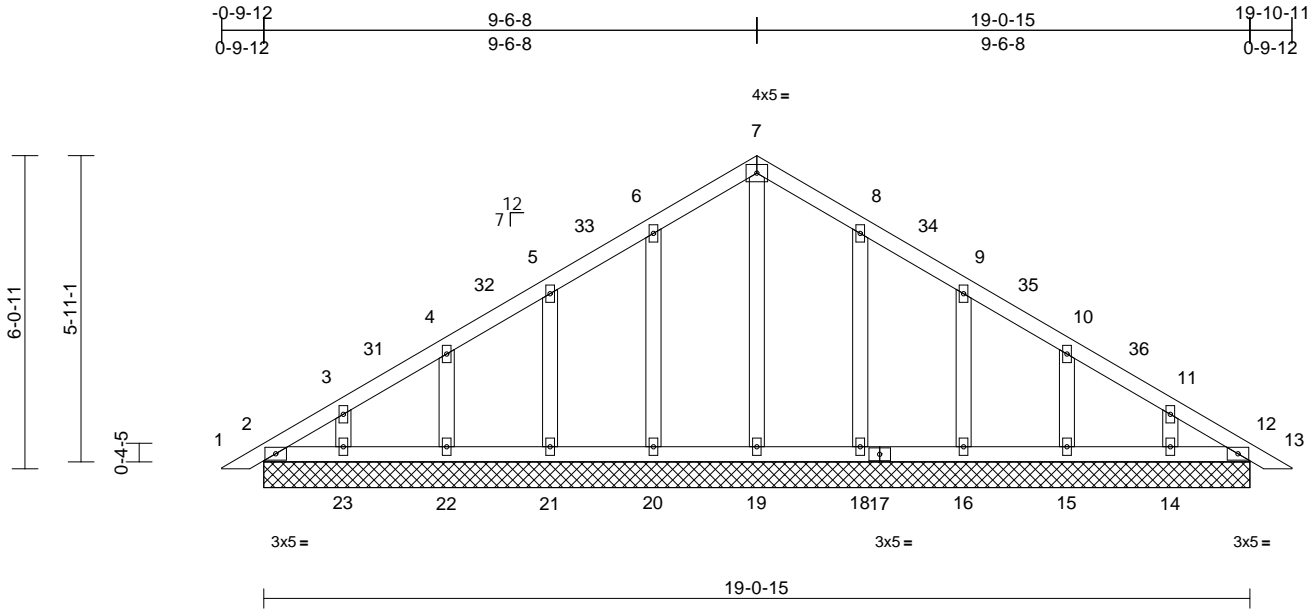
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss PB2	Truss Type Piggyback	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987088
-----------------	--------------	-------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:44
ID: _yGnhJ2Aar_rjAcghDlxQrZFn1t-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCdoi7J4zJC7f

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	0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	12	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 101 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 (lb/size)
 2=90/19-0-15, 12=90/19-0-15, 14=144/19-0-15, 15=158/19-0-15, 16=153/19-0-15, 18=161/19-0-15, 19=128/19-0-15, 20=161/19-0-15, 21=153/19-0-15, 22=158/19-0-15, 23=144/19-0-15, 24=90/19-0-15, 27=90/19-0-15
 Max Horiz 2=-134 (LC 12), 24=-134 (LC 12)
 Max Uplift 2=-24 (LC 10), 14=-47 (LC 15), 15=-49 (LC 15), 16=-50 (LC 15), 18=-50 (LC 15), 20=-51 (LC 14), 21=-49 (LC 14), 22=-49 (LC 14), 23=-49 (LC 14), 24=-24 (LC 10)
 Max Grav 2=102 (LC 29), 12=91 (LC 22), 14=151 (LC 25), 15=164 (LC 25), 16=219 (LC 22), 18=245 (LC 22), 19=149 (LC 27), 20=245 (LC 21), 21=219 (LC 21), 22=164 (LC 24), 23=153 (LC 24), 24=102 (LC 29), 27=91 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/16, 2-3=-114/100, 3-4=-96/86, 4-5=-87/74, 5-6=-76/99, 6-7=-82/124, 7-8=-82/116, 8-9=-64/68, 9-10=-49/36, 10-11=-57/34, 11-12=-79/48, 12-13=0/16

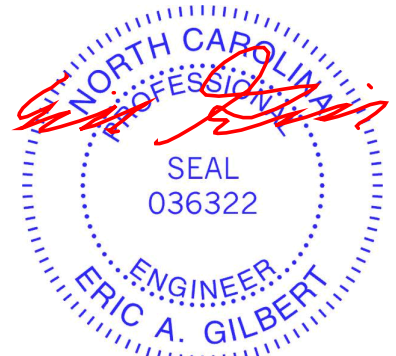
BOT CHORD 2-23=-42/92, 22-23=-42/92, 21-22=-42/92, 20-21=-42/92, 19-20=-42/92, 18-19=-42/92, 16-18=-42/92, 15-16=-42/92, 14-15=-42/92, 12-14=-42/92
WEBS 7-19=-110/5, 6-20=-206/74, 5-21=-180/72, 4-22=-126/74, 3-23=-110/64, 8-18=-206/73, 9-16=-180/72, 10-15=-126/74, 11-14=-110/63

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 7-4-10, Exterior(2R) 7-4-10 to 13-4-10, Interior (1) 13-4-10 to 17-5-10, Exterior(2E) 17-5-10 to 20-5-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- N/A

- This truss is designed in accordance with the 2018 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



May 17, 2022

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



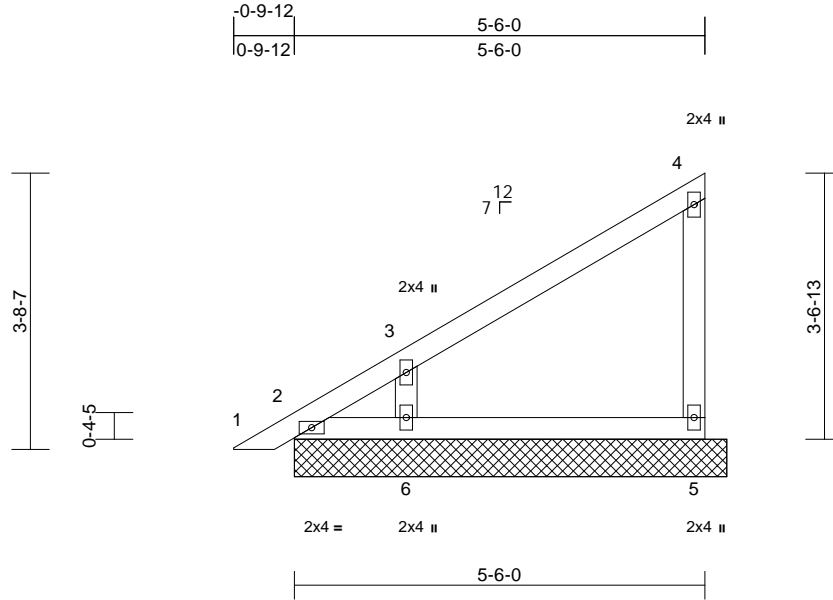
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss PB3	Truss Type Piggyback	Qty 4	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987089
-----------------	--------------	-------------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:44
ID:0qyafw_?OUWQ4iiU?QBuzpZfZim-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 24 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=23/5-9-8, 5=125/5-9-8, 6=312/5-9-8, 7=23/5-9-8
Max Horiz 2=124 (LC 14), 7=124 (LC 14)
Max Uplift 2=-18 (LC 12), 5=-39 (LC 14), 6=-101 (LC 14), 7=-18 (LC 12)
Max Grav 2=62 (LC 14), 5=185 (LC 21), 6=461 (LC 21), 7=62 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-182/114, 3-4=-114/58
BOT CHORD 2-6=-29/2, 5-6=0/0
WEBS 3-6=-420/225, 4-5=-152/78

- NOTES**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 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



May 17, 2022

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

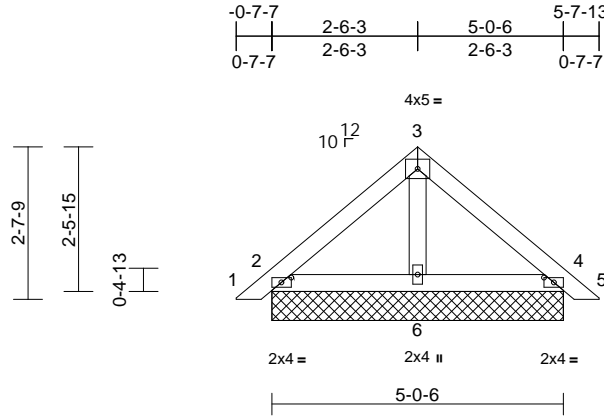
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss PB5	Truss Type Piggyback	Qty 10	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK I51987090 Job Reference (optional)
-----------------	--------------	-------------------------	-----------	----------	--

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:45
ID:FdqRVfn0ZNVmMDACD34oHRzTR4m-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:39.8

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

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 22 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

(lb/size) 2=140/5-0-6, 4=140/5-0-6, 6=156/5-0-6, 7=140/5-0-6, 11=140/5-0-6
Max Horiz 2=-55 (LC 12), 7=-55 (LC 12)
Max Uplift 2=-24 (LC 14), 4=-31 (LC 15), 7=-24 (LC 14), 11=-31 (LC 15)
Max Grav 2=199 (LC 21), 4=199 (LC 22), 6=163 (LC 21), 7=199 (LC 21), 11=199 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/24, 2-3=-117/104, 3-4=-117/104, 4-5=0/24
BOT CHORD 2-6=-16/55, 4-6=-9/55
WEBS 3-6=-63/0

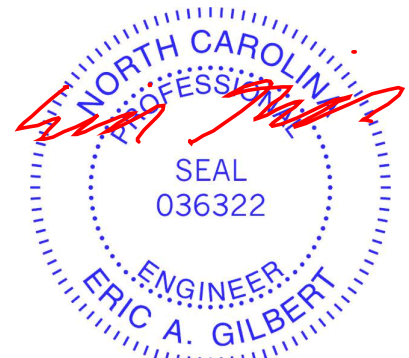
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- N/A

- This truss is designed in accordance with the 2018 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



May 17, 2022

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



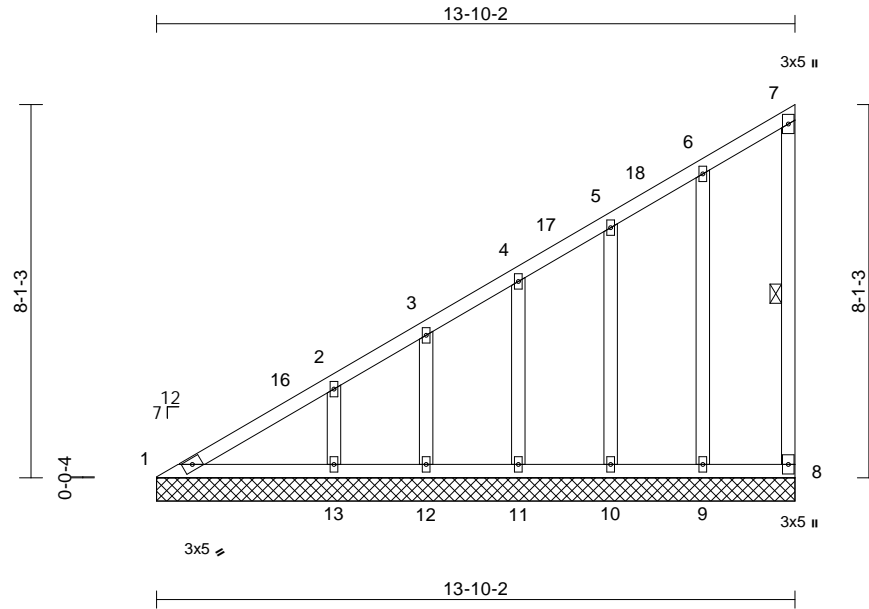
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss V1	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987091
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:45
ID:obl8CR79AVlhJxhIYrZsHzhpM4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f

Page: 1



Scale = 1:50

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	0.67	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 85 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-8

REACTIONS

(lb/size)	1=122/13-10-2, 8=58/13-10-2, 9=164/13-10-2, 10=150/13-10-2, 11=170/13-10-2, 12=94/13-10-2, 13=302/13-10-2
Max Horiz	1=270 (LC 11)
Max Uplift	1=-11 (LC 10), 8=-40 (LC 13), 9=-54 (LC 14), 10=-46 (LC 14), 11=-52 (LC 14), 12=-40 (LC 14), 13=-72 (LC 14)
Max Grav	1=164 (LC 24), 8=87 (LC 20), 9=243 (LC 20), 10=220 (LC 20), 11=179 (LC 20), 12=101 (LC 23), 13=308 (LC 23)

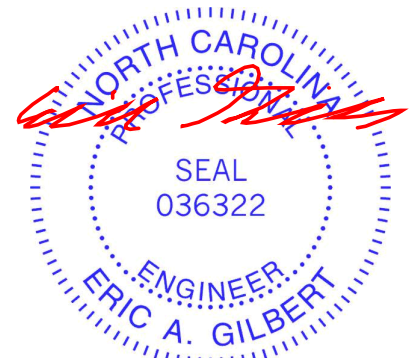
FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-263/158, 2-3=-190/116, 3-4=-164/108, 4-5=-152/97, 5-6=-143/97, 6-7=-104/107, 7-8=-72/30
BOT CHORD	1-13=-114/184, 12-13=-114/142, 11-12=-114/142, 10-11=-114/142, 9-10=-114/142, 8-9=-114/142
WEBS	6-9=-201/63, 5-10=-184/114, 4-11=-132/96, 3-12=-92/80, 2-13=-201/142

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-7 to 3-0-7, Exterior(2N) 3-0-7 to 10-8-13, Corner(3E) 10-8-13 to 13-8-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 8, 11 lb uplift at joint 1, 54 lb uplift at joint 9, 46 lb uplift at joint 10, 52 lb uplift at joint 11, 40 lb uplift at joint 12 and 72 lb uplift at joint 13.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

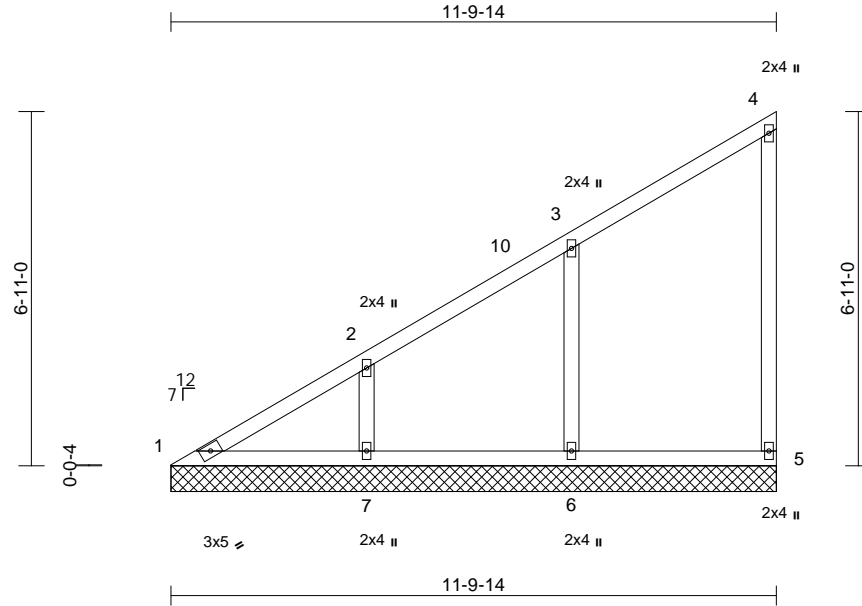
Job 22040116	Truss V2	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987092
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:45

Page: 1

Id:dZR1oJ6SMNhWoks6TOXq3zTR1m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f



Scale = 1:45

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	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 55 lb	FT = 20%	

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

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

REACTIONS (lb/size)
1=123/11-9-14, 5=128/11-9-14,
6=337/11-9-14, 7=346/11-9-14
Max Horiz 1=236 (LC 11)
Max Uplift 1=-4 (LC 10), 5=-35 (LC 11),
6=-109 (LC 14), 7=-94 (LC 14)
Max Grav 1=167 (LC 24), 5=211 (LC 5),
6=491 (LC 5), 7=413 (LC 23)

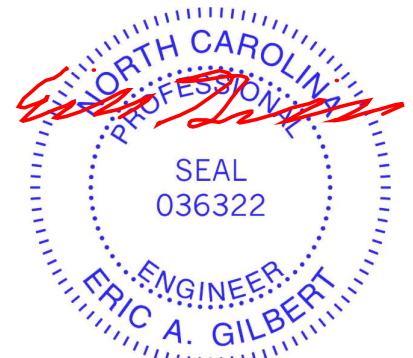
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-268/139, 2-3=-160/110, 3-4=-136/89,
4-5=-159/45
BOT CHORD 1-7=-99/196, 6-7=-99/110, 5-6=-99/110
WEBS 3-6=-387/152, 2-7=-254/148

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 8-8-9, Exterior(2E) 8-8-9 to 11-8-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 5, 4 lb uplift at joint 1, 109 lb uplift at joint 6 and 94 lb uplift at joint 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

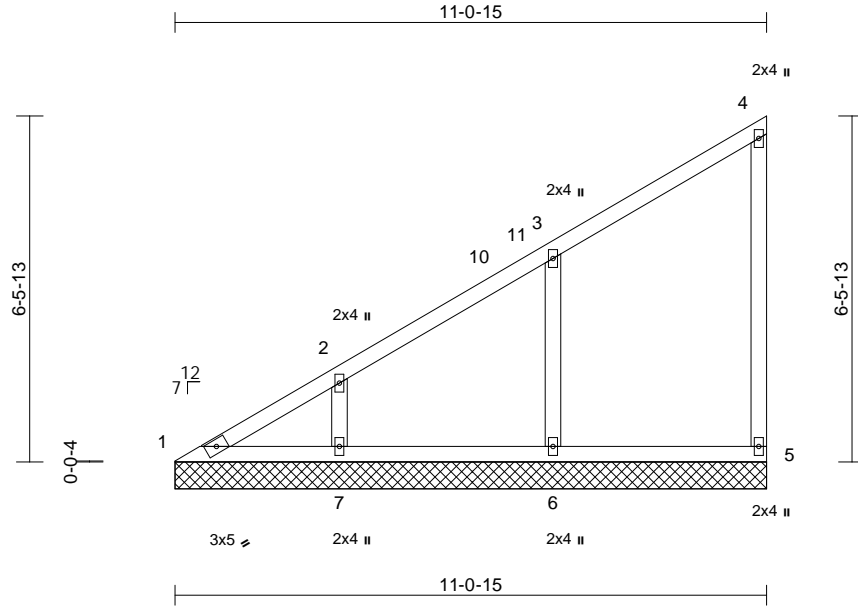
Job 22040116	Truss V3	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987093
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:45

Page: 1

ID:dfqSUCwL2q1s9Sv5905YzhpM_-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:43.1

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	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 51 lb	FT = 20%

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

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

REACTIONS (lb/size)
1=94/11-0-15, 5=126/11-0-15,
6=347/11-0-15, 7=308/11-0-15
Max Horiz 1=221 (LC 11)
Max Uplift 1=-11 (LC 10), 5=-33 (LC 11),
6=-61 (LC 14), 7=-86 (LC 14)
Max Grav 1=137 (LC 24), 5=209 (LC 5),
6=501 (LC 5), 7=364 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-213/130, 2-3=-153/110, 3-4=-133/82,
4-5=-158/44
BOT CHORD 1-7=-93/142, 6-7=-93/103, 5-6=-93/103
WEBS 3-6=-392/141, 2-7=-229/129

- NOTES**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-1-6, Interior (1) 3-1-6 to 6-8-11, Exterior(2R) 6-8-11 to 10-11-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 5, 11 lb uplift at joint 1, 61 lb uplift at joint 6 and 86 lb uplift at joint 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



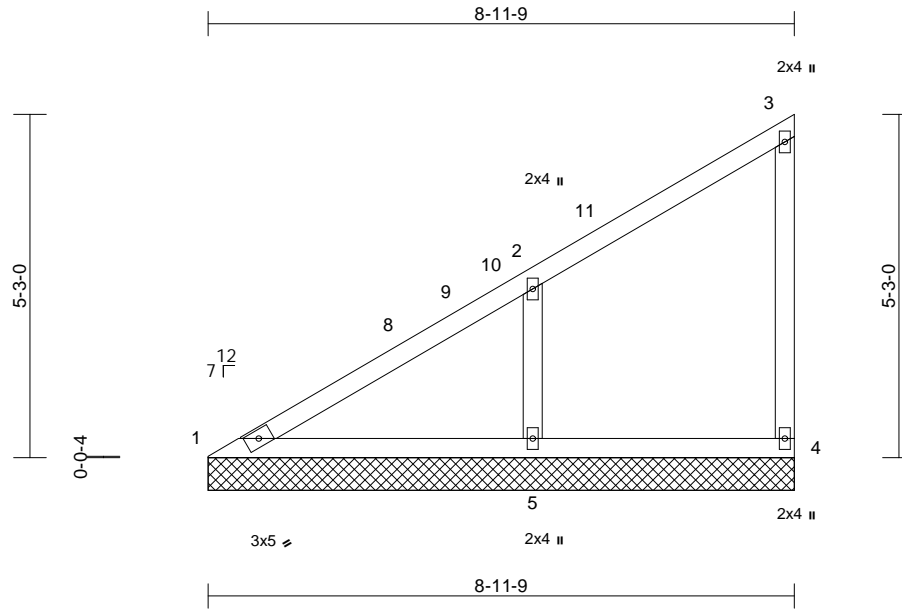
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss V4	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987094
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:45
ID:WLGyeg9zPbBytL9tiEbmDnzTR1i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 38 lb	FT = 20%

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

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

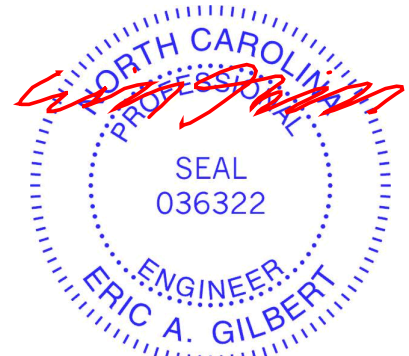
REACTIONS (lb/size)
1=158/8-11-9, 4=102/8-11-9,
5=446/8-11-9
Max Horiz 1=177 (LC 11)
Max Uplift 4=-27 (LC 11), 5=-112 (LC 14)
Max Grav 1=167 (LC 24), 4=165 (LC 20),
5=575 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-265/128, 2-3=-124/65, 3-4=-144/45
BOT CHORD 1-5=-79/227, 4-5=-79/86
WEBS 2-5=-442/189

- NOTES**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 4-7-5, Exterior(2R) 4-7-5 to 8-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 4 and 112 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

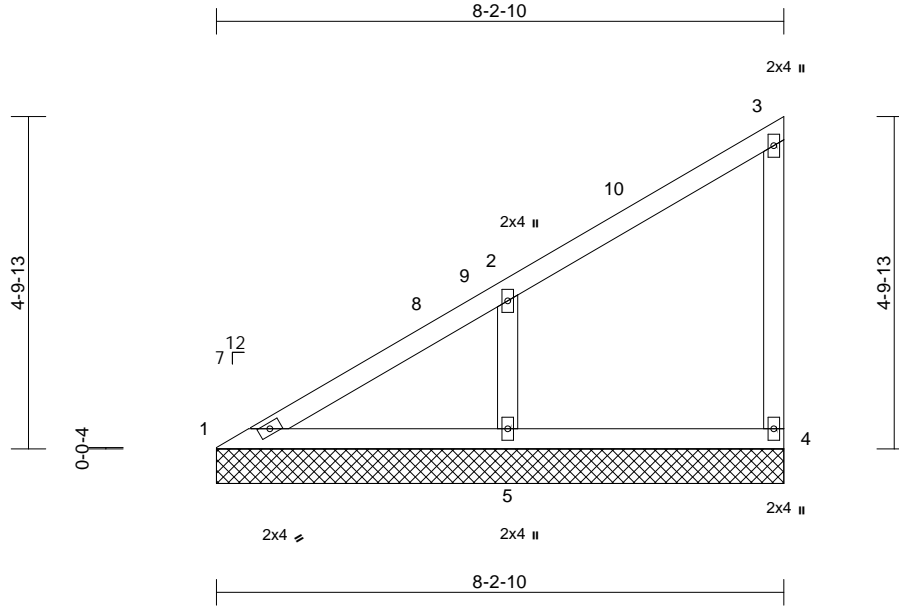
Job 22040116	Truss V5	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987095
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:46

Page: 1

ID:VWwvsFRpZYGWTSd8xEKGOzhpLw-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoi7J4zJC7f



Scale = 1:33.4

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	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 35 lb	FT = 20%

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

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

REACTIONS (lb/size)
1=130/8-2-10, 4=112/8-2-10,
5=403/8-2-10
Max Horiz 1=161 (LC 11)
Max Uplift 4=-26 (LC 11), 5=-107 (LC 14)
Max Grav 1=142 (LC 24), 4=175 (LC 20),
5=535 (LC 20)

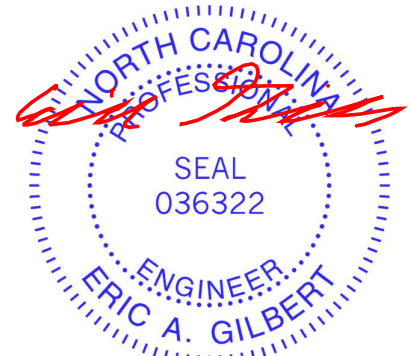
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-220/116, 2-3=-117/58, 3-4=-150/44
BOT CHORD 1-5=-72/181, 4-5=-72/79
WEBS 2-5=-419/186

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCCL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-10-7, Exterior(2R) 3-10-7 to 8-1-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 4 and 107 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



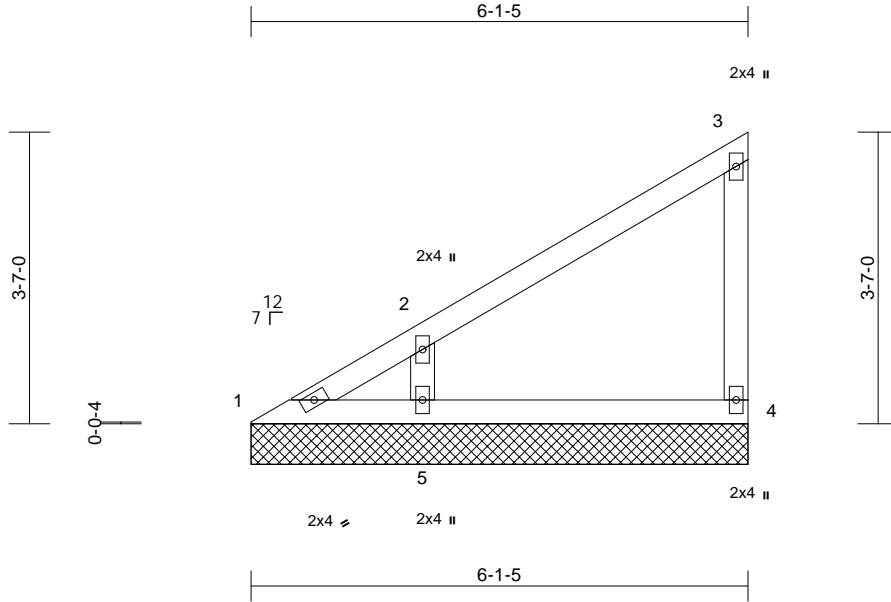
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss V6	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987096
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:46
ID:9eP49nIUaHiFJB4BlpajJzTR1W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:28.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 24 lb	FT = 20%	

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

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

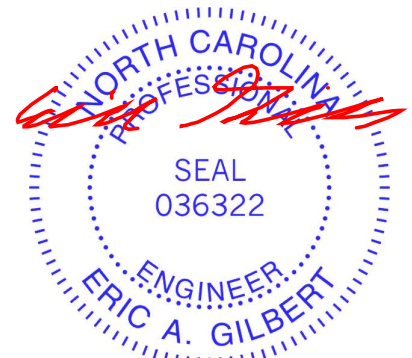
REACTIONS (lb/size)
1=31/6-1-5, 4=125/6-1-5,
5=320/6-1-5
Max Horiz 1=117 (LC 11)
Max Uplift 1=-12 (LC 10), 4=-24 (LC 14),
5=-90 (LC 14)
Max Grav 1=55 (LC 24), 4=186 (LC 20),
5=462 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-106/99, 2-3=-114/58, 3-4=-153/42
BOT CHORD 1-5=-54/59, 4-5=-54/59
WEBS 2-5=-415/211

- NOTES**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 4, 12 lb uplift at joint 1 and 90 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



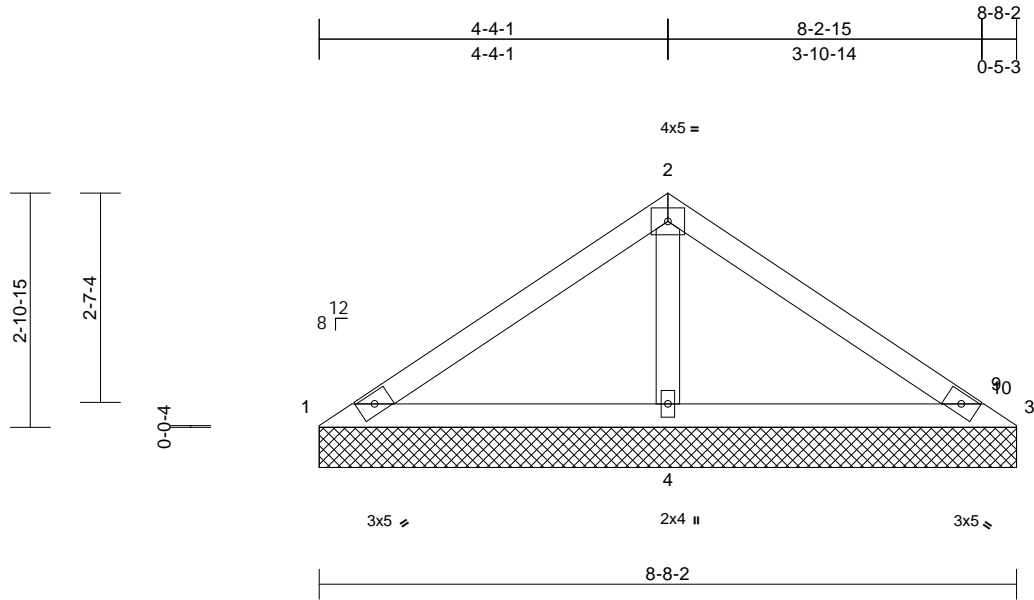
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss V7	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	151987097
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:46
ID:BJweuyr2dKwhU0kO5sRv9pzG_Fp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:28.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
										Weight: 30 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 8-8-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(lb/size) 1=32/8-8-2, 3=6/8-8-2, 4=629/8-8-2
Max Horiz 1=64 (LC 11)
Max Uplift 1=-37 (LC 21), 3=-51 (LC 20), 4=-77 (LC 14)
Max Grav 1=102 (LC 20), 3=65 (LC 21), 4=668 (LC 21)

FORCES

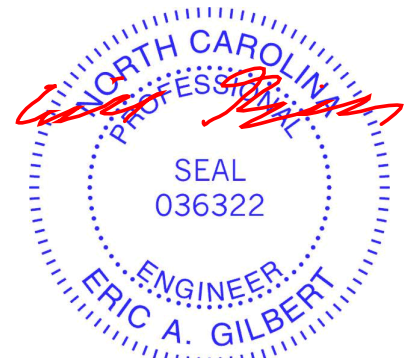
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/329, 2-3=-110/329
BOT CHORD 1-4=-221/152, 3-4=-221/152
WEBS 2-4=-494/210

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 5-3-2, Exterior(2E) 5-3-2 to 8-3-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 1, 51 lb uplift at joint 3 and 77 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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



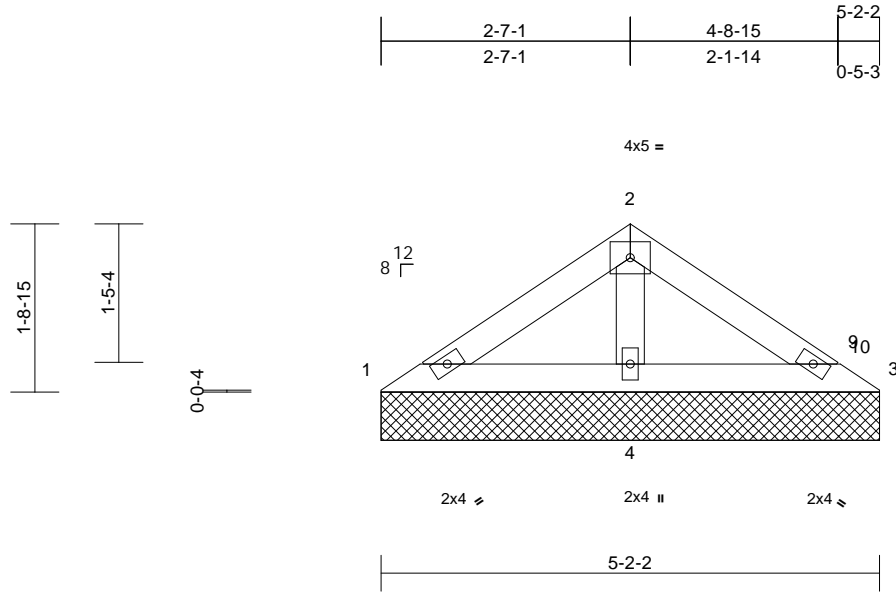
818 Soundside Road
Edenton, NC 27932

Job 22040116	Truss V8	Truss Type Valley	Qty 1	Ply 1	DRB GROUP - 78 FARM AT NEILLS CREEK Job Reference (optional)	I51987098
-----------------	-------------	----------------------	----------	----------	---	-----------

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon May 16 23:36:46
ID:Bjweuyr2dKwhU0kO5sRv9pzG_Fp-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:23.9

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
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 5-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(lb/size) 1=53/5-2-2, 3=29/5-2-2, 4=305/5-2-2
Max Horiz 1=36 (LC 11)
Max Uplift 1=-4 (LC 14), 4=-29 (LC 14)
Max Grav 1=88 (LC 20), 3=55 (LC 21), 4=306 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-87/116, 2-3=-66/114
BOT CHORD 1-4=-84/72, 3-4=-84/72
WEBS 2-4=-190/102

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 29 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 17, 2022

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

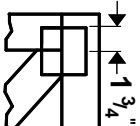
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

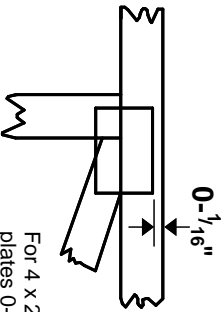
818 Soundside Road
Edenton, NC 27932

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



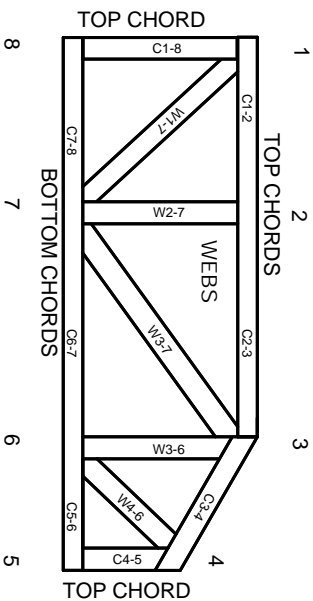
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.