ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 22030101
DRB - 97 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: I51218096 thru I51218118

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

North Carolina COA: C-0844

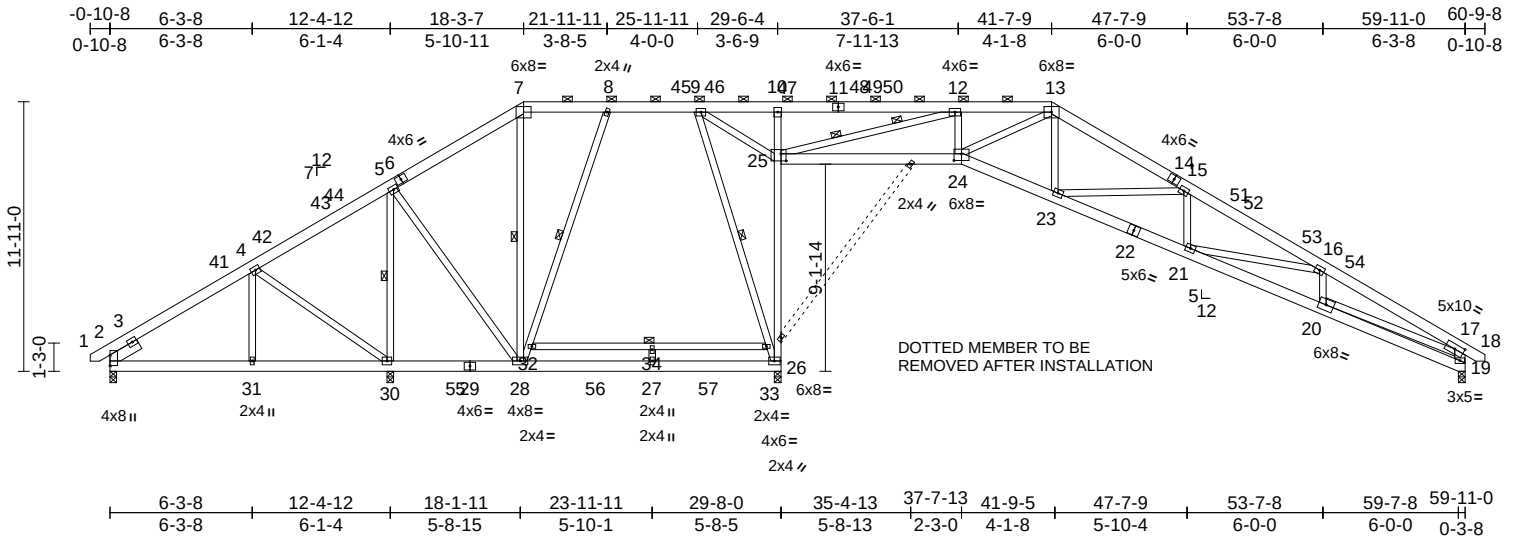
April 7,2022

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	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	A01	Piggyback Base	7	1	I51218096 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:42:56 ID:vmWSYKxMeSKeeaoGnh3QrczhvSE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:101.9

Plate Offsets (X, Y): [17:0-4-15,0-2-8], [24:0-4-0,0-3-8], [25:0-2-12,0-3-12]

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	0.58	Vert(LL)	-0.30	21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.52	21-23	>702	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.27	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 512 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 26-10:2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 28-7,25-12,20-17,28-8,26-9,32-33:2x4 SP No.2, 19-17:2x6 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-7 max.): 7-13.	
BOT CHORD	Rigid ceiling directly applied or 3-4-10 oc bracing.	
WEBS	1 Row at midpt	5-30, 7-28, 8-28, 9-26, 32-33
WEBS	2 Rows at 1/3 pts	12-25

REACTIONS (lb/size) 2=163/0-3-8, 19=1185/0-3-8, 26=1966/0-3-8, 30=1756/0-3-8
Max Horiz 2=283 (LC 13)
Max Uplift 2=-181 (LC 15), 19=-248 (LC 15), 26=-10 (LC 10), 30=-97 (LC 14)
Max Grav 2=288 (LC 49), 19=1396 (LC 49), 26=2133 (LC 44), 30=2089 (LC 35)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-197/493, 4-5=-85/903, 5-7=-198/283, 7-8=-148/274, 8-9=-144/313, 9-10=0/1077, 10-12=0/974, 12-13=-2625/358, 13-15=-2731/412, 15-16=-4060/639, 16-17=-4065/665, 17-18=0/27, 17-19=-1531/330

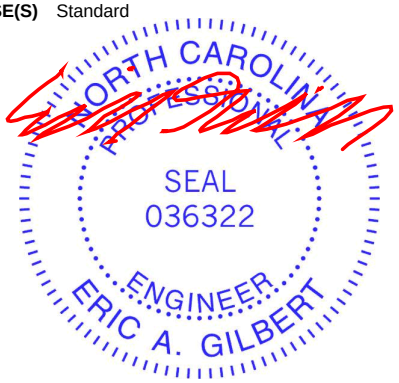
BOT CHORD 2-31=-336/215, 30-31=-336/137, 28-30=-655/0, 27-28=-151/111, 26-27=-151/111, 25-26=-2019/430, 10-25=-397/202, 24-25=0/2589, 23-24=-8/2400, 21-23=-384/3764, 20-21=-531/3731, 19-20=-157/735

WEBS 4-31=0/304, 4-30=-689/140, 5-30=-1582/14, 5-28=0/1071, 7-28=-420/95, 9-25=-1284/386, 12-25=-3545/333, 12-24=0/910, 13-24=-185/838, 13-23=-117/822, 15-23=-1267/337, 17-20=-358/2863, 15-21=0/267, 16-21=-152/158, 16-20=-351/138, 28-32=-143/235, 8-32=-117/259, 9-33=-296/484, 26-33=-316/459, 32-34=-16/14, 33-34=-16/14, 27-34=0/64

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) -0-8-1 to 5-3-14, Interior (1) 5-3-14 to 9-9-12, Exterior(2R) 9-9-12 to 26-9-2, Interior (1) 26-9-2 to 33-1-14, Exterior(2R) 33-1-14 to 50-1-4, Interior (1) 50-1-4 to 54-7-2, Exterior(2E) 54-7-2 to 60-7-1 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) 200.0lb AC unit load placed on the bottom chord, 23-11-12 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 4x5 MT20 unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 30, 19, and 26. 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.
14) 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



April 7,2022

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	A02	Piggyback Base Supported Gable	1	1	I51218097 Job Reference (optional)

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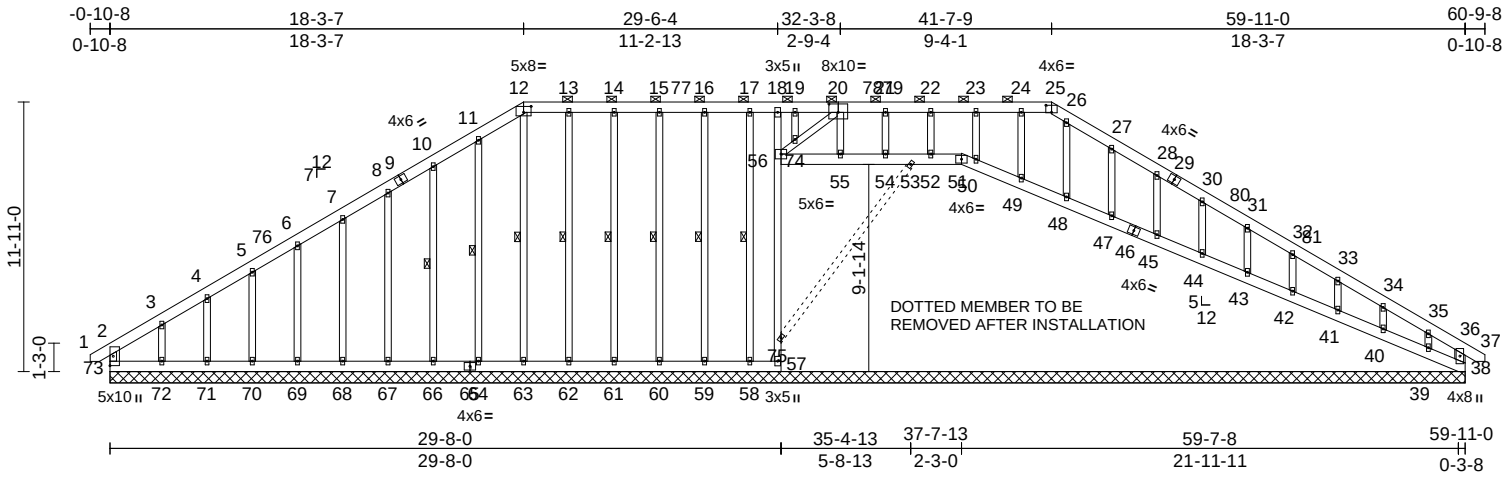

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Plate Offsets (X, Y): [12:0-4-0,0-3-3], [20:0-5-0,0-4-8], [25:0-3-0,0-3-12]

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	0.36	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	0.23	Horz(CT)	0.03	38	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 554 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 57-18:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 38-36:2x6 SP No.2
OTHERS 2x4 SP No.3 *Except* 63-12,62-13,61-14,60-15,59-16,58-17:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-25.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-66, 11-64, 12-63, 13-62, 14-61, 15-60, 16-59, 17-58

REACTIONS (lb/size) 38=181/59-11-0, 39=57/59-11-0, 40=170/59-11-0, 41=152/59-11-0, 42=156/59-11-0, 43=155/59-11-0, 44=155/59-11-0, 45=155/59-11-0, 47=159/59-11-0, 48=121/59-11-0, 49=142/59-11-0, 50=116/59-11-0, 51=82/59-11-0, 52=-78/59-11-0, 53=429/59-11-0, 57=3/59-11-0, 58=132/59-11-0, 59=140/59-11-0, 60=156/59-11-0, 61=156/59-11-0, 62=159/59-11-0, 63=149/59-11-0, 64=158/59-11-0, 66=156/59-11-0, 67=155/59-11-0, 68=155/59-11-0, 69=155/59-11-0, 70=156/59-11-0, 71=151/59-11-0, 72=170/59-11-0, 73=124/59-11-0, 75=290/59-11-0
Max Horiz 73=282 (LC 13)

Max Uplift 39=-102 (LC 15), 40=-41 (LC 15), 41=-51 (LC 15), 42=-48 (LC 15), 43=-49 (LC 15), 44=-49 (LC 15), 45=-48 (LC 15), 47=-69 (LC 15), 49=-25 (LC 11), 50=-29 (LC 10), 51=-7 (LC 11), 52=-78 (LC 42), 53=-106 (LC 10), 57=-1 (LC 48), 58=-13 (LC 10), 59=-23 (LC 11), 60=-27 (LC 10), 61=-31 (LC 10), 62=-29 (LC 11), 63=-36 (LC 13), 64=-33 (LC 14), 66=-56 (LC 14), 67=-49 (LC 14), 68=-49 (LC 14), 69=-48 (LC 14), 70=-53 (LC 14), 71=-31 (LC 15), 72=-169 (LC 11), 73=-257 (LC 10), 75=-59 (LC 11)
Max Grav 38=181 (LC 22), 39=120 (LC 49), 40=171 (LC 25), 41=160 (LC 49), 42=213 (LC 43), 43=242 (LC 43), 44=238 (LC 43), 45=238 (LC 43), 47=247 (LC 43), 48=184 (LC 43), 49=195 (LC 38), 50=173 (LC 38), 51=90 (LC 38), 52=35 (LC 15), 53=489 (LC 38), 57=13 (LC 10), 58=133 (LC 38), 59=169 (LC 38), 60=215 (LC 38), 61=219 (LC 38), 62=219 (LC 38), 63=208 (LC 52), 64=242 (LC 41), 66=242 (LC 41), 67=238 (LC 41), 68=240 (LC 41), 69=229 (LC 41), 70=169 (LC 41), 71=152 (LC 39), 72=301 (LC 24), 73=315 (LC 13), 75=296 (LC 38)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-73=-237/204, 1-2=0/24, 2-3=-344/343, 3-4=-288/295, 4-5=-283/302, 5-6=-269/297, 6-7=-255/321, 7-8=-242/348, 8-10=-229/376, 10-11=-224/409, 11-12=-244/442, 12-13=-217/405, 13-14=-217/405, 14-15=-217/405, 15-16=-217/405, 16-17=-217/405, 17-18=-217/405, 18-19=-219/400, 19-21=-234/400, 21-22=-234/333, 22-23=-234/333, 23-24=-234/333, 24-25=-234/333, 25-26=-237/320, 26-27=-265/360, 27-28=-232/306, 28-30=-206/261, 30-31=-180/216, 31-32=-154/171, 32-33=-128/125, 33-34=-117/80, 34-35=-113/35, 35-36=-143/21, 36-37=0/26, 36-38=-173/31

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

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Edenton, NC 27932

BOT CHORD 72-73=-2/2, 71-72=-2/2, 70-71=-2/2, 69-70=-2/2, 68-69=-2/2, 67-68=-2/2, 66-67=-2/2, 64-66=-2/2, 63-64=-2/2, 62-63=-2/2, 61-62=-2/2, 60-61=-2/2, 59-60=-2/2, 58-59=-2/2, 57-58=-2/2, 57-75=0/0, 56-75=-296/59, 18-56=-160/92, 55-56=-23/98, 54-55=-21/100, 53-54=-21/100, 52-53=-21/100, 51-52=-21/100, 50-51=-26/110, 49-50=-31/115, 48-49=-30/115, 47-48=-31/115, 45-47=-31/115, 44-45=-31/115, 43-44=-31/115, 42-43=-31/115, 41-42=-31/115, 40-41=-31/115, 39-40=-31/118, 38-39=-25/100

WEBS 3-72=-192/123, 4-71=-115/68, 5-70=-129/73, 6-69=-191/72, 7-68=-201/72, 8-67=-199/72, 10-66=-203/79, 11-64=-203/56, 12-63=-169/75, 13-62=-180/52, 14-61=-180/54, 15-60=-177/50, 16-59=-130/46, 17-58=-92/37, 19-74=-19/5, 20-55=-1/68, 21-54=-182/65, 22-52=-222/56, 23-50=-153/53, 24-49=-154/49, 26-48=-145/15, 27-47=-208/92, 28-45=-199/71, 30-44=-199/72, 31-43=-203/72, 32-42=-174/72, 33-41=-122/72, 34-40=-129/70, 35-39=-91/93, 56-74=-128/28, 20-74=-118/26

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) -0-8-1 to 5-3-14, Exterior(2N) 5-3-14 to 12-3-8, Corner(3R) 12-3-8 to 24-3-8, Exterior (2N) 24-3-8 to 35-7-11, Corner(3R) 35-7-11 to 47-7-8, Exterior(2N) 47-7-8 to 54-7-2, Corner(3E) 54-7-2 to 60-7-1 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) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
14) Bearing at joint(s) 75 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 57.
16) N/A
17) N/A
18) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 51, 52, 50, 49, 48, 47, 45, 44, 43, 42, 41, 40, 39, 53.
19) 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.
20) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	B01	Roof Special	4	1	I51218098 Job Reference (optional)

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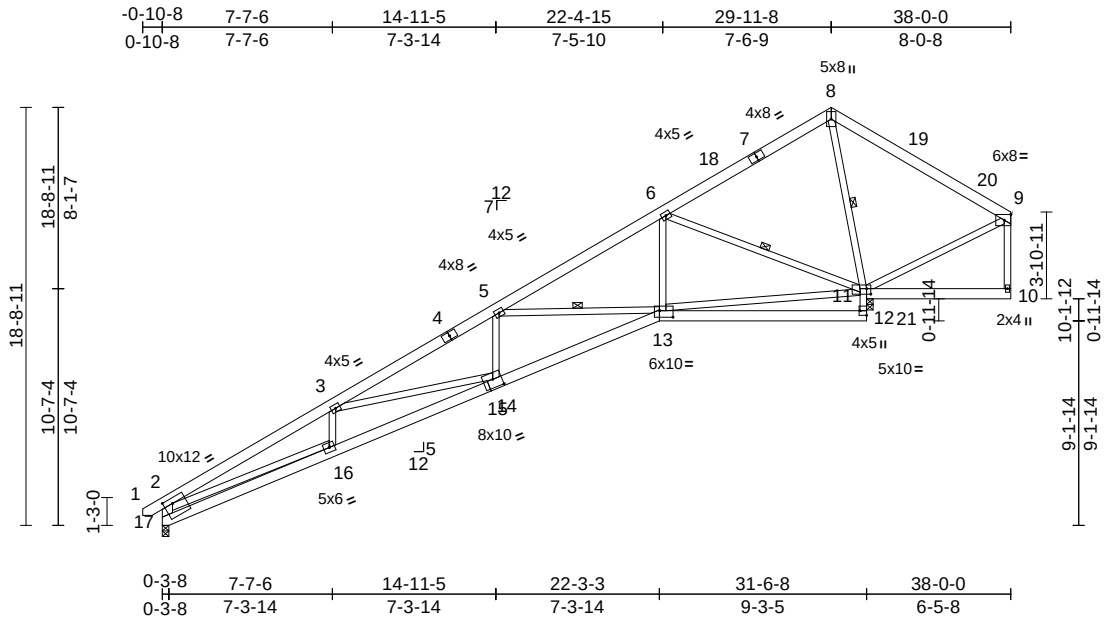

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Plate Offsets (X, Y): [2:0-4-12,0-2-12], [11:0-2-4,0-3-0], [12:Edge,0-3-8], [13:0-7-4,0-3-8], [15:0-4-12,0-4-8]

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	0.80	Vert(LL)	0.26	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.48	14-16	>775	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.19	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 302 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 12-11:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 17-2:2x6 SP No.2, 16-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-7-8 oc bracing.
WEBS 1 Row at midpt 5-13, 6-11, 8-11

REACTIONS (lb/size) 11=1816/0-3-8, 17=1248/0-3-8
Max Horiz 17=483 (LC 14)
Max Uplift 11=-275 (LC 14), 17=-94 (LC 14)
Max Grav 11=1816 (LC 1), 17=1289 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-3913/870, 3-5=-3481/789, 5-6=-2160/496, 6-8=-104/294, 8-9=-126/632, 2-17=-1479/394, 9-10=-108/132
BOT CHORD 16-17=-706/1044, 14-16=-1233/3713, 13-14=-996/3272, 12-13=-16/165, 11-12=0/187, 10-11=-43/59
WEBS 3-16=-211/164, 3-14=-408/216, 5-14=0/391, 5-13=-1256/411, 6-13=-239/1278, 6-11=-1927/580, 8-11=-919/238, 2-16=-507/2637, 9-11=-468/258, 11-13=-473/1582

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) -0-8-1 to 2-8-12, Interior (1) 2-8-12 to 26-6-11, Exterior(2R) 26-6-11 to 33-4-5, Interior (1) 33-4-5 to 34-5-7, Exterior(2E) 34-5-7 to 37-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; 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) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 17. 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

April 7,2022

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	B02	Roof Special	3	1	I51218099
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:00 Page: 1

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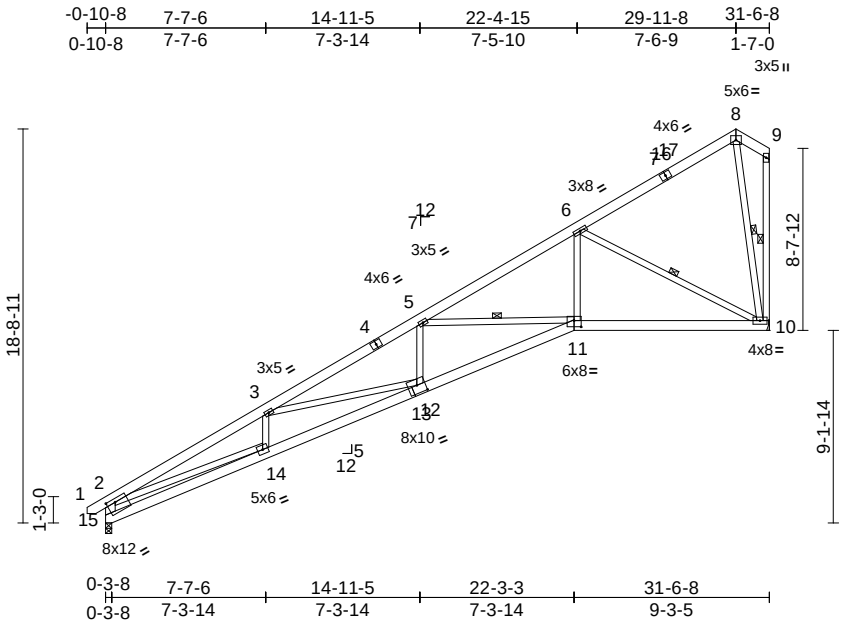


Scale = 1:109.5

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

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)	0.27	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.49	12-14	>763	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.22	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 253 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 15-2:2x6 SP No.2, 14-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-8-5 oc bracing.
WEBS 1 Row at midpt 5-11, 6-10, 9-10, 8-10

REACTIONS (lb/size) 10=1246/ Mechanical, 15=1301/0-3-8
Max Horiz 15=512 (LC 11)
Max Uplift 10=-298 (LC 14), 15=-92 (LC 14)
Max Grav 10=1300 (LC 24), 15=1305 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-3986/852, 3-5=-3565/764, 5-6=-2242/471, 6-8=-243/104, 8-9=-168/173, 2-15=-1508/389, 9-10=-144/126
BOT CHORD 14-15=-697/1068, 12-14=-1209/3869, 11-12=-965/3475, 10-11=-457/1908
WEBS 3-14=-216/161, 3-12=-364/223, 5-12=0/376, 5-11=-1232/410, 6-11=-286/1534, 6-10=-2051/592, 2-14=-493/2683, 8-10=-361/166

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) -0-8-1 to 2-3-15, Interior (1) 2-3-15 to 26-11-8, Exterior(2R) 26-11-8 to 29-11-8, Exterior(2E) 29-11-8 to 31-4-12 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
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) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 298 lb uplift at joint 10.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
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.

LOAD CASE(S) Standard

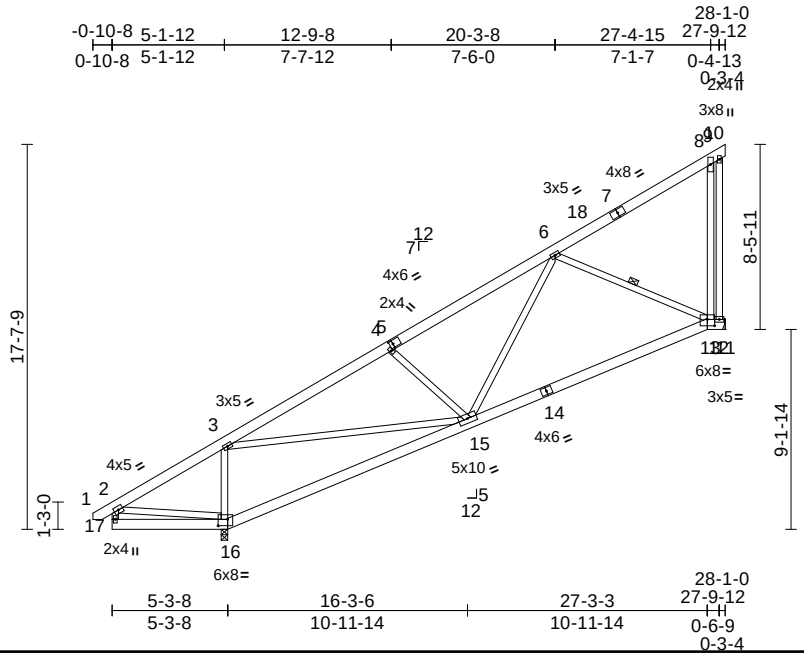
April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	B03	Monopitch	3	1	I51218100 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:01 Page: 1

ID:XuVw4mrM?Ew4XkguX?Re7ezhpjh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:105.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.12	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 230 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 15-3:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-13

REACTIONS (lb/size) 12=864/ Mechanical, 16=1420/0-3-8
Max Horiz 16=601 (LC 14)
Max Uplift 12=-372 (LC 14)
Max Grav 12=1128 (LC 21), 16=1459 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-233/377, 3-4=-1455/237, 4-6=-1120/205, 6-8=-230/83, 8-9=-84/370, 9-10=-15/0, 2-17=-101/71
BOT CHORD 16-17=-23/7, 15-16=-570/258, 13-15=-418/879, 12-13=0/0, 11-12=0/0
WEBS 3-16=-1142/292, 3-15=-101/1436, 4-15=-405/253, 6-15=-105/440, 6-13=-880/403, 2-16=-244/297, 8-13=-42/628, 9-12=-769/158

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) -0-8-1 to 2-3-15, Interior (1) 2-3-15 to 25-1-0, Exterior(2E) 25-1-0 to 28-1-0 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
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 372 lb uplift at joint 12.
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

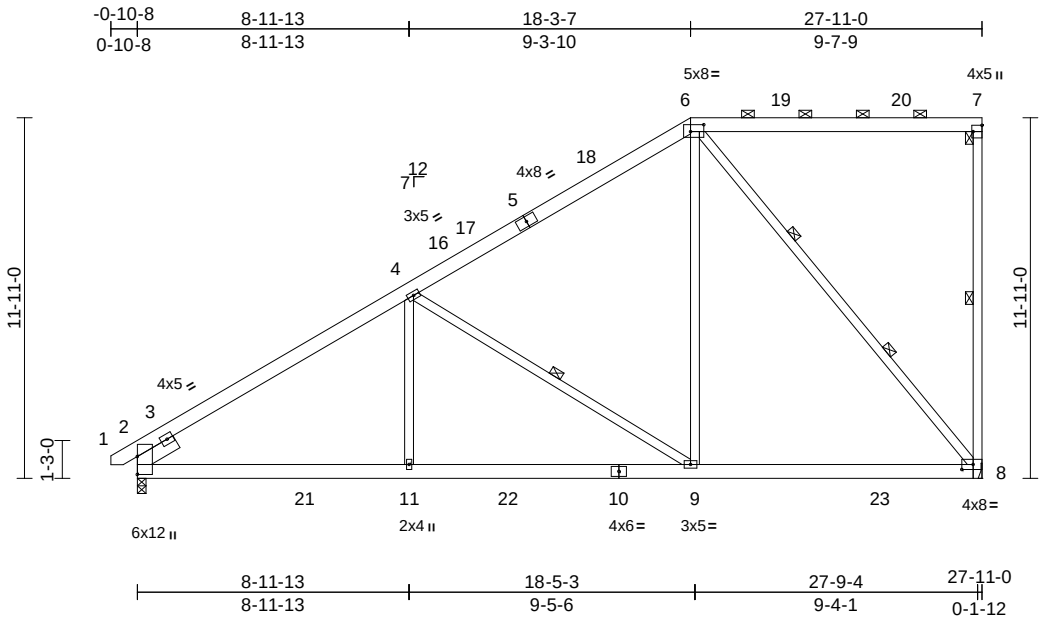
April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	C01	Piggyback Base	6	1	I51218101 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:01 Page: 1

ID:fgJGN1CBxSiq8LzfII_gKzzhpjD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.1

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

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	0.76	Vert(LL)	-0.12	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.19	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 222 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* 6-7:2x6 SP 2400F 2.0E
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2 *Except* 11-4:2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-6-0

BRACING

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

REACTIONS (lb/size) 2=1152/0-3-8, 8=1110/ Mechanical
Max Horiz 2=409 (LC 13)
Max Uplift 2=-119 (LC 14), 8=-165 (LC 11)
Max Grav 2=1412 (LC 40), 8=1338 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-4=-1856/169, 4-6=-1076/199, 6-7=-162/175, 7-8=-405/132
BOT CHORD	2-11=-329/1676, 9-11=-229/1676, 8-9=-168/855
WEBS	4-11=0/424, 4-9=-987/274, 6-9=-35/987, 6-8=-1276/143

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) -0-8-1 to 2-3-15, Interior (1) 2-3-15 to 15-3-7, Exterior(2R) 15-3-7 to 21-3-7, Interior (1) 21-3-7 to 24-9-4, Exterior(2E) 24-9-4 to 27-9-4 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) 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 8.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

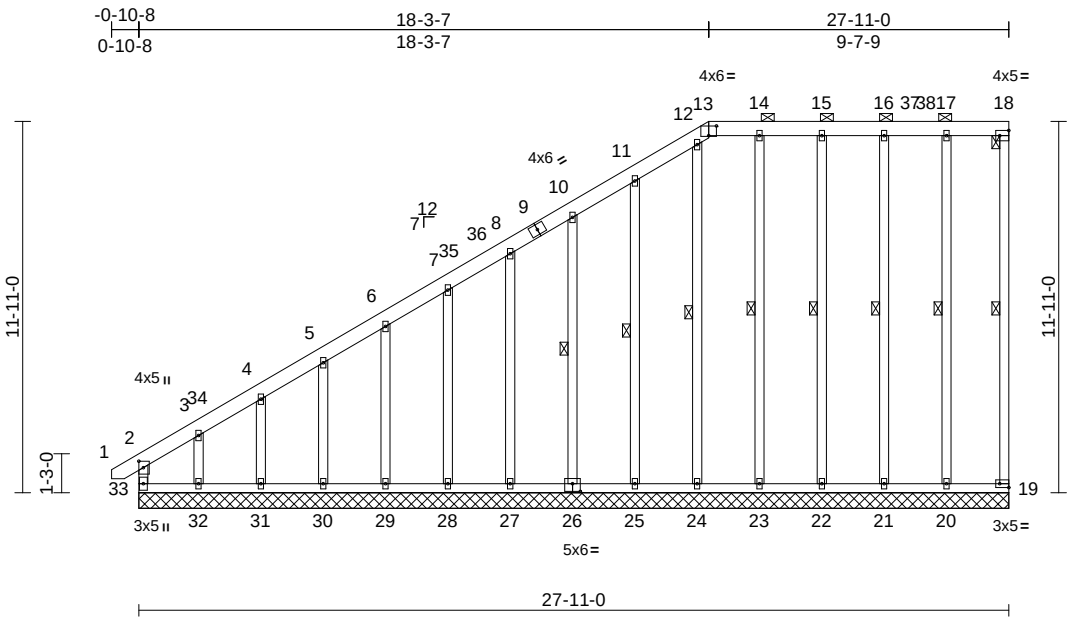
LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	C02	Piggyback Base Supported Gable	1	1	I51218102 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:01 ID:YRYnCOFh?hCFcyHRX82cVpzhpj9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:73.9

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [13:0-3-0,0-3-12], [18:Edge,0-2-0], [19:Edge,0-1-8], [26:0-3-0,0-3-0]

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	0.76	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	-0.01	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 284 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 18-19:2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 20-17,21-16,22-15,23-14,24-12:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-18.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 18-19, 17-20, 16-21, 15-22, 14-23, 12-24, 11-25, 10-26

REACTIONS (lb/size) 19=62/27-11-0, 20=157/27-11-0, 21=158/27-11-0, 22=155/27-11-0, 23=155/27-11-0, 24=155/27-11-0, 25=155/27-11-0, 26=155/27-11-0, 27=155/27-11-0, 28=155/27-11-0, 29=155/27-11-0, 30=155/27-11-0, 31=156/27-11-0, 32=147/27-11-0, 33=114/27-11-0
Max Horiz 33=406 (LC 11)
Max Uplift 19=-19 (LC 11), 20=-52 (LC 10), 21=-50 (LC 11), 22=-39 (LC 10), 23=-40 (LC 11), 24=-51 (LC 11), 25=-48 (LC 14), 26=-52 (LC 14), 27=-49 (LC 14), 28=-49 (LC 14), 29=-47 (LC 14), 30=-56 (LC 14), 31=-11 (LC 14), 32=-255 (LC 14), 33=-168 (LC 12)
Max Grav 19=86 (LC 35), 20=215 (LC 35), 21=219 (LC 35), 22=218 (LC 35), 23=210 (LC 35), 24=172 (LC 36), 25=217 (LC 36), 26=218 (LC 36), 27=212 (LC 36), 28=176 (LC 40), 29=161 (LC 24), 30=165 (LC 24), 31=156 (LC 36), 32=266 (LC 40), 33=365 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-33=-284/135, 1-2=0/24, 2-3=-403/256, 3-4=-304/195, 4-5=-287/184, 5-6=-259/166, 6-7=-240/149, 7-8=-227/145, 8-10=-213/142, 10-11=-201/139, 11-12=-185/181, 12-13=-157/170, 13-14=-155/180, 14-15=-155/180, 15-16=-155/180, 16-17=-155/180, 17-18=-155/180, 18-19=-138/144
BOT CHORD 32-33=-150/175, 31-32=-150/175, 30-31=-150/175, 29-30=-150/175, 28-29=-150/175, 27-28=-150/175, 25-27=-150/175, 24-25=-150/175, 23-24=-150/175, 22-23=-150/175, 21-22=-150/175, 20-21=-150/175, 19-20=-150/175
WEBS 17-20=-174/108, 16-21=-181/53, 15-22=-179/56, 14-23=-171/62, 12-24=-133/75, 11-25=-178/72, 10-26=-179/75, 8-27=-173/72, 7-28=-137/72, 6-29=-123/72, 5-30=-124/74, 4-31=-118/53, 3-32=-184/199

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) -0-8-1 to 2-3-15, Exterior(2N) 2-3-15 to 15-3-7, Corner(3R) 15-3-7 to 21-3-7, Exterior (2N) 21-3-7 to 24-9-4, Corner(3E) 24-9-4 to 27-9-4 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.

April 7,2022

Continued on page 2

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

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) 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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	D01	Common	6	1	I51218103
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:02 Page: 1

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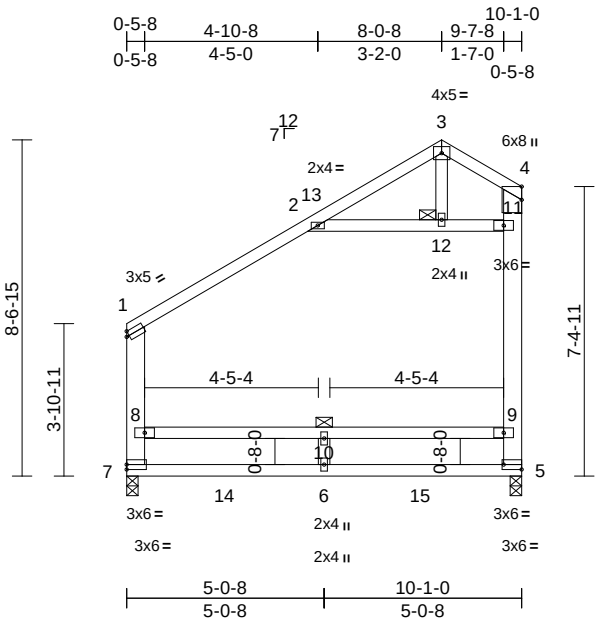

Scale = 1:58.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.14	6	>834	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.42	6-7	>274	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 82 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 7-1,5-4:2x6 SP No.2, 8-9:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-9
JOINTS 1 Brace at Jt(s): 12

REACTIONS (lb/size) 5=484/0-3-8, 7=486/0-3-8
Max Horiz 7=277 (LC 13)
Max Grav 5=521 (LC 23), 7=505 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-309/139, 2-3=-262/325, 3-4=-156/141, 7-8=-352/117, 1-8=-320/144, 5-9=-326/123, 9-11=-293/150, 4-11=-214/112
BOT CHORD 6-7=-192/307, 5-6=-192/307
WEBS 8-10=-220/279, 9-10=-220/279, 6-10=0/98, 2-12=-379/311, 11-12=-379/311, 3-12=-131/67

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) 4-9-1 to 7-9-1, Interior (1) 7-9-1 to 9-6-13, Exterior(2R) 9-6-13 to 12-6-13, Exterior (2E) 12-6-13 to 14-4-9 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
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) 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

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	D02	Common Supported Gable	1	1	I51218104 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:02 Page: 1
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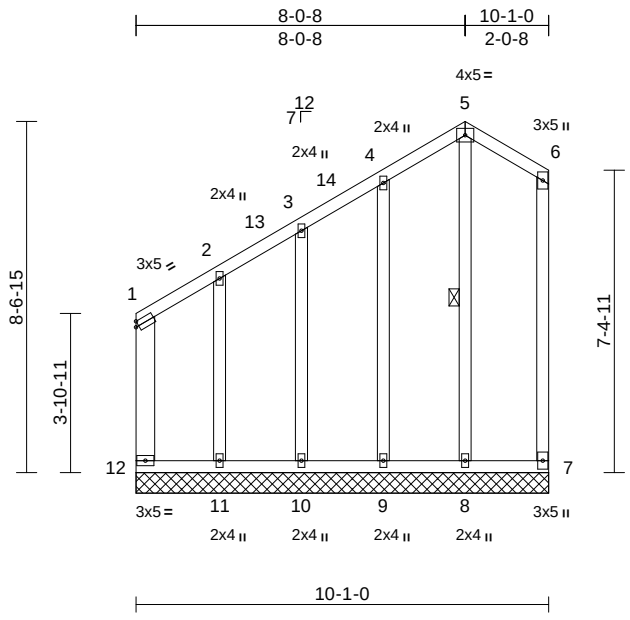

Scale = 1:56.3

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	0.68	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 89 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except* 6-7:2x4 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 5-8

REACTIONS (lb/size) 7=68/10-1-0, 8=152/10-1-0, 9=161/10-1-0, 10=153/10-1-0, 11=162/10-1-0, 12=58/10-1-0
Max Horiz 12=268 (LC 13)
Max Uplift 7=-57 (LC 15), 9=-60 (LC 11), 10=-33 (LC 10), 11=-521 (LC 11), 12=-349 (LC 12)
Max Grav 7=103 (LC 21), 8=165 (LC 21), 9=208 (LC 20), 10=196 (LC 28), 11=530 (LC 12), 12=495 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-257/176, 1-2=-245/182, 2-3=-129/97, 3-4=-137/155, 4-5=-158/226, 5-6=-176/249, 6-7=-155/217
BOT CHORD 11-12=-108/133, 10-11=-108/133, 9-10=-108/133, 8-9=-108/133, 7-8=-108/133
WEBS 5-8=-199/106, 4-9=-170/118, 3-10=-120/92, 2-11=-263/278

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) 4-9-1 to 7-9-1, Exterior(2N) 7-9-1 to 9-6-13, Corner(3R) 9-6-13 to 12-6-13, Corner (3E) 12-6-13 to 14-5-9 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
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	G01	Attic	3	1	I51218105
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:02 Page: 1

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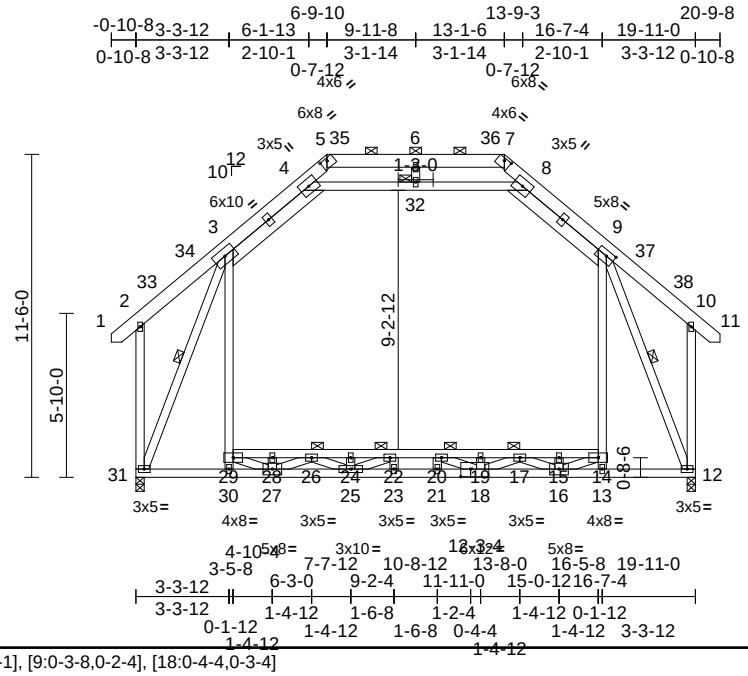

Scale = 1:82

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

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	G02	Attic	7	1	I51218106
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:03 Page: 1

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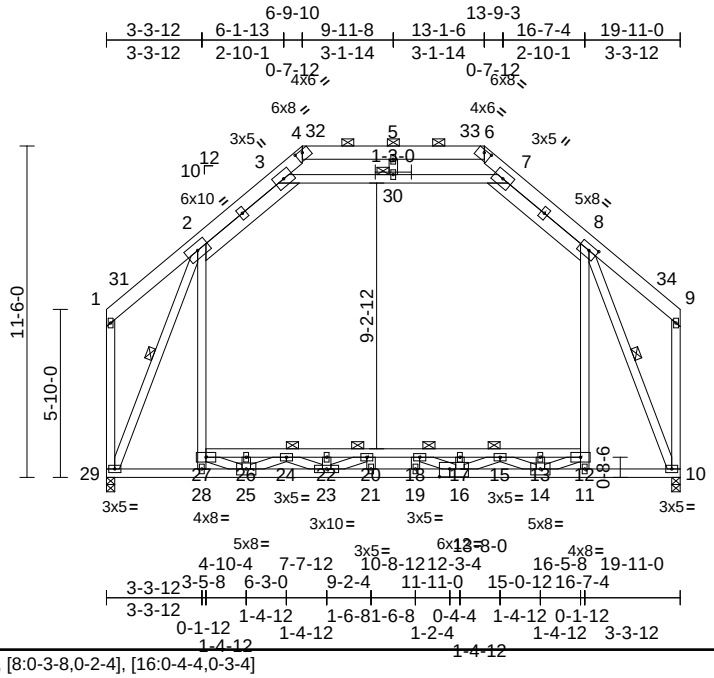

Scale = 1:80

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

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 3-3-12, 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
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) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) 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
10) 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
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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	G03	Attic Supported Gable	1	1	I51218107 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:04 Page: 1

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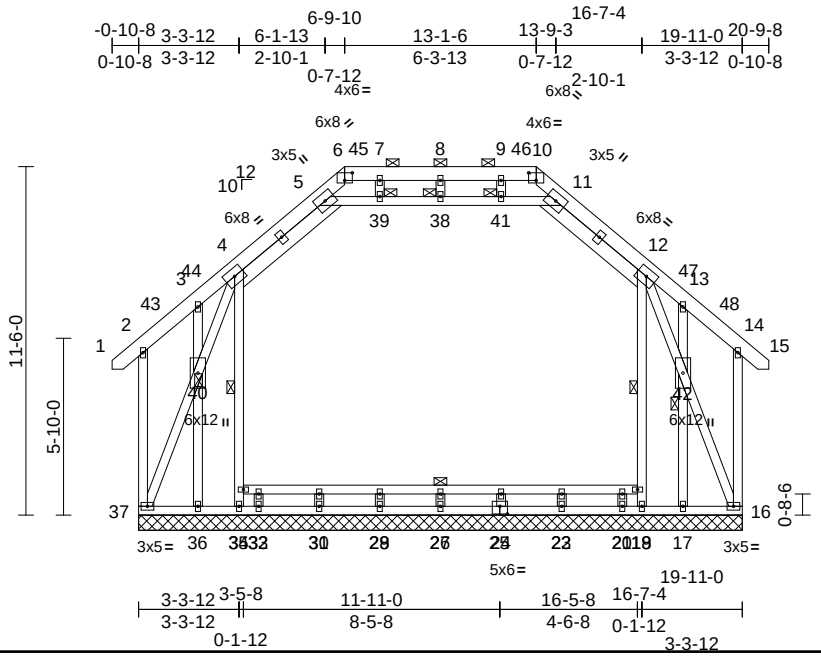


Scale = 1:76

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	0.16	Horz(CT)	0.01	16	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 232 lb	FT = 20%

LUMBER

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

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, 41, 42

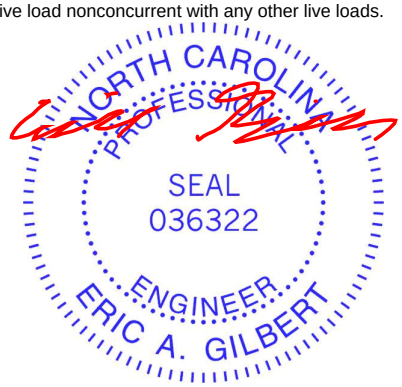
REACTIONS (lb/size) 16=698/19-11-0, 17=-34/19-11-0, 18=157/19-11-0, 21=65/19-11-0, 23=80/19-11-0, 25=77/19-11-0, 27=77/19-11-0, 29=77/19-11-0, 31=79/19-11-0, 33=65/19-11-0, 35=157/19-11-0, 36=-34/19-11-0, 37=698/19-11-0
Max Horiz 37=-327 (LC 12)
Max Uplift 16=-226 (LC 11), 17=-107 (LC 39), 18=-161 (LC 10), 35=-197 (LC 11), 36=-107 (LC 39), 37=-260 (LC 10)
Max Grav 16=789 (LC 23), 17=138 (LC 50), 18=365 (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=394 (LC 48), 36=136 (LC 48), 37=789 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-37=-185/193, 1-2=0/31, 2-3=-137/207, 3-4=-126/270, 4-5=-543/203, 5-6=-886/123, 6-7=-876/112, 7-8=-876/112, 8-9=-876/112, 9-10=-876/112, 10-11=-886/134, 11-12=-543/203, 12-13=-129/270, 13-14=-137/207, 14-15=0/31, 14-16=-187/193
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=-138/264, 21-23=-137/264, 18-21=-137/264, 17-18=-142/276, 16-17=-142/276, 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 37-40=-713/308, 4-40=-750/320, 34-35=-393/223, 4-34=-396/291, 18-19=-364/187, 12-19=-366/255, 12-42=-744/285, 16-42=-702/275, 5-39=-57/619, 38-39=-57/619, 38-41=-57/619, 11-41=-57/619, 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=-40/181, 36-40=-43/144, 9-41=-6/63, 24-25=-115/0, 22-23=-120/0, 20-21=-97/0, 13-42=-42/181, 17-42=-45/144

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) 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) 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.



April 7,2022

Continued on page 2

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

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, 38-41, 11-41; Wall dead load (5.0psf) on member(s).34-35, 4-34, 18-19, 12-19
15) N/A

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	PB1	Piggyback	7	1	I51218108 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:05 Page: 1
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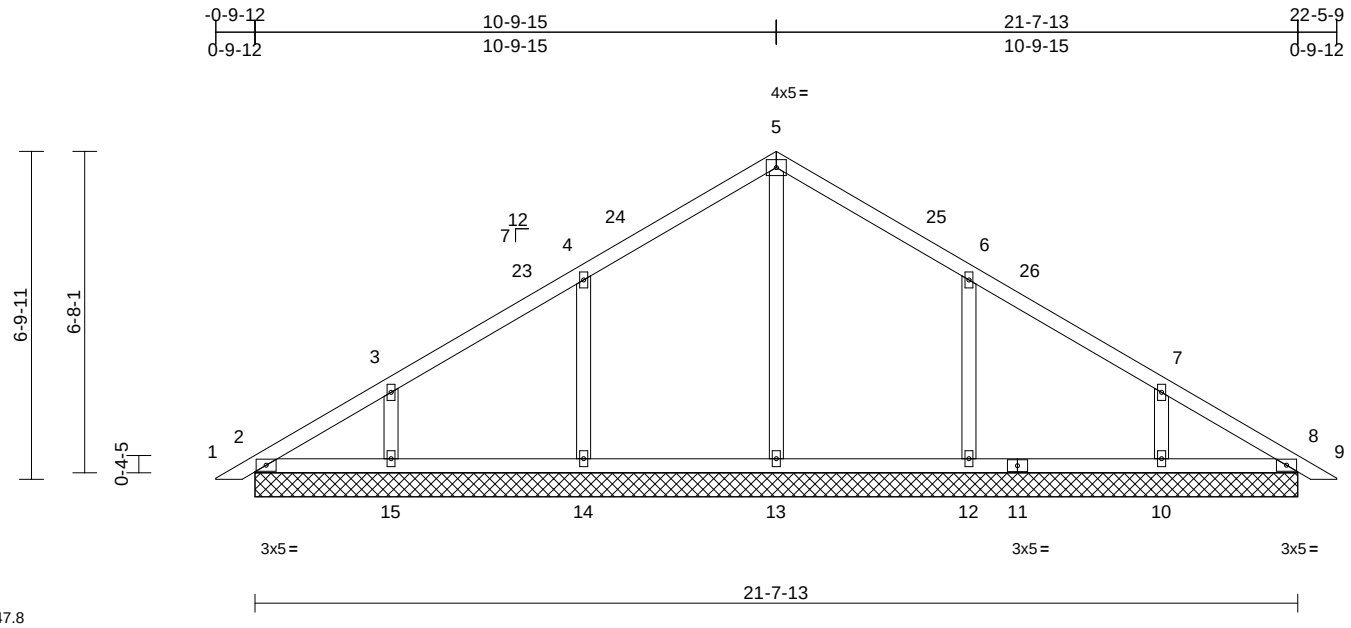

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 97 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=135/21-7-13, 8=135/21-7-13, 10=294/21-7-13, 12=341/21-7-13, 13=259/21-7-13, 14=341/21-7-13, 15=294/21-7-13, 16=135/21-7-13, 20=135/21-7-13
Max Horiz 2=-156 (LC 12), 16=-156 (LC 12)
Max Uplift 2=-17 (LC 10), 10=-92 (LC 15), 12=-113 (LC 15), 14=-113 (LC 14), 15=-93 (LC 14), 16=-17 (LC 10)
Max Grav 2=158 (LC 25), 8=139 (LC 22), 10=359 (LC 25), 12=486 (LC 6), 13=378 (LC 24), 14=486 (LC 5), 15=359 (LC 24), 16=158 (LC 25), 20=139 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-127/115, 3-4=-137/93, 4-5=-149/146, 5-6=-149/129, 6-7=-92/49, 7-8=-81/54, 8-9=0/16
BOT CHORD 2-15=-44/102, 14-15=-44/102, 13-14=-44/102, 12-13=-44/102, 10-12=-44/102, 8-10=-44/102
WEBS 5-13=-201/0, 4-14=-392/164, 3-15=-226/129, 6-12=-392/164, 7-10=-226/129

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 8-8-1, Exterior(2R) 8-8-1 to 14-8-1, Interior (1) 14-8-1 to 20-0-7, Exterior(2E) 20-0-7 to 23-0-7 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) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
12) N/A
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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	PB2	Piggyback	1	1	I51218109 Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:05 Page: 1
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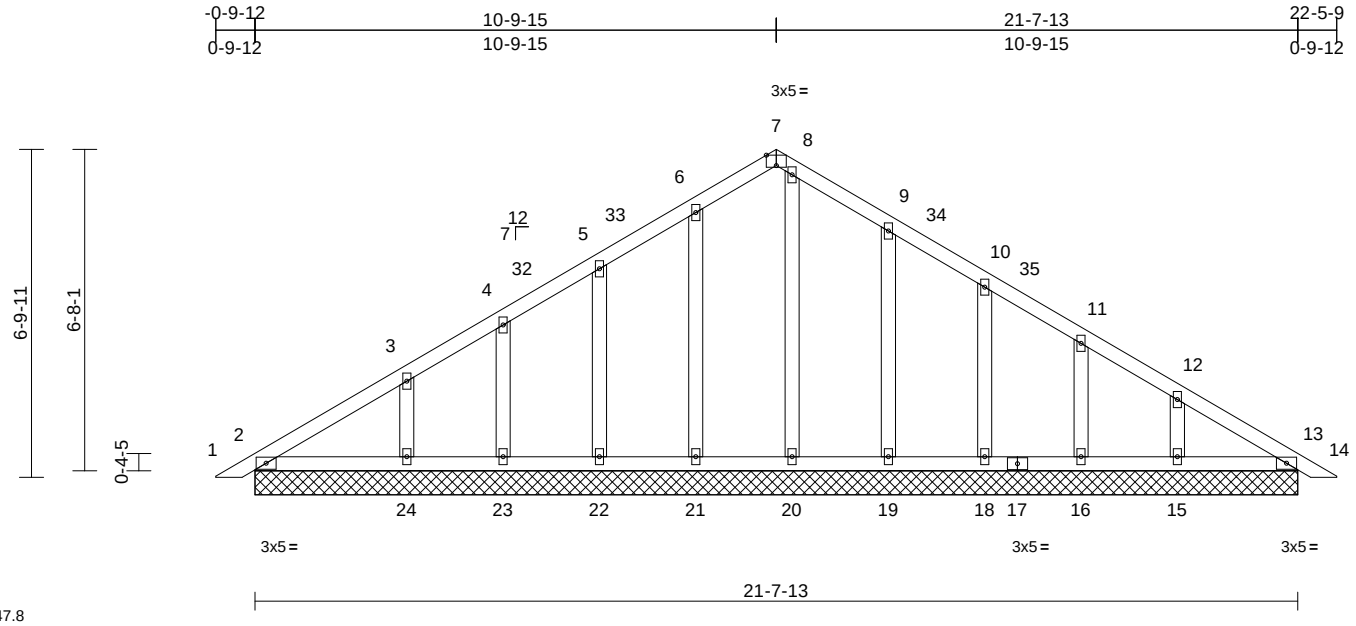

Scale = 1:47.8

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

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 119 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=145/21-7-13, 13=125/21-7-13, 15=199/21-7-13, 16=141/21-7-13, 18=158/21-7-13, 19=157/21-7-13, 20=135/21-7-13, 21=150/21-7-13, 22=164/21-7-13, 23=122/21-7-13, 24=244/21-7-13, 25=145/21-7-13, 28=125/21-7-13
Max Horiz 2=-151 (LC 12), 25=-151 (LC 12)
Max Uplift 2=-4 (LC 10), 15=-65 (LC 15), 16=-44 (LC 15), 18=-48 (LC 15), 19=-63 (LC 15), 21=-32 (LC 14), 22=-57 (LC 14), 23=-36 (LC 14), 24=-80 (LC 14), 25=-4 (LC 10)
Max Grav 2=149 (LC 21), 13=125 (LC 1), 15=209 (LC 25), 16=147 (LC 25), 18=215 (LC 22), 19=241 (LC 22), 20=167 (LC 22), 21=228 (LC 21), 22=237 (LC 21), 23=135 (LC 21), 24=257 (LC 24), 25=149 (LC 21), 28=125 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-124/107, 3-4=-102/73, 4-5=-85/75, 5-6=-78/105, 6-7=-85/119, 7-8=-68/84, 8-9=-85/113, 9-10=-61/63, 10-11=-55/36, 11-12=-67/35, 12-13=-99/60, 13-14=0/16
BOT CHORD 2-24=-52/118, 23-24=-52/118, 22-23=-52/118, 21-22=-52/118, 20-21=-52/118, 19-20=-52/118, 18-19=-52/118, 16-18=-52/118, 15-16=-52/118, 13-15=-52/118
WEBS 3-24=-175/96, 4-23=-112/63, 5-22=-194/79, 6-21=-190/55, 8-20=-128/2, 9-19=-203/86, 10-18=-174/70, 11-16=-116/70, 12-15=-144/80

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 8-8-1, Exterior(2R) 8-8-1 to 14-8-1, Interior (1) 14-8-1 to 20-0-0, Exterior(2E) 20-0-0 to 23-0-7 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) Gable requires continuous bottom chord bearing.
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) N/A
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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	PB3	Piggyback	6	1	I51218110 Job Reference (optional)

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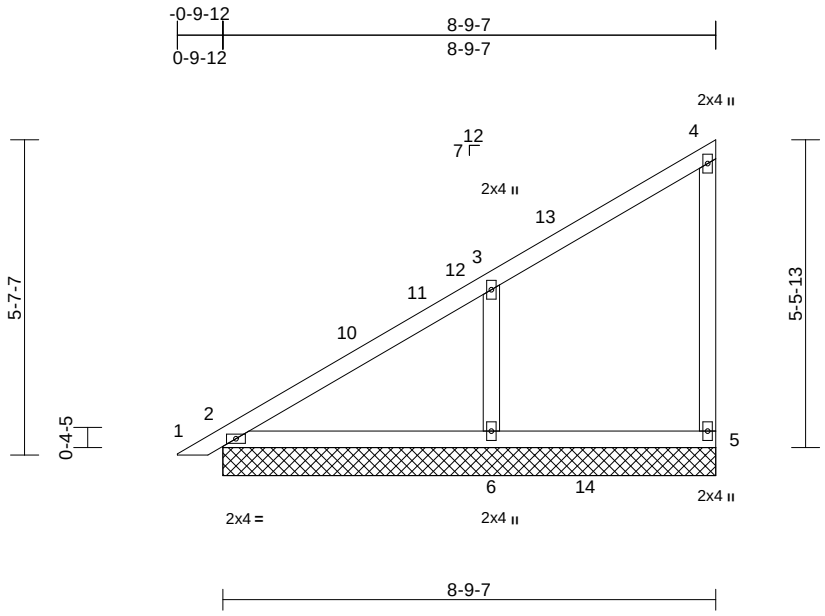

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 41 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) 2=186/8-9-7, 5=105/8-9-7, 6=433/8-9-7, 7=186/8-9-7
Max Horiz 2=186 (LC 13), 7=186 (LC 13)
Max Uplift 5=-27 (LC 11), 6=-120 (LC 14)
Max Grav 2=214 (LC 25), 5=180 (LC 5), 6=570 (LC 5), 7=214 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-143/131, 3-4=-127/70, 4-5=-145/45
BOT CHORD 2-6=-83/90, 5-6=-83/90
WEBS 3-6=-438/195

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-2-15, Exterior(2R) 5-2-15 to 9-5-13 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) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) N/A
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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	PB4	Piggyback	1	1	I51218111
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:06 Page: 1
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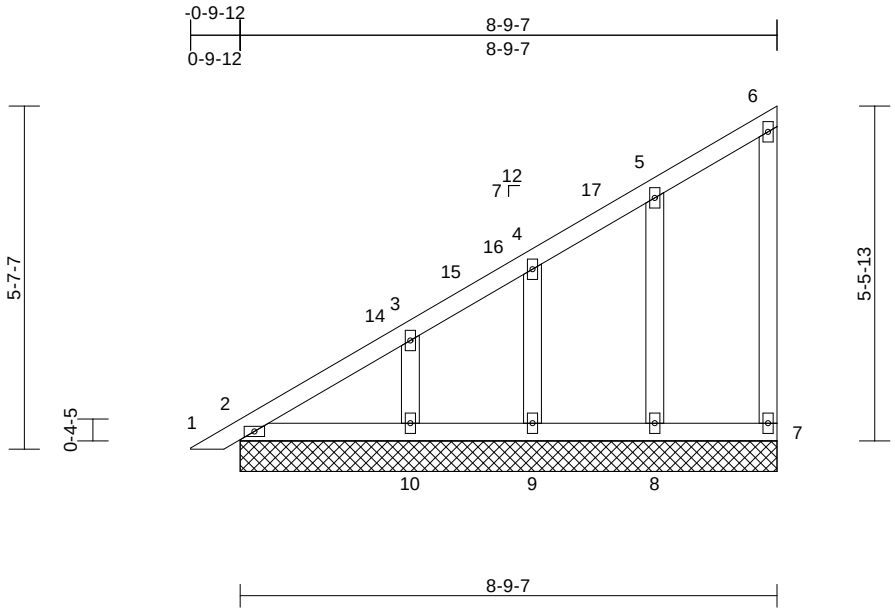

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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 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) 2=123/8-9-7, 7=56/8-9-7, 8=171/8-9-7, 9=132/8-9-7, 10=219/8-9-7, 11=123/8-9-7
Max Horiz 2=181 (LC 13), 11=181 (LC 13)
Max Uplift 2=-5 (LC 10), 7=-24 (LC 11), 8=-27 (LC 14), 9=-41 (LC 14), 10=-72 (LC 14), 11=-5 (LC 10)
Max Grav 2=139 (LC 25), 7=83 (LC 21), 8=252 (LC 21), 9=202 (LC 21), 10=230 (LC 24), 11=139 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-146/103, 3-4=-116/74, 4-5=-102/67, 5-6=-94/84, 6-7=-69/33
BOT CHORD 2-10=-80/87, 9-10=-80/87, 8-9=-80/87, 7-8=-80/87
WEBS 5-8=-207/90, 4-9=-174/72, 3-10=-158/87

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) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-2-15, Exterior(2R) 5-2-15 to 9-5-13 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) 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) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) N/A
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	PB5	Piggyback	11	1	I51218112
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:06 Page: 1

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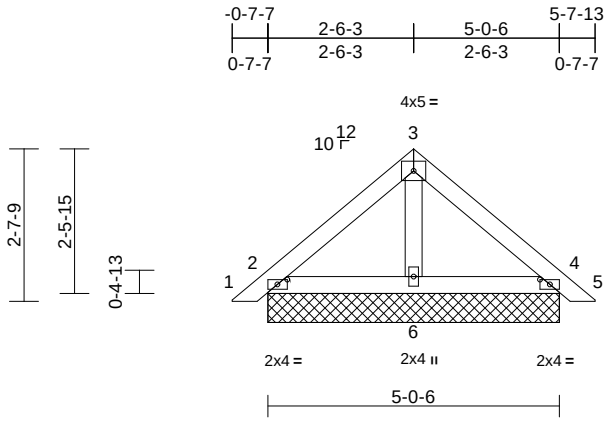

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Plate Offsets (X, Y): [2:0-2-1,0-1-0], [4:0-2-1,0-1-0]

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

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) 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) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) N/A
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK I51218113
22030101	V1	Valley	1	1	Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:06 Page: 1
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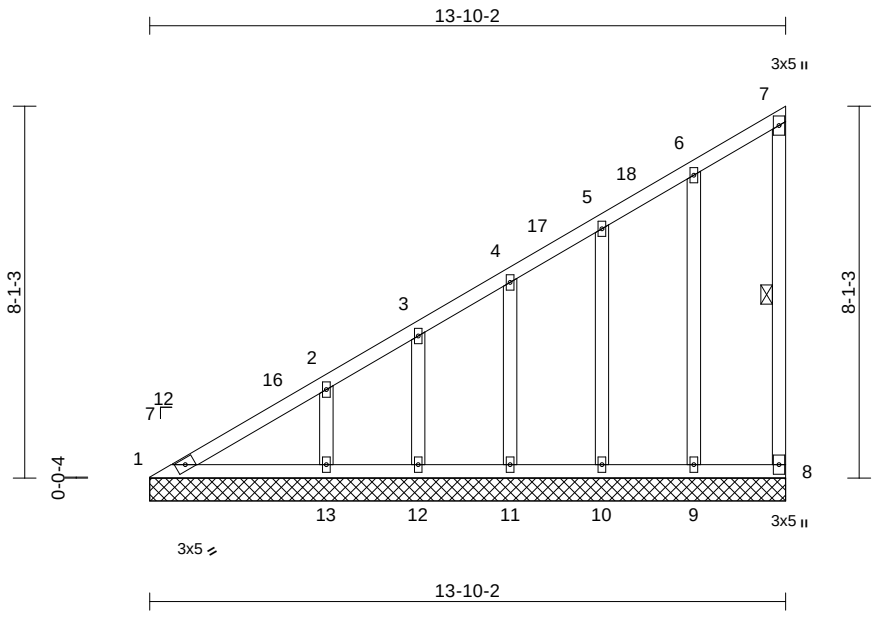

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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	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 11 lb uplift at joint 1.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	V2	Valley	1	1	I51218114
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:07 Page: 1
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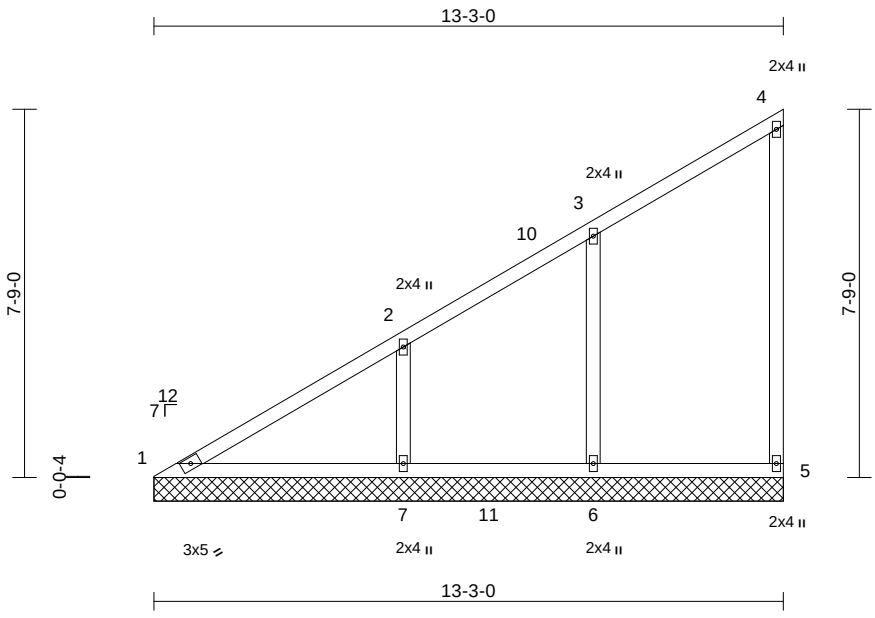

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 63 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=173/13-3-0, 5=133/13-3-0, 6=306/13-3-0, 7=436/13-3-0
Max Horiz 1=266 (LC 11)
Max Uplift 5=-39 (LC 11), 6=-101 (LC 14), 7=-123 (LC 14)
Max Grav 1=221 (LC 28), 5=214 (LC 5), 6=485 (LC 5), 7=533 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-364/164, 2-3=-175/106, 3-4=-142/103, 4-5=-162/47
BOT CHORD	1-7=-110/291, 6-7=-110/123, 5-6=-110/123
WEBS	3-6=-370/141, 2-7=-315/164

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 10-1-11, Exterior(2E) 10-1-11 to 13-1-11 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.

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	V3	Valley	1	1	I51218115
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:07 Page: 1

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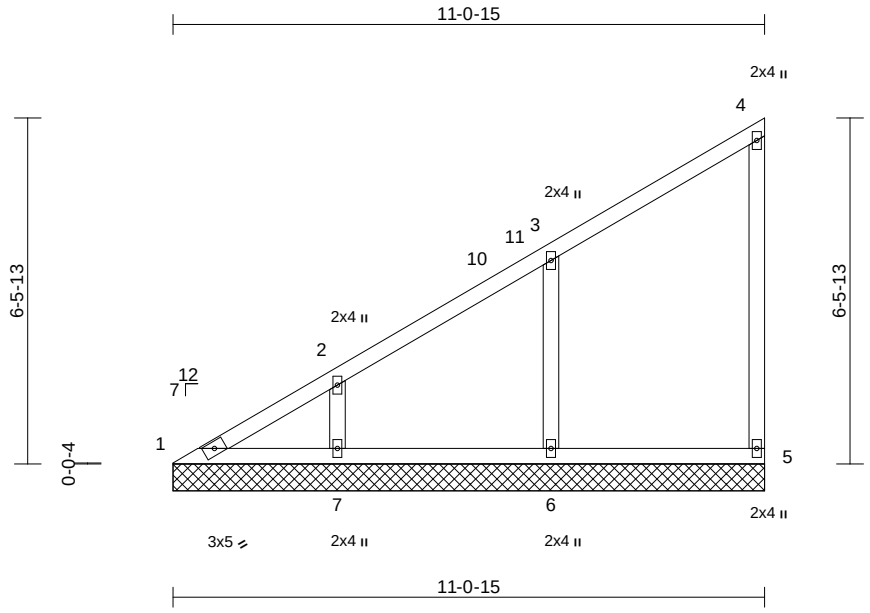

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	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.

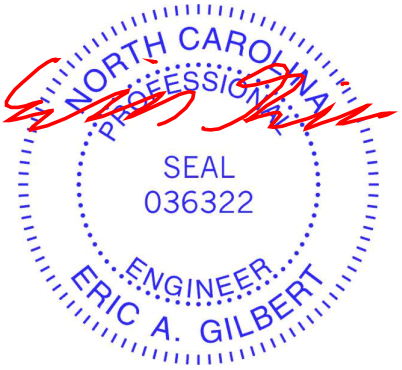
REACTIONS (lb/size) 1=94/11-0-15, 5=126/11-0-15, 6=347/11-0-15, 7=308/11-0-15
Max Horiz 1=221 (LC 11)
Max Uplift 1=-11 (LC 10), 5=-33 (LC 11), 6=-61 (LC 14), 7=-86 (LC 14)
Max Grav 1=137 (LC 24), 5=209 (LC 5), 6=501 (LC 5), 7=364 (LC 23)

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 11 lb uplift at joint 1.



April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	V4	Valley	1	1	I51218116
					Job Reference (optional)

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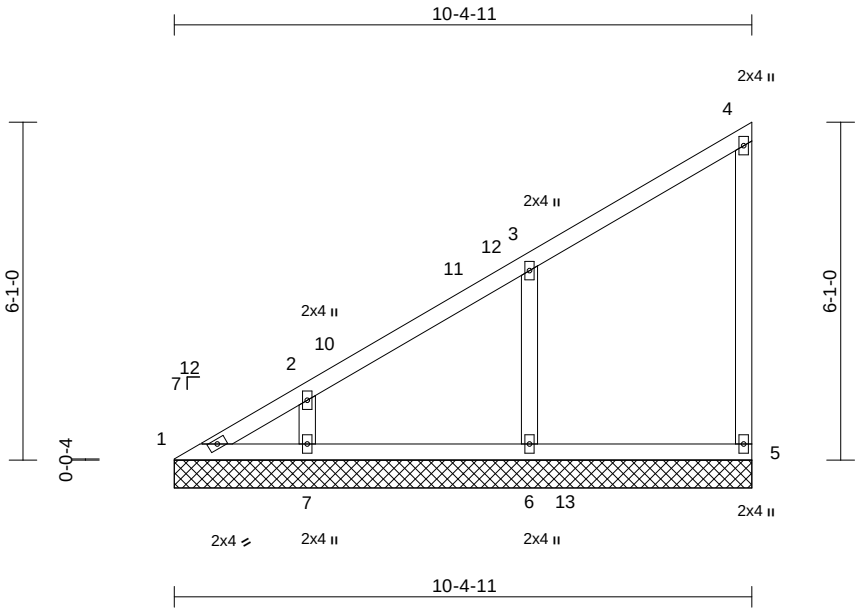

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 47 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=64/10-4-11, 5=125/10-4-11, 6=352/10-4-11, 7=279/10-4-11
Max Horiz 1=207 (LC 11)
Max Uplift 1=-18 (LC 10), 5=-31 (LC 11), 6=-72 (LC 14), 7=-78 (LC 14)
Max Grav 1=105 (LC 24), 5=208 (LC 5), 6=497 (LC 5), 7=328 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-176/123, 2-3=-147/109, 3-4=-130/76, 4-5=-157/44
BOT CHORD 1-7=-87/97, 6-7=-87/97, 5-6=-87/97
WEBS 3-6=-395/148, 2-7=-214/130

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 6-0-8, Exterior(2R) 6-0-8 to 10-3-6 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 18 lb uplift at joint 1.

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	V5	Valley	1	1	I51218117
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:07 Page: 1
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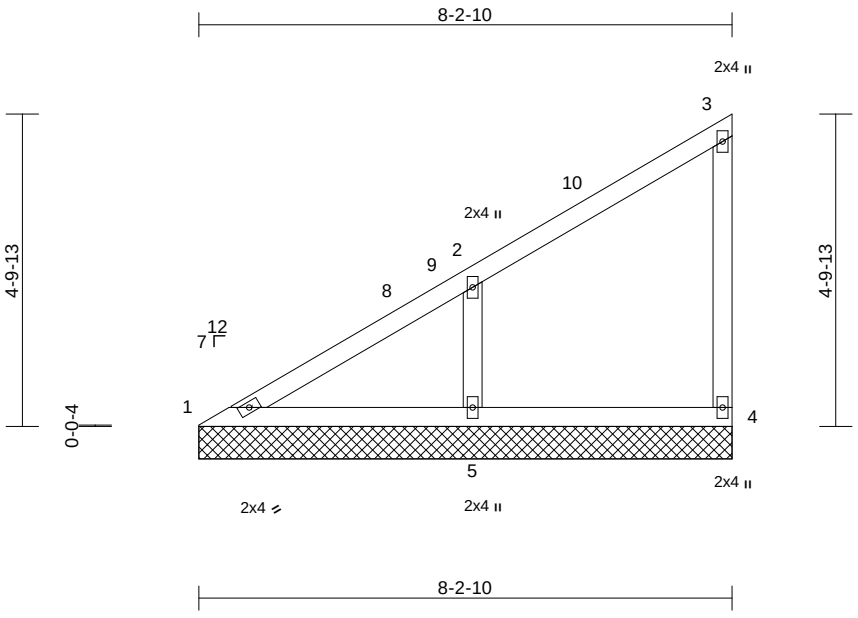

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	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

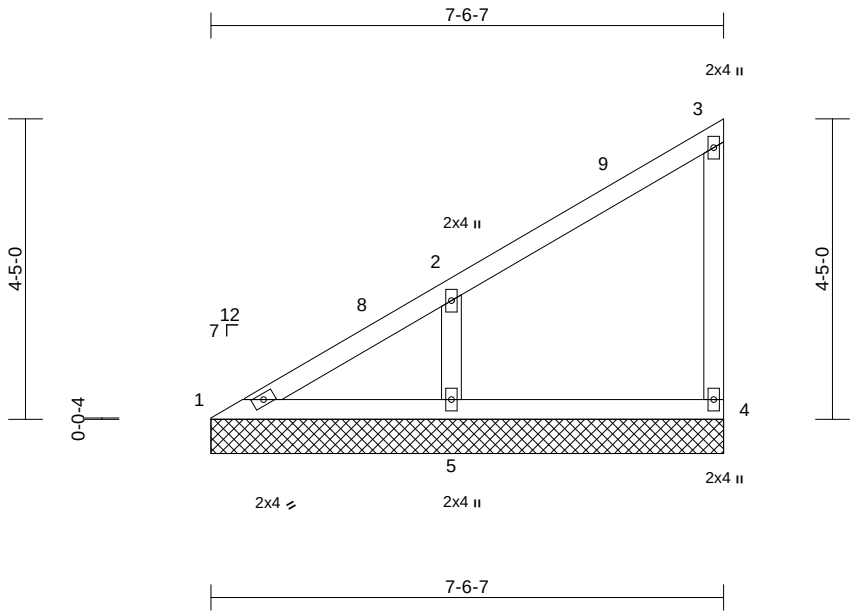
NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-10-7, Exterior(2R) 3-10-7 to 8-1-5 zone; cantilever left and right exposed ; end vertical 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.

April 7,2022

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

Job	Truss	Truss Type	Qty	Ply	DRB - 97 FARM AT NEILLS CREEK
22030101	V6	Valley	1	1	I51218118
					Job Reference (optional)

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Dec 6 2021 Print: 8.530 S Dec 6 2021 MiTek Industries, Inc. Wed Apr 06 13:43:07 Page: 1
ID:9eP49nIUaHiFJB4BPlpajJzTR1W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:33.9

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	0.13	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: 31 lb	FT = 20%

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

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

REACTIONS (lb/size) 1=103/7-6-7, 4=119/7-6-7, 5=369/7-6-7
Max Horiz 1=147 (LC 11)
Max Uplift 4=-24 (LC 11), 5=-102 (LC 14)
Max Grav 1=117 (LC 24), 4=181 (LC 20), 5=502 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-176/106, 2-3=-114/58, 3-4=-153/43
BOT CHORD 1-5=-67/136, 4-5=-67/73
WEBS 2-5=-403/187

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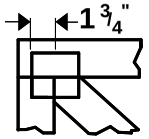
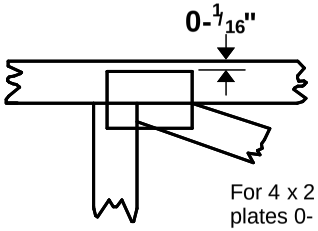
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

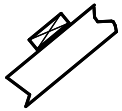
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

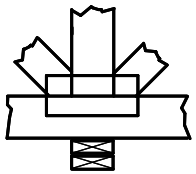
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

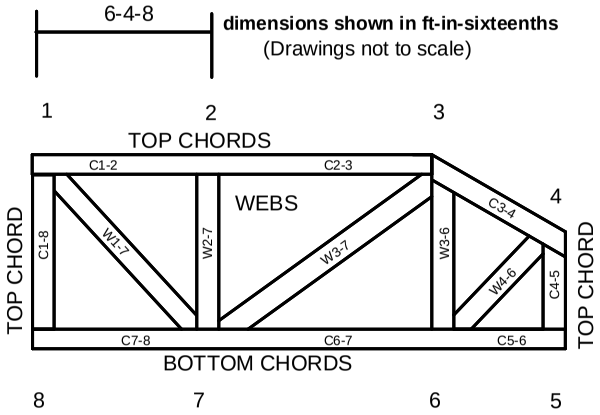


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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