ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 200464RT1

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carolina Structural Systems, LLC.

Pages or sheets covered by this seal: E14287001 thru E14287016

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

North Carolina COA: C-0844

April 13,2020

Gilbert, Eric

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

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TRENCO
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818 Soundside Rd
Edenton, NC 27932

Re: 200464RT1

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carolina Structural Systems, LLC.

Pages or sheets covered by this seal: E14287001 thru E14287016

My license renewal date for the state of South Carolina is June 30, 2020.

South Carolina COA: 923

April 13,2020

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A01	Common	10	1	E14287001 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:00 Page: 1

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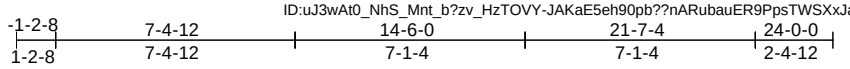
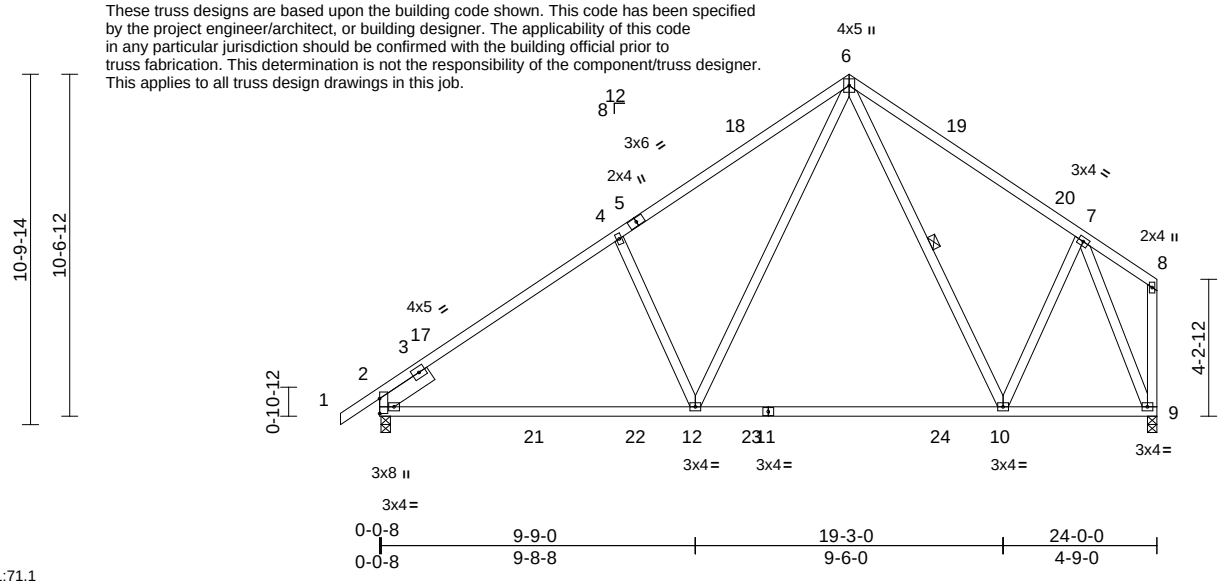


These truss designs are based upon the building code shown. This code has been specified by the project engineer/architect, or building designer. The applicability of this code in any particular jurisdiction should be confirmed with the building official prior to truss fabrication. This determination is not the responsibility of the component/truss designer. This applies to all truss design drawings in this job.



Scale = 1:71.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.27	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.41	10-12	>704	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 149 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2 *Except* 9-8:2x4 SP No.1
SLIDER	Left 2x6 SP No.2 -- 1-10-11

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-10

REACTIONS (size) 2=0-3-8, 9=0-3-8
Max Horiz 2=271 (LC 10)
Max Uplift 2=-95 (LC 11), 9=-59 (LC 11)
Max Grav 2=1071 (LC 16), 9=976 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/40, 2-3=-485/0, 3-17=-1264/129, 4-17=-1224/170, 4-5=-1160/204, 5-18=-1143/229, 6-18=-1044/252, 6-19=-674/216, 19-20=-680/194, 7-20=-782/173, 7-8=-58/110, 8-9=-45/76
BOT CHORD	2-21=-274/1112, 21-22=-198/1112, 12-22=-198/1112, 12-23=-80/636, 11-23=-80/636, 11-24=-80/636, 10-24=-80/636, 9-10=-104/425
WEBS	4-12=-398/207, 6-12=-83/773, 6-10=-127/109, 7-10=0/427, 7-9=-1115/188

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 14-6-0, Exterior (2) 14-6-0 to 17-6-0, Interior (1) 17-6-0 to 23-10-4 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 2 and 59 lb uplift at joint 9.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

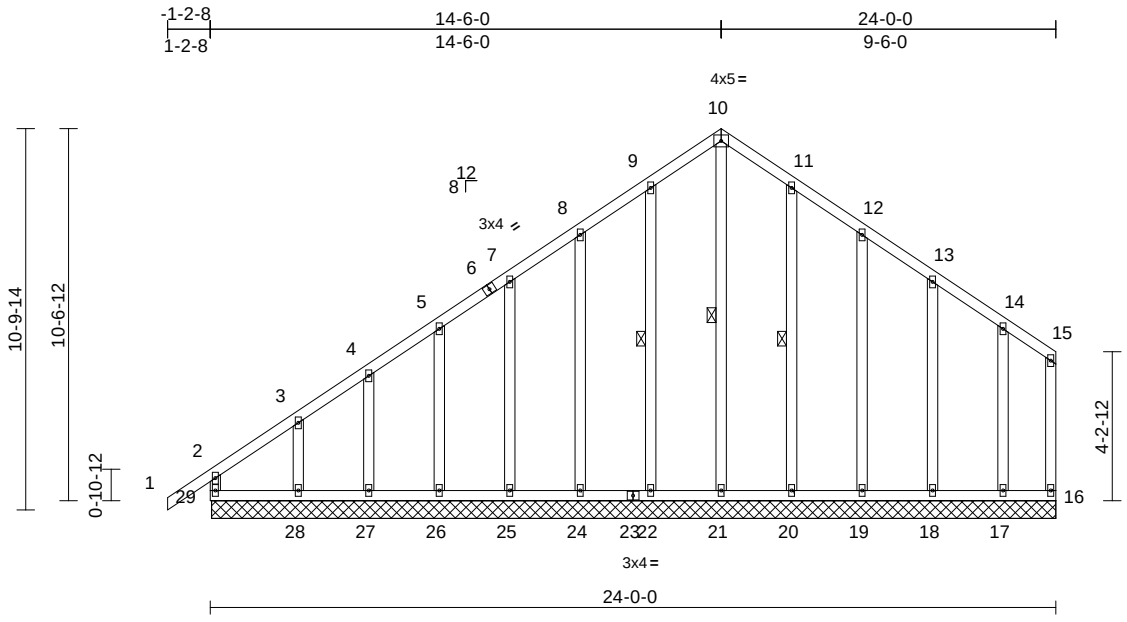
April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A02	Common Supported Gable	1	1	E14287002 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:02 ID:M9_9Y8?I9utvHtSrgMTDaazTOWs-Bxa54ShCDEK1Uc4xgkfW24cwjQMQSNSXECSmSCzRElh



Scale = 1:65.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 190 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2 *Except* 15-16:2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 10-21, 9-22, 11-20

REACTIONS (size) 16=23-11-8, 17=23-11-8, 18=23-11-8, 19=23-11-8, 20=23-11-8, 21=23-11-8, 22=23-11-8, 24=23-11-8, 25=23-11-8, 26=23-11-8, 27=23-11-8, 28=23-11-8, 29=23-11-8
Max Horiz 29=276 (LC 10)
Max Uplift 16=-27 (LC 11), 17=-45 (LC 11), 18=-32 (LC 11), 19=-43 (LC 11), 20=-18 (LC 11), 21=-53 (LC 10), 22=-18 (LC 11), 24=-42 (LC 11), 25=-34 (LC 11), 26=-37 (LC 11), 27=-28 (LC 11), 28=-89 (LC 8), 29=-78 (LC 9)
Max Grav 16=46 (LC 17), 17=168 (LC 17), 18=164 (LC 1), 19=165 (LC 17), 20=166 (LC 21), 21=239 (LC 11), 22=172 (LC 16), 24=160 (LC 16), 25=161 (LC 16), 26=167 (LC 16), 27=160 (LC 1), 28=234 (LC 16), 29=286 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-29=-236/73, 1-2=0/45, 2-3=-267/221, 3-4=-220/178, 4-5=-212/169, 5-6=-195/148, 6-7=-175/155, 7-8=-185/212, 8-9=-238/274, 9-10=-277/321, 10-11=-277/321, 11-12=-238/274, 12-13=-185/212, 13-14=-135/153, 14-15=-96/109, 15-16=-88/82
BOT CHORD 28-29=-61/74, 27-28=-61/74, 26-27=-61/74, 25-26=-61/74, 24-25=-61/74, 23-24=-61/74, 22-23=-61/74, 21-22=-61/74, 20-21=-61/74, 19-20=-61/74, 18-19=-61/74, 17-18=-61/74, 16-17=-61/74
WEBS 10-21=-280/179, 9-22=-132/67, 8-24=-135/91, 7-25=-126/80, 5-26=-131/85, 4-27=-120/79, 3-28=-174/131, 11-20=-126/67, 12-19=-134/90, 13-18=-131/84, 14-17=-129/86

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-2-8 to 1-9-8, Exterior (2) 1-9-8 to 14-6-0, Corner (3) 14-6-0 to 17-6-0, Exterior (2) 17-6-0 to 23-10-4 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 29, 27 lb uplift at joint 16, 53 lb uplift at joint 21, 18 lb uplift at joint 22, 42 lb uplift at joint 24, 34 lb uplift at joint 25, 37 lb uplift at joint 26, 28 lb uplift at joint 27, 89 lb uplift at joint 28, 18 lb uplift at joint 20, 43 lb uplift at joint 19, 32 lb uplift at joint 18 and 45 lb uplift at joint 17.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A03	Roof Special	3	1	E14287003 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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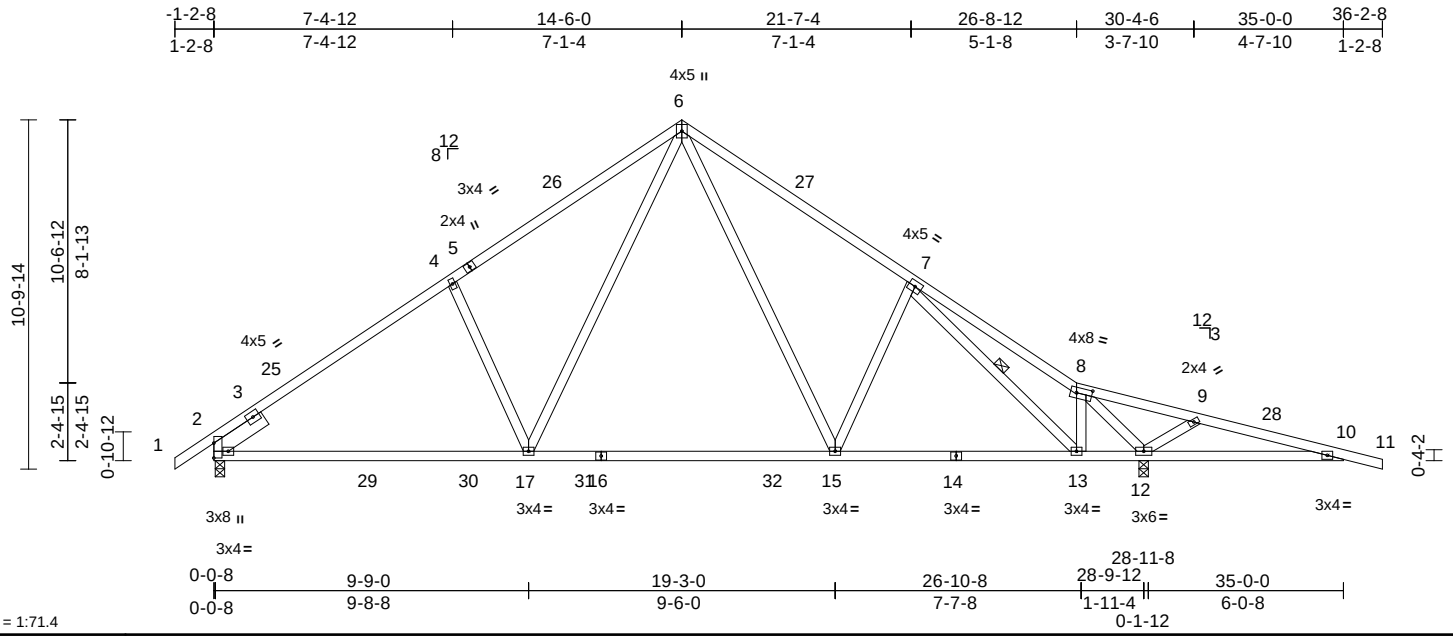

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Plate Offsets (X, Y): [8:0-5-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.30	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.45	15-17	>775	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 191 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-10-11

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-13

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=-215 (LC 9)
Max Uplift 2=-96 (LC 11), 12=-149 (LC 11)
Max Grav 2=1220 (LC 16), 12=1789 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-526/0, 3-25=-1502/116, 4-25=-1450/149, 4-5=-1396/183, 5-26=-1380/208, 6-26=-1292/231, 6-27=-1156/184, 7-27=-1260/160, 7-8=-652/81, 8-9=-819/1264, 9-28=-712/940, 10-28=-715/899, 10-11=0/18
BOT CHORD 2-29=-95/1318, 29-30=0/1318, 17-30=0/1318, 17-31=0/850, 16-31=0/850, 16-32=0/850, 15-32=0/850, 14-15=0/983, 13-14=0/983, 12-13=0/589, 10-12=-872/727
WEBS 4-17=-385/210, 6-17=-89/760, 6-15=-20/484, 7-15=-245/140, 8-13=-347/828, 8-12=-2019/398, 9-12=-401/170, 7-13=-1063/637

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 2-3-8, Interior (1) 2-3-8 to 14-6-0, Exterior (2) 14-6-0 to 18-0-0, Interior (1) 18-0-0 to 36-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 3x4 MT20 unless otherwise indicated.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 2 and 149 lb uplift at joint 12.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A04	Roof Special	11	1	E14287004 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:03 Page: 1
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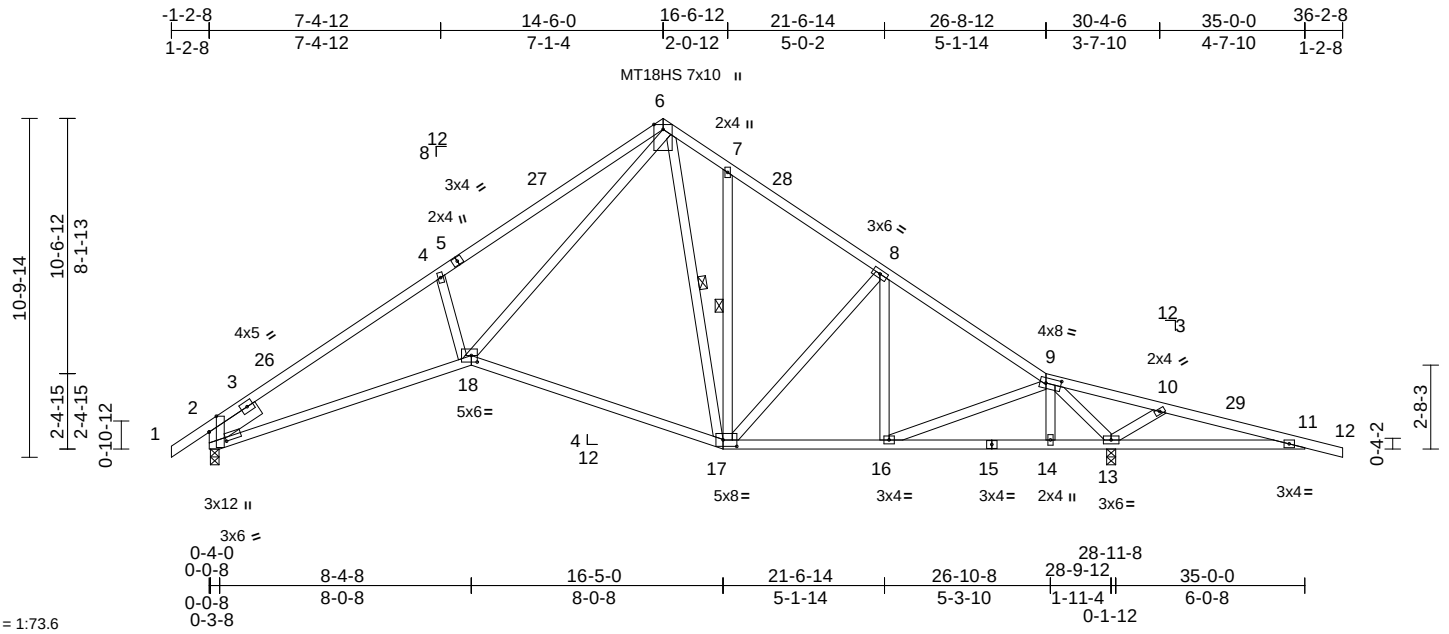

Scale = 1:73.6

Plate Offsets (X, Y): [2:0-6-1,Edge], [2:0-5-4,0-5-8], [9:0-5-12,0-2-0], [17:0-5-4,0-2-8], [18:0-2-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.18	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.43	17-18	>804	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.19	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 205 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 5-1:2x4 SP DSS
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-11-5

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 7-17

REACTIONS (size) 2=0-3-4, 13=0-3-8
Max Horiz 2=-215 (LC 9)
Max Uplift 2=-96 (LC 11), 13=-149 (LC 11)
Max Grav 2=1156 (LC 1), 13=1789 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-435/0, 3-26=-2373/106, 4-26=-2338/139, 4-5=-2231/189, 5-27=-2207/214, 6-27=-2110/237, 6-7=-1048/221, 7-28=-996/154, 8-28=-1051/139, 8-9=-1142/84, 9-10=-820/1261, 10-29=-713/942, 11-29=-717/902, 11-12=0/18
BOT CHORD 2-18=-60/2027, 17-18=0/839, 16-17=0/889, 15-16=0/576, 14-15=0/576, 13-14=0/583, 11-13=-875/728
WEBS 4-18=-319/223, 6-18=-78/1646, 6-17=-101/304, 7-17=-180/105, 8-17=-278/70, 8-16=-185/219, 9-16=-425/744, 9-14=0/105, 9-13=-1997/407, 10-13=-394/169

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 2-3-8, Interior (1) 2-3-8 to 14-6-0, Exterior (2) 14-6-0 to 18-0-0, Interior (1) 18-0-0 to 36-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 13 and 96 lb uplift at joint 2.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A05	Common	7	1	E14287005 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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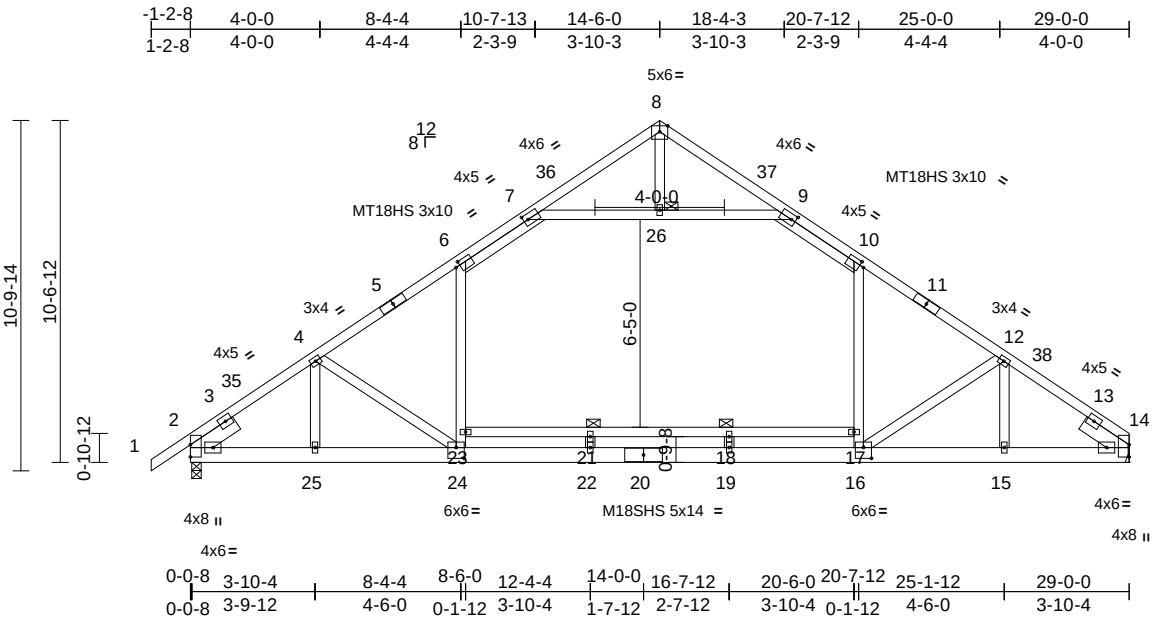


Scale = 1:71.2

Plate Offsets (X, Y): [6:0-1-10,0-1-8], [7:0-1-10,0-2-0], [9:0-1-10,0-2-0], [10:0-1-10,0-1-8], [16:0-3-0,0-4-0], [24:0-3-0,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.62	19-22	>559	240	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-1.03	19-22	>338	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	2	n/a	n/a	M18SHS	244/190
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 213 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP DSS
BOT CHORD 2x6 SP DSS *Except* 23-17:2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-7-6, Right 2x6 SP No.2 -- 1-7-6

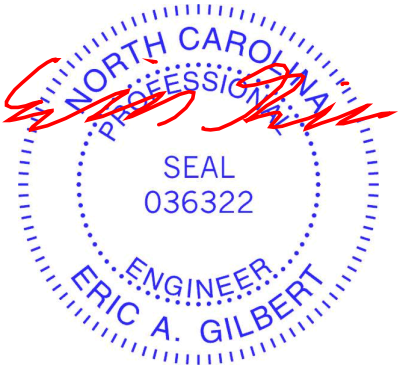
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except: 6-0-0 oc bracing: 17-23
JOINTS 1 Brace at Jt(s): 26

REACTIONS (size) 2=0-3-8, 14= Mechanical
Max Horiz 2=210 (LC 10)
Max Uplift 2=-35 (LC 11)
Max Grav 2=1608 (LC 16), 14=1540 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-1741/0, 3-35=-2045/57, 4-35=-1996/75, 4-5=-2258/25, 5-6=-2146/43, 6-7=-1577/143, 7-36=-75/236, 8-36=-38/277, 8-37=-38/277, 9-37=-75/236, 9-10=-1577/146, 10-11=-2145/49, 11-12=-2257/31, 12-38=-2012/95, 13-38=-2028/84, 13-14=-1468/0
BOT CHORD 2-25=-17/1862, 24-25=-6/1863, 22-24=0/1856, 20-22=0/1856, 19-20=0/1856, 16-19=0/1856, 15-16=-16/1729, 14-15=-16/1728, 21-23=-127/0, 18-21=-127/0, 17-18=-127/0
WEBS 12-16=-329/184, 4-24=-313/191, 23-24=0/905, 6-23=0/1044, 16-17=0/906, 10-17=0/1044, 8-26=0/8, 7-26=-1915/77, 9-26=-1915/77, 4-25=-591/0, 12-15=-581/0, 21-22=-231/0, 18-19=-230/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 14-6-0, Exterior (2) 14-6-0 to 17-6-0, Interior (1) 17-6-0 to 29-0-0 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
3) All plates are MT20 plates unless otherwise indicated.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



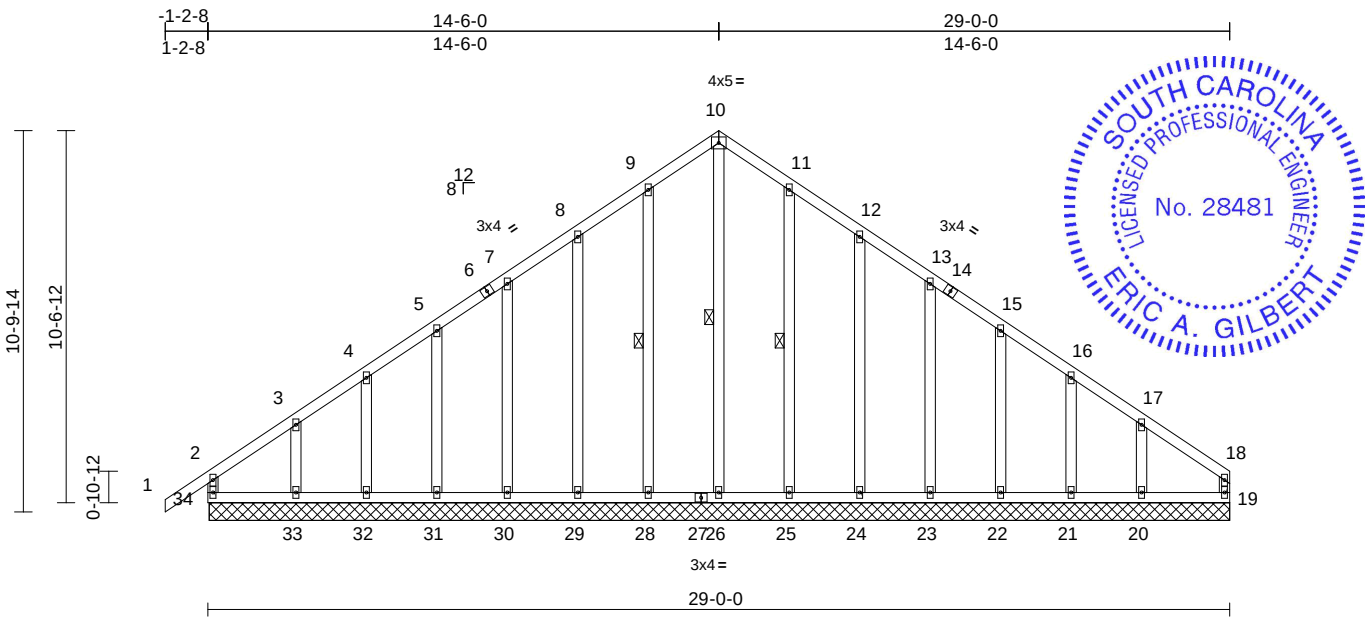
April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	A06	Common Supported Gable	1	1	E14287006 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:04 ID:Q2P92nDz6Fzi8NZPSNXigczTPMo-7KirV8jSlsaljwEKn9i_8VhGdD3NwHyqhWxtX5zRElf



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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	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 209 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 10-26, 9-28, 11-25

REACTIONS (size) 19=28-11-8, 20=28-11-8, 21=28-11-8, 22=28-11-8, 23=28-11-8, 24=28-11-8, 25=28-11-8, 26=28-11-8, 28=28-11-8, 29=28-11-8, 30=28-11-8, 31=28-11-8, 32=28-11-8, 33=28-11-8, 34=28-11-8
Max Horiz 34=231 (LC 10)
Max Uplift 19=-19 (LC 10), 20=-76 (LC 11), 21=-23 (LC 11), 22=-38 (LC 11), 23=-33 (LC 11), 24=-42 (LC 11), 25=-18 (LC 11), 28=-18 (LC 11), 29=-42 (LC 11), 30=-34 (LC 11), 31=-37 (LC 11), 32=-27 (LC 11), 33=-62 (LC 11), 34=-36 (LC 7)
Max Grav 19=130 (LC 16), 20=230 (LC 17), 21=150 (LC 21), 22=168 (LC 17), 23=162 (LC 17), 24=164 (LC 17), 25=166 (LC 17), 26=233 (LC 11), 28=169 (LC 16), 29=163 (LC 16), 30=163 (LC 16), 31=167 (LC 16), 32=161 (LC 1), 33=212 (LC 16), 34=237 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-34=-195/53, 1-2=0/45, 2-3=-173/148, 3-4=-136/111, 4-5=-126/99, 5-6=-139/125, 6-7=-119/131, 7-8=-186/189, 8-9=-239/251, 9-10=-278/299, 10-11=-278/299, 11-12=-239/251, 12-13=-186/189, 13-14=-119/132, 14-15=-139/125, 15-16=-89/72, 16-17=-93/58, 17-18=-113/94, 18-19=-99/22
BOT CHORD 33-34=-84/97, 32-33=-84/97, 31-32=-84/97, 30-31=-84/97, 29-30=-84/97, 28-29=-84/97, 27-28=-84/97, 26-27=-84/97, 25-26=-84/97, 24-25=-84/97, 23-24=-84/97, 22-23=-84/97, 21-22=-84/97, 20-21=-84/97, 19-20=-84/97
WEBS 10-26=-256/180, 9-28=-129/61, 8-29=-135/90, 7-30=-126/80, 5-31=-130/83, 4-32=-121/77, 3-33=-166/111, 11-25=-126/61, 12-24=-135/90, 13-23=-126/79, 15-22=-130/84, 16-21=-116/72, 17-20=-168/117

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=29ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-2-8 to 1-9-8, Exterior (2) 1-9-8 to 14-6-0, Corner (3) 14-6-0 to 17-6-0, Exterior (2) 17-6-0 to 28-10-4 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 34, 19 lb uplift at joint 19, 18 lb uplift at joint 28, 42 lb uplift at joint 29, 34 lb uplift at joint 30, 37 lb uplift at joint 31, 27 lb uplift at joint 32, 62 lb uplift at joint 33, 18 lb uplift at joint 25, 42 lb uplift at joint 24, 33 lb uplift at joint 23, 38 lb uplift at joint 22, 23 lb uplift at joint 21 and 76 lb uplift at joint 20.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 28481 ERIC A. GILBERT

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	B01	Common	4	1	E14287007 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:04 Page: 1
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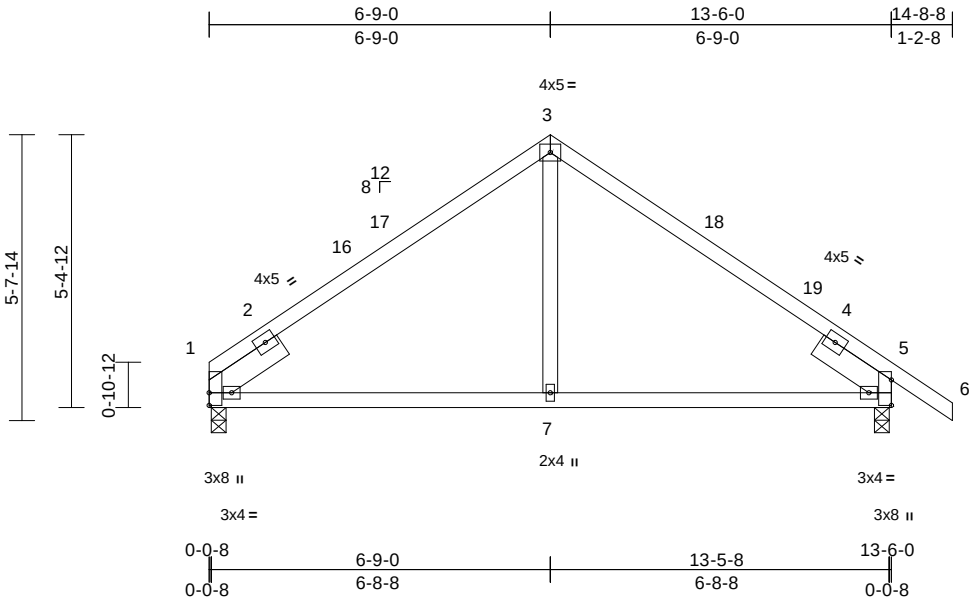

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.05	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.08	7-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.03	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 62 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-8-15, Right 2x6 SP No.2 -- 1-8-15

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-102 (LC 9)
Max Uplift 1=-31 (LC 11), 5=-72 (LC 11)
Max Grav 1=537 (LC 1), 5=616 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-200/0, 2-16=-511/96, 16-17=-491/98, 3-17=-486/121, 3-18=-488/117, 18-19=-491/95, 4-19=-576/84, 4-5=-157/21, 5-6=0/40
BOT CHORD 1-7=-95/409, 5-7=0/409
WEBS 3-7=0/191

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-9-0, Exterior (2) 6-9-0 to 9-9-0, Interior (1) 9-9-0 to 14-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1 and 72 lb uplift at joint 5.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	B02	Common Supported Gable	1	1	E14287008 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 07:56:02

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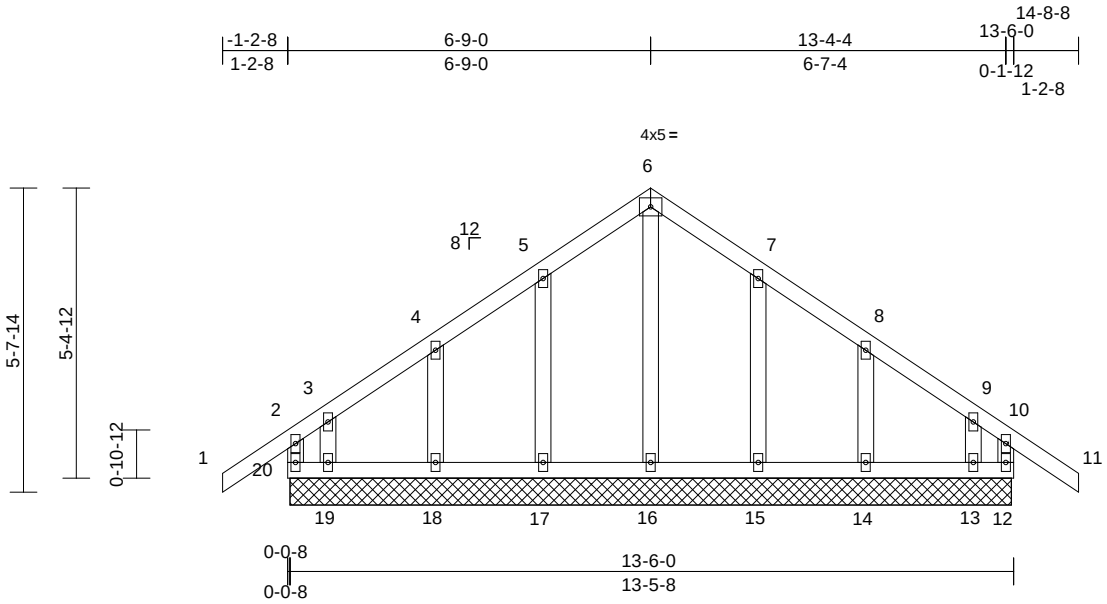

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 77 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS All bearings 13-5-0.

(lb) - Max Horiz 20=-123 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 14, 15, 17, 18, 19 except 12=-150 (LC 11), 20=-142 (LC 7)

Max Grav All reactions 250 (lb) or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19, 20

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

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-2-8 to 1-9-8, Exterior (2) 1-9-8 to 6-9-0, Corner (3) 6-9-0 to 9-9-0, Exterior (2) 9-9-0 to 14-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 19, 15, 14 except (jt=lb) 20=141, 12=149.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	B03	Common Girder	1	2	E14287009 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:05 ID:awFCXouvZye5UjJJeLaSLwzTPPp-bWFDiUk4W9icL4pWLsDDgiEMVdKEffTzw9hQ3XzREle

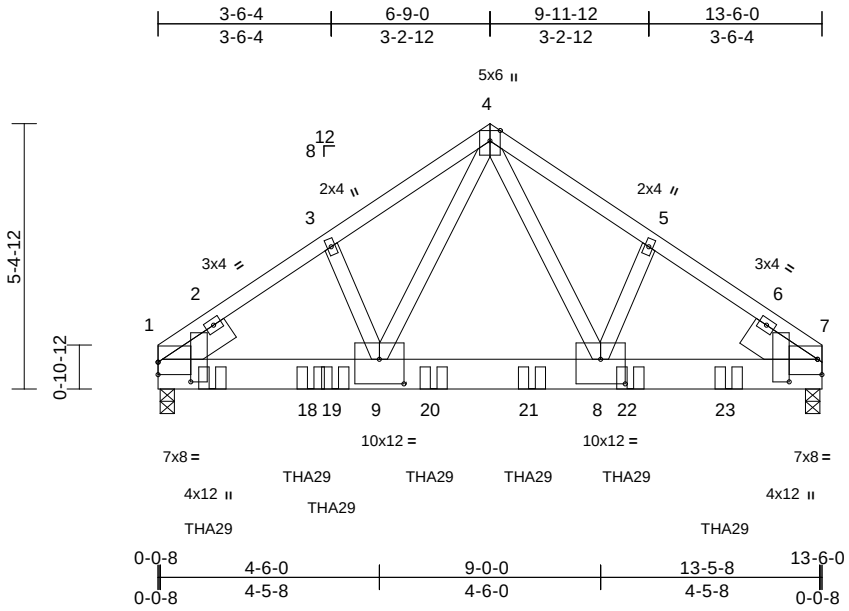

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Plate Offsets (X, Y): [1:Edge,0-3-1], [1:0-4-13,0-8-0], [7:Edge,0-3-12], [7:0-0-0,0-0-0], [7:0-5-8,0-6-15], [8:0-6-0,0-6-0], [9:0-6-0,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.07	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.12	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 193 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x8 SP DSS
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x8 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-10-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-87 (LC 22)
Max Grav 1=6249 (LC 2), 7=5069 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5374/0, 2-3=-6494/0, 3-4=-6404/0, 4-5=-5902/0, 5-6=-5995/0, 6-7=-3813/0
BOT CHORD	1-18=0/5290, 18-19=0/5290, 9-19=0/5290, 9-20=0/3637, 20-21=0/3637, 8-21=0/3637, 8-22=0/4867, 22-23=0/4867, 7-23=0/4867
WEBS	3-9=-87/197, 4-9=0/4081, 4-8=0/3077, 5-8=-83/210

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Use Simpson Strong-Tie THA29 (10-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-1-4 from the left end to 11-7-4 to connect truss(es) to back face of bottom chord.
8) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-7=-60, 10-14=-20
Concentrated Loads (lb)
Vert: 12=-1262 (B), 18=-1261 (B), 19=-1261 (B), 20=-1261 (B), 21=-1261 (B), 22=-1261 (B), 23=-1261 (B)

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	C01	Common	3	1	E14287010 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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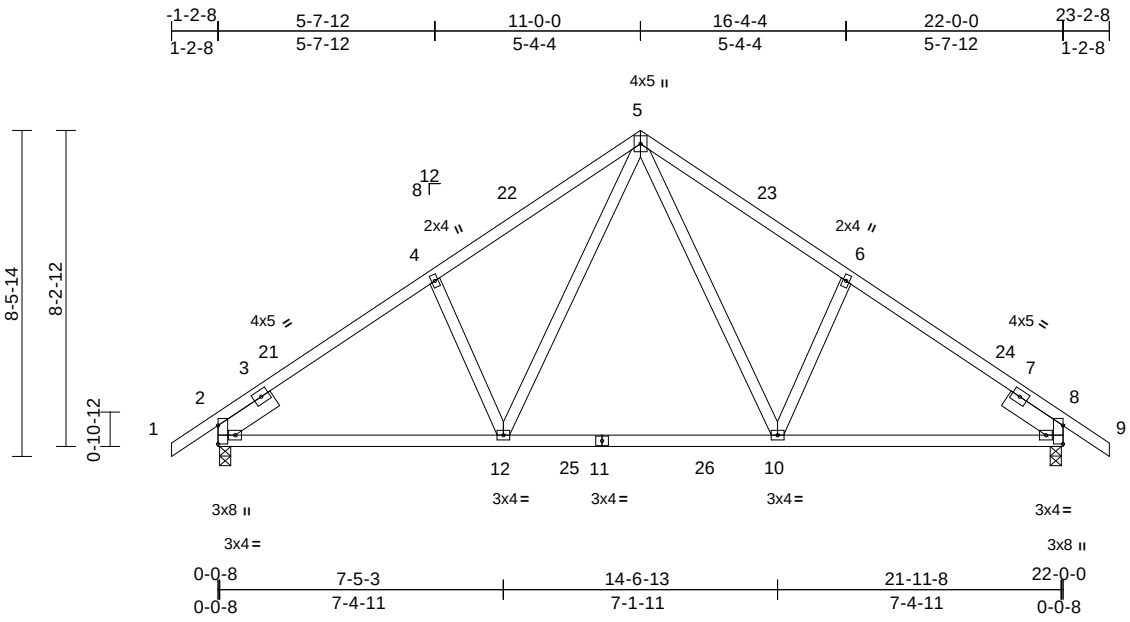

Scale = 1:60

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.13	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.19	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 123 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-9-3, Right 2x6 SP No.2 -- 1-9-3

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-162 (LC 9)
Max Uplift 2=-91 (LC 11), 8=-91 (LC 11)
Max Grav 2=953 (LC 1), 8=953 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/40, 2-3=-326/0, 3-21=-1118/122, 4-21=-1096/152, 4-22=-1012/194, 5-22=-944/214, 5-23=-944/214, 6-23=-1012/194, 6-24=-1096/152, 7-24=-1118/122, 7-8=-259/0, 8-9=0/40
BOT CHORD	2-12=-61/942, 12-25=0/659, 11-25=0/659, 11-26=0/659, 10-26=0/659, 8-10=-27/861
WEBS	5-10=-63/459, 6-10=-272/155, 5-12=-63/459, 4-12=-272/155

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-0-0, Exterior (2) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 23-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2 and 91 lb uplift at joint 8.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	C02	Common Structural Gable	1	1	E14287011 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:06 Page: 1
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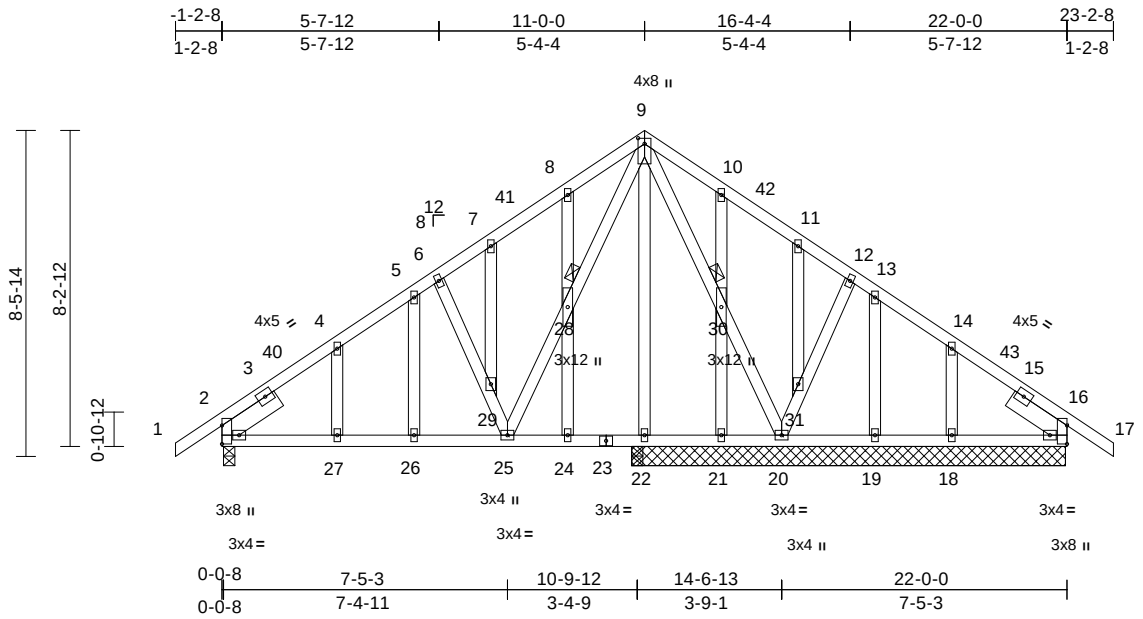


Scale = 1:60

Plate Offsets (X, Y): [9:0-1-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	0.02	27	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	27-34	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 183 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-9-3, Right 2x6 SP No.2 -- 1-9-3

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
JOINTS	1 Brace at Jt(s): 28, 30

REACTIONS (size) 2=0-3-8, 16=11-3-8, 18=11-3-8, 19=11-3-8, 20=11-3-8, 21=11-3-8, 22=0-3-8, 36=11-3-8
Max Horiz 2=160 (LC 10)
Max Uplift 2=-96 (LC 11), 16=-45 (LC 11), 18=-57 (LC 11), 20=-42 (LC 11), 21=-24 (LC 11), 36=-45 (LC 11)
Max Grav 2=554 (LC 1), 16=230 (LC 21), 18=227 (LC 17), 19=85 (LC 21), 20=331 (LC 1), 21=154 (LC 21), 22=376 (LC 1), 36=230 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/40, 2-3=-232/36, 3-40=-467/87, 4-40=-460/93, 4-5=-491/139, 5-6=-401/144, 6-7=-452/165, 7-41=-451/190, 8-41=-439/196, 8-9=-477/246, 9-10=-210/194, 10-42=-154/155, 11-42=-165/147, 11-12=-140/119, 12-13=-135/105, 13-14=-139/93, 14-43=-64/33, 15-43=-64/24, 15-16=-86/7, 16-17=0/40

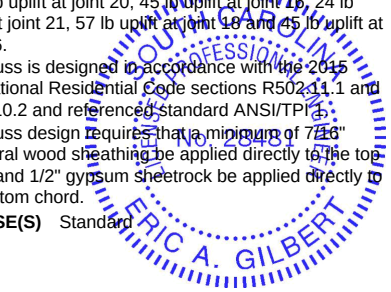
BOT CHORD 2-27=-51/425, 26-27=-6/425, 25-26=-6/425, 24-25=-41/125, 23-24=-41/125, 22-23=-41/125, 21-22=-42/120, 20-21=-42/120, 19-20=-17/71, 18-19=-17/71, 16-18=-17/71

WEBS 9-30=-160/3, 20-30=-171/3, 20-31=-172/89, 12-31=-102/53, 25-28=-113/444, 9-28=-124/478, 6-29=-327/87, 25-29=-352/119, 9-22=-263/0, 8-28=-94/64, 24-28=-60/51, 7-29=-34/37, 5-26=0/125, 4-27=-71/56, 10-30=-145/69, 21-30=-138/70, 11-31=-77/39, 13-19=-47/13, 14-18=-185/88

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 10-10-3, Exterior (2) 10-10-3 to 13-10-3, Interior (1) 13-10-3 to 23-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 2, 42 lb uplift at joint 20, 45 lb uplift at joint 16, 24 lb uplift at joint 21, 57 lb uplift at joint 18 and 45 lb uplift at joint 16.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	C03	Common	7	1	E14287012 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Mon Apr 13 04:32:06
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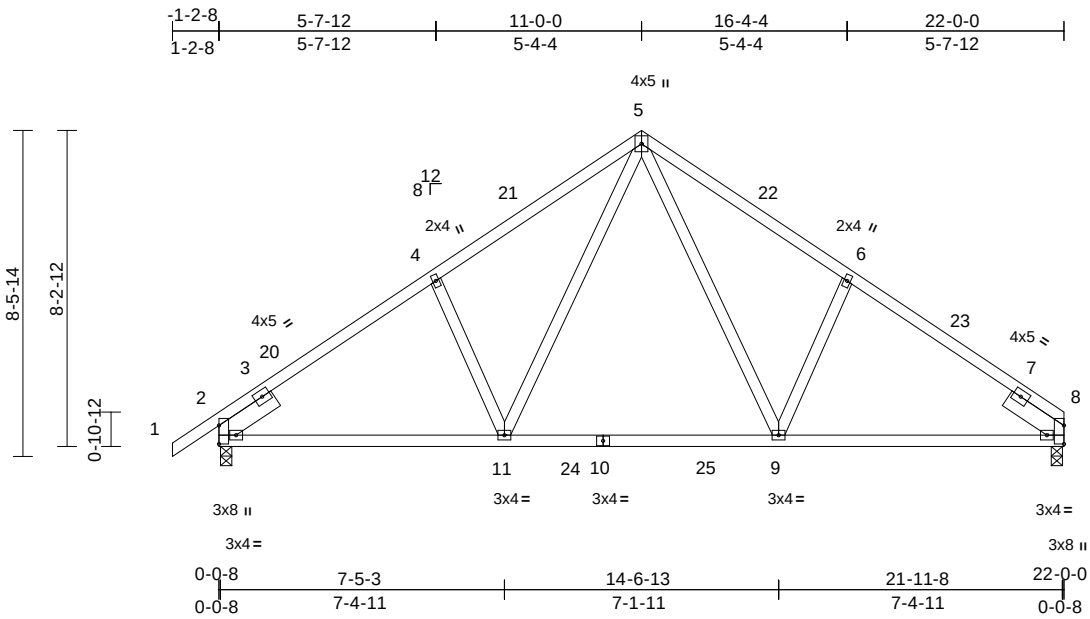

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.12	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.19	9-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 121 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-9-3, Right 2x6 SP No.2 -- 1-9-3

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=158 (LC 10)
Max Uplift 2=-92 (LC 11), 8=-52 (LC 11)
Max Grav 2=954 (LC 1), 8=878 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/40, 2-3=-327/0, 3-20=-1121/123, 4-20=-1099/152, 4-21=-1015/195, 5-21=-946/215, 5-22=-946/225, 6-22=-1021/192, 6-23=-1018/161, 7-23=-1126/142, 7-8=-259/0
BOT CHORD	2-11=-84/935, 11-24=0/652, 10-24=0/652, 10-25=0/652, 9-25=0/652, 8-9=-51/871
WEBS	5-9=-65/467, 6-9=-272/156, 5-11=-62/458, 4-11=-272/155

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-0-0, Exterior (2) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 22-0-0 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
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 8 and 92 lb uplift at joint 2.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	D02	Common Supported Gable	1	1	E14287013 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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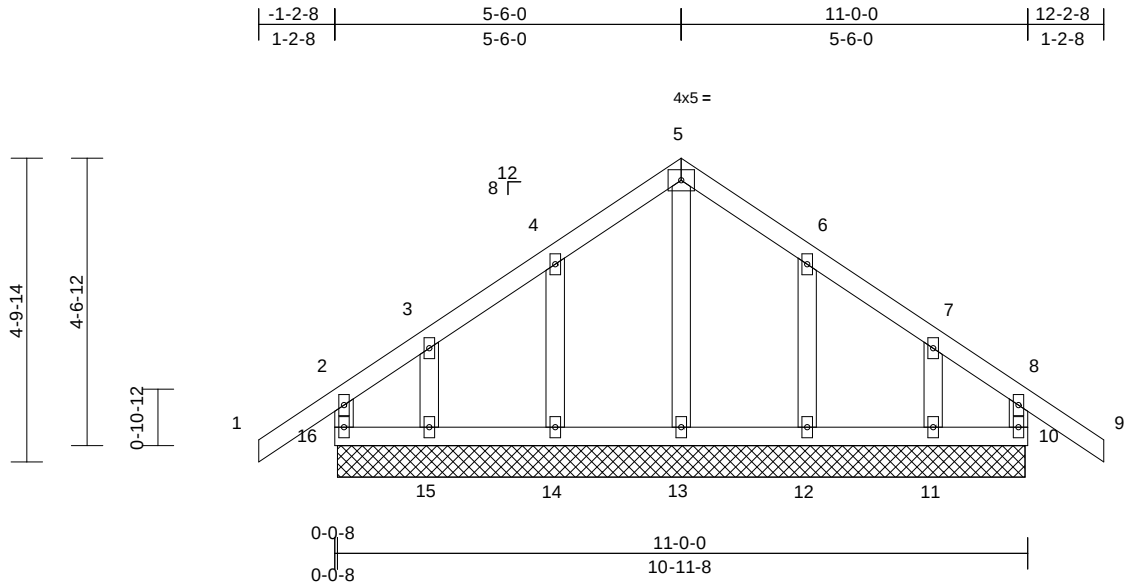

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 60 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS (size) 10=10-11-0, 11=10-11-0, 12=10-11-0, 13=10-11-0, 14=10-11-0, 15=10-11-0, 16=10-11-0
Max Horiz 16=-111 (LC 9)
Max Uplift 10=-51 (LC 11), 11=-28 (LC 7), 12=-35 (LC 11), 14=-35 (LC 11), 15=-32 (LC 8), 16=-51 (LC 11)
Max Grav 10=151 (LC 21), 11=129 (LC 17), 12=178 (LC 21), 13=174 (LC 1), 14=178 (LC 20), 15=136 (LC 16), 16=151 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-16=-135/97, 1-2=0/45, 2-3=-58/66, 3-4=-54/72, 4-5=-105/122, 5-6=-106/121, 6-7=-52/61, 7-8=-39/52, 8-9=0/45, 8-10=-135/94
BOT CHORD	15-16=-59/76, 14-15=-59/76, 13-14=-59/76, 12-13=-59/76, 11-12=-59/76, 10-11=-59/76
WEBS	5-13=-135/4, 4-14=-138/92, 3-15=-126/79, 6-12=-138/92, 7-11=-130/78

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-2-8 to 1-6-0, Exterior (2) 1-6-0 to 5-6-0, Corner (3) 5-6-0 to 8-6-0, Exterior (2) 8-6-0 to 12-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 16, 51 lb uplift at joint 10, 35 lb uplift at joint 14, 32 lb uplift at joint 15, 35 lb uplift at joint 12 and 28 lb uplift at joint 11.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	V01	Valley	2	1	E14287014 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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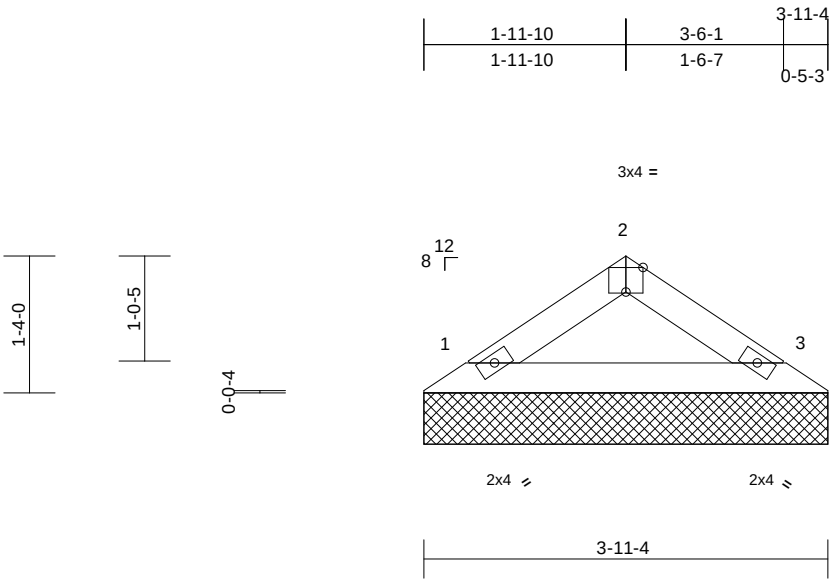

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

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

REACTIONS (size) 1=3-11-4, 3=3-11-4
Max Horiz 1=-20 (LC 9)
Max Uplift 1=-7 (LC 11), 3=-7 (LC 11)
Max Grav 1=121 (LC 1), 3=121 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-102/46, 2-3=-102/46
BOT CHORD 1-3=-13/68

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1 and 7 lb uplift at joint 3.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	V02	Valley	2	1	E14287015
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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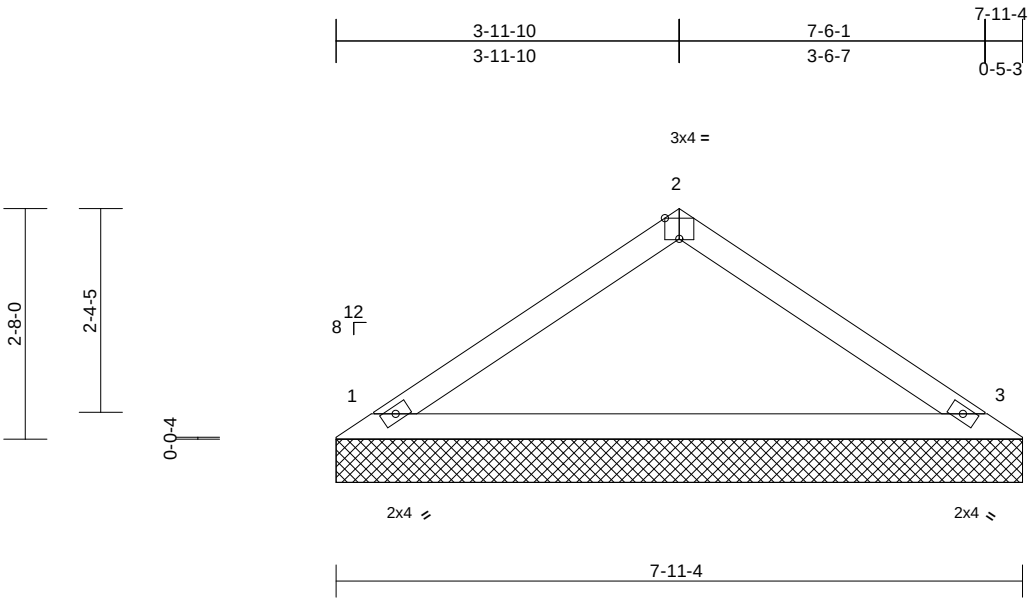

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

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

REACTIONS (size) 1=7-11-4, 3=7-11-4
Max Horiz 1=-47 (LC 9)
Max Uplift 1=-17 (LC 11), 3=-17 (LC 11)
Max Grav 1=281 (LC 1), 3=281 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-237/100, 2-3=-237/100
BOT CHORD 1-3=-28/158

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-5-12 to 3-5-12, Exterior (2) 3-5-12 to 4-0-0, Corner (3) 4-0-0 to 7-0-0, Exterior (2) 7-0-0 to 7-6-4 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) 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 3.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2020

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

Job	Truss	Truss Type	Qty	Ply	
200464RT1	V03	Valley	1	1	E14287016 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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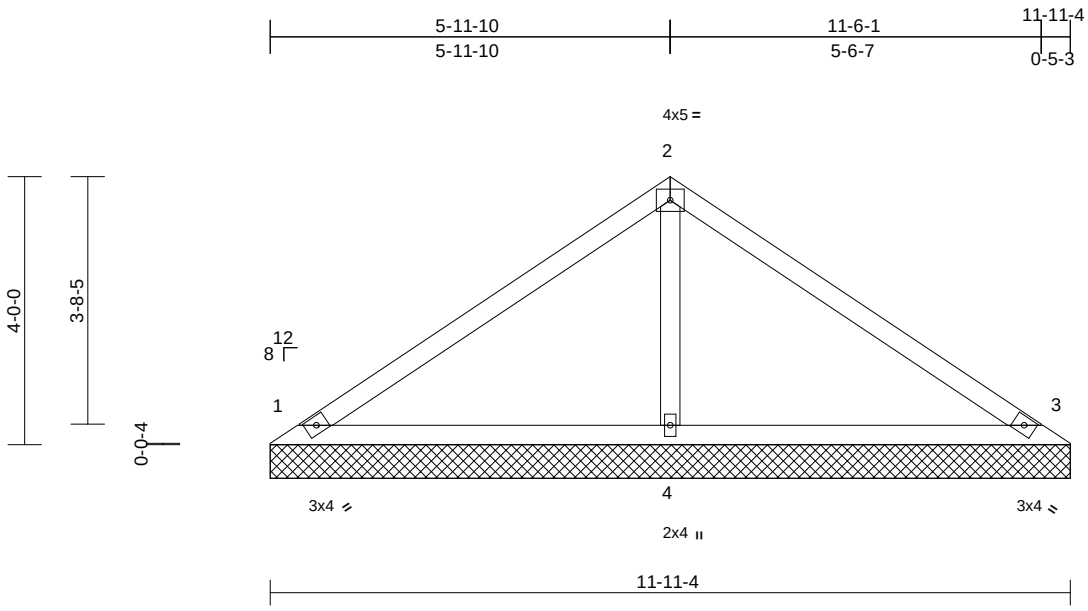


Scale = 1:34.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS (size) 1=11-11-4, 3=11-11-4, 4=11-11-4
Max Horiz 1=73 (LC 10)
Max Uplift 1=-29 (LC 11), 3=-29 (LC 11)
Max Grav 1=219 (LC 1), 3=219 (LC 1), 4=445 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-152/70, 2-3=-152/70
BOT CHORD 1-4=-6/66, 3-4=-6/66
WEBS 2-4=-282/97

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-5-12 to 3-5-12, Exterior (2) 3-5-12 to 6-0-0, Corner (3) 6-0-0 to 9-0-0, Exterior (2) 9-0-0 to 11-6-4 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) 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 6-0-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 29 lb uplift at joint 3.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

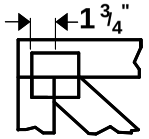
LOAD CASE(S) Standard

April 13,2020

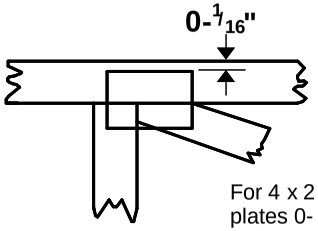
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

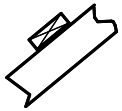
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

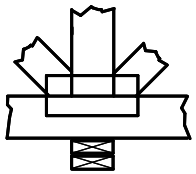
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

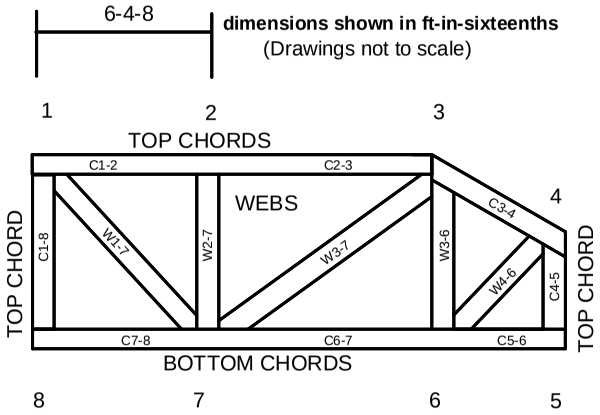


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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 BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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