

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: P-7005-1  
Roman-Roof

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

Pages or sheets covered by this seal: E14707732 thru E14707754

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

North Carolina COA: C-0844



August 6, 2020

Lassiter, Frank

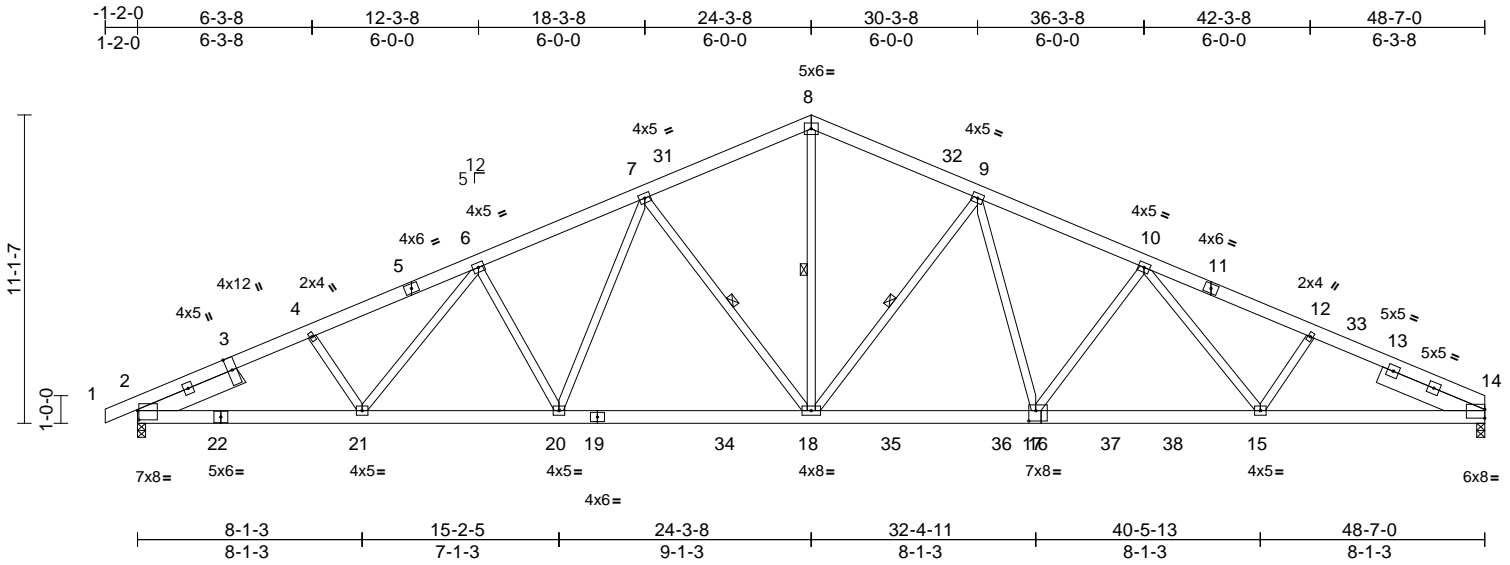
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 P-7005-1	Truss T1	Truss Type Common	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707732
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:48  
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Page: 1



Scale = 1:83.1

Plate Offsets (X, Y): [2:0-0-8,0-4-0], [14:Edge,0-3-13], [17:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	0.27	18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.47	18-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.14	14	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 382 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x8 SP No.2 -- 4-0-0, Right 2x8 SP No.2 -- 4-0-0

**WEBS**  
4-21=-139/181, 6-21=-46/211,  
6-20=-493/330, 7-20=-218/739,  
7-18=-877/451, 8-18=-616/1585,  
9-18=-925/445, 9-17=-191/732,  
10-17=-531/337, 10-15=-52/267,  
12-15=-112/175

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-3-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-9-11 oc bracing.  
WEBS 1 Row at midpt 7-18, 8-18, 9-18

**REACTIONS** (size) 2=0-3-8, 14=0-3-8  
Max Horiz 2=244 (LC 10)  
Max Uplift 2=-774 (LC 11), 14=-701 (LC 11)  
Max Grav 2=2014 (LC 1), 14=1942 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-3714/1367, 3-4=-3665/1386,  
4-5=-3575/1369, 5-6=-3504/1385,  
6-7=-3287/1347, 7-31=-2520/1092,  
8-31=-2463/1117, 8-32=-2463/1117,  
9-32=-2520/1092, 9-10=-3240/1311,  
10-11=-3558/1398, 11-12=-3618/1382,  
12-33=-3649/1399, 13-33=-3703/1386,  
13-14=-1612/589  
BOT CHORD 2-22=-1166/3413, 21-22=-1166/3413,  
20-21=-1042/3287, 19-20=-814/2819,  
19-34=-814/2819, 18-34=-814/2819,  
18-35=-811/2758, 35-36=-811/2758,  
17-36=-811/2758, 16-17=-1050/3184,  
16-37=-1050/3184, 37-38=-1050/3184,  
15-38=-1050/3184, 14-15=-1175/3336

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=49ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-0 to 3-8-5, Interior (1) 3-8-5 to 24-3-8, Exterior (2) 24-3-8 to 29-1-13, Interior (1) 29-1-13 to 48-7-0 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 4x5 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 774 lb uplift at joint 2 and 701 lb uplift at joint 14.  
6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



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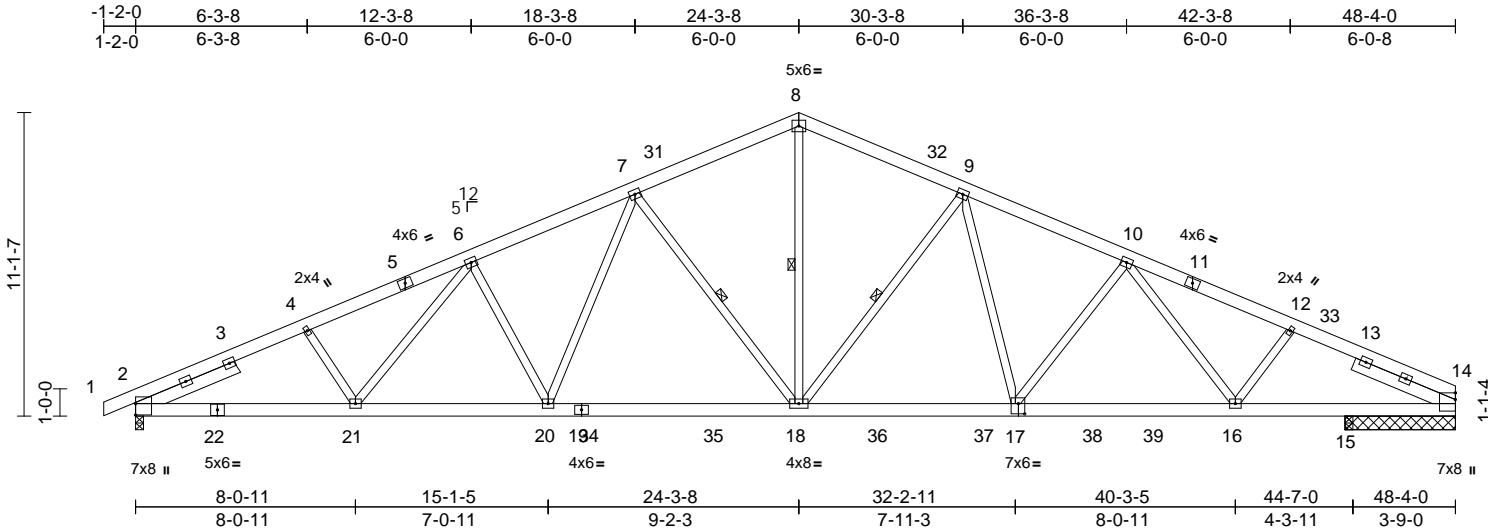
Job P-7005-1	Truss T1A	Truss Type Common	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707733
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 E Jul 22 2020 Print: 8.330 E Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 12:38:01

Page: 1

ID: xwJ3ulS2cc\_IAT8QDQBv11ysXsH-1TFG0FNb8lcFAPtOPIZjpmad66MCMd2VvYUgbyqayK



Scale = 1:84.4

Plate Offsets (X, Y): [14:0-2-15,Edge], [17:0-2-12,0-4-8]

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	0.79	Vert(LL)	0.26	18-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.45	18-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.14	14	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 375 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\* 17-14:2x6 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 -- 4-0-0, Right 2x6 SP No.2 -- 4-0-0

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 3-3-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-10-12 oc bracing.  
 WEBS 1 Row at midpt 7-18, 8-18, 9-18

**REACTIONS** (lb/size) 2=1959/0-3-8, 14=1417/4-0-8, 15=561/0-3-8  
 Max Horiz 2=242 (LC 10)  
 Max Uplift 2=-756 (LC 11), 14=-533 (LC 11), 15=-179 (LC 11)  
 Max Grav 2=1959 (LC 1), 14=1418 (LC 17), 15=561 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3601/1325, 3-4=-3543/1346, 4-5=-3454/1330, 5-6=-3382/1346,  
 6-7=-3160/1307, 7-31=-2381/1047, 8-31=-2324/1072, 8-32=-2324/1071,  
 9-32=-2380/1047, 9-10=-2985/1227, 10-11=-2857/1158, 11-12=-2917/1141,  
 12-33=-2919/1155, 13-33=-2958/1145  
 BOT CHORD 2-22=-1136/3302, 21-22=-1136/3302, 20-21=-1008/3169, 19-20=-779/2696,  
 19-34=-779/2696, 34-35=-779/2696, 18-35=-779/2696, 18-36=-751/2558,  
 36-37=-751/2558, 17-37=-751/2558, 17-38=-935/2823, 38-39=-935/2823,  
 16-39=-935/2823, 15-16=-941/2600, 14-15=-941/2600  
 WEBS 6-20=-495/331, 7-20=-223/745, 7-18=-877/454, 8-18=-580/1477,  
 9-18=-804/405, 9-17=-146/592, 10-17=-341/259, 10-16=-318/115

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-0 to 3-8-0, Interior (1) 3-8-0 to 24-3-8, Exterior (2) 24-3-8 to 29-1-8, Interior (1) 29-1-8 to 48-4-0 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
  - All plates are 4x5 MT20 unless otherwise indicated.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 756 lb uplift at joint 2, 533 lb uplift at joint 14 and 179 lb uplift at joint 15.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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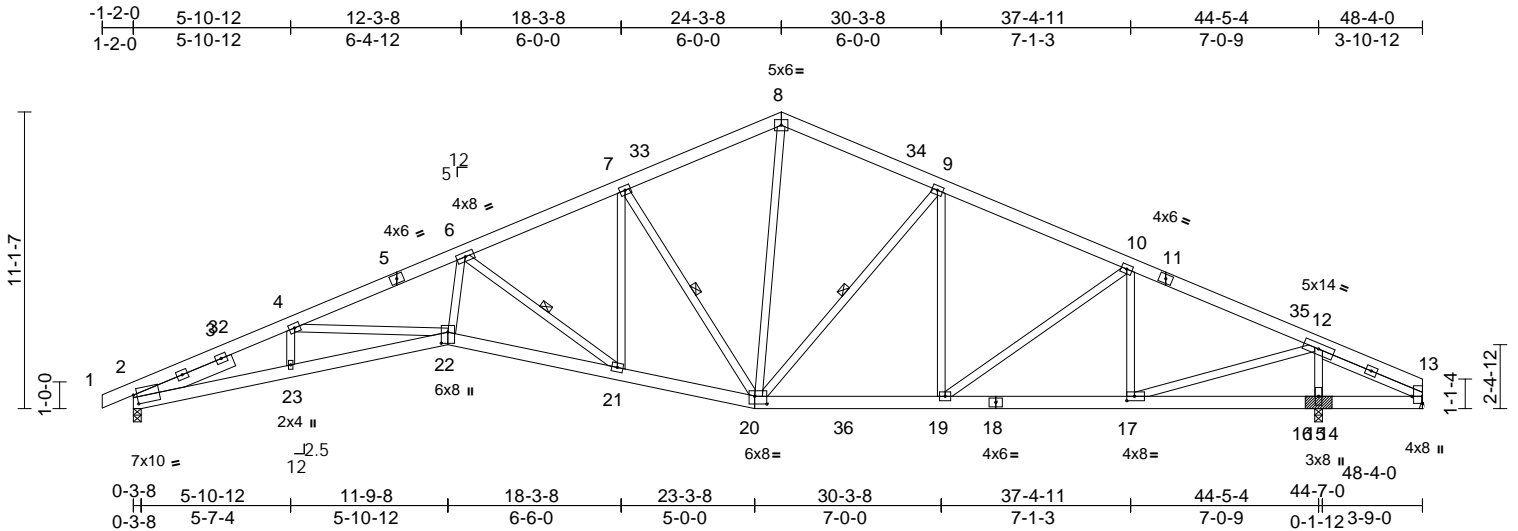
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T1B	Truss Type Roof Special	Qty 2	Ply 1	Roman-Roof Job Reference (optional)	E14707734
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Peak Truss Builders, LLC, New Hill, NC - 27562,

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Page: 1



Scale = 1:86.4

Plate Offsets (X, Y): [2:0-1-9,0-4-6], [13:Edge,0-4-13], [17:0-3-8,0-2-0], [20:0-5-8,0-3-8], [22:0-5-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.40	22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.62	21-22	>864	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.27	15	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 383 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\* 2-22:2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\* 12-17:2x4 SP No.2  
 SLIDER Left 2x6 SP No.2 -- 4-0-0, Right 2x4 SP No.3 -- 4-1-7

**WEBS**  
 4-22=0/302, 6-22=-576/2015,  
 7-20=-1471/599, 8-20=-470/1074,  
 9-20=-443/213, 12-15=-2671/1081,  
 7-21=-331/1205, 6-21=-2419/916,  
 9-19=-125/124, 10-19=-62/540,  
 10-17=-815/406, 12-17=-954/2869,  
 4-23=-107/140

9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 5-10-8 oc bracing.  
 WEBS 1 Row at midpt 7-20, 9-20, 6-21  
**REACTIONS** (size) 2=0-3-8, 13= Mechanical, 15= (0-3-8 + bearing block), (req. 0-4-11)  
 Max Horiz 2=242 (LC 10)  
 Max Uplift 2=-684 (LC 11), 13=-804 (LC 1), 15=-1078 (LC 11)  
 Max Grav 2=1764 (LC 1), 13=293 (LC 11), 15=2977 (LC 1)

**NOTES**

- 2x6 SP No.2 bearing block 12" long at jt. 15 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-0 to 3-8-0, Interior (1) 3-8-0 to 24-3-8, Exterior (2) 24-3-8 to 29-1-8, Interior (1) 29-1-8 to 48-4-0 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
- All plates are 4x5 MT20 unless otherwise indicated.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1078 lb uplift at joint 15, 804 lb uplift at joint 13 and 684 lb uplift at joint 2.

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/27, 2-3=-2321/825, 3-32=-4978/1797, 4-32=-4971/1809, 4-5=-5178/1841, 5-6=-5101/1858, 6-7=-2782/1127, 7-33=-1952/910, 8-33=-1880/934, 8-34=-1771/889, 9-34=-1846/864, 9-10=-2060/880, 10-11=-1527/659, 11-35=-1652/643, 12-35=-1672/630, 12-13=-222/714  
 BOT CHORD 2-23=-1578/4553, 22-23=-1597/4597, 21-22=-1459/4523, 20-21=-715/2569, 20-36=-477/1828, 19-36=-477/1828, 18-19=-428/1461, 17-18=-428/1461, 16-17=-1263/478, 15-16=-1263/478, 14-15=-1391/530, 13-14=-1391/530



August 6, 2020

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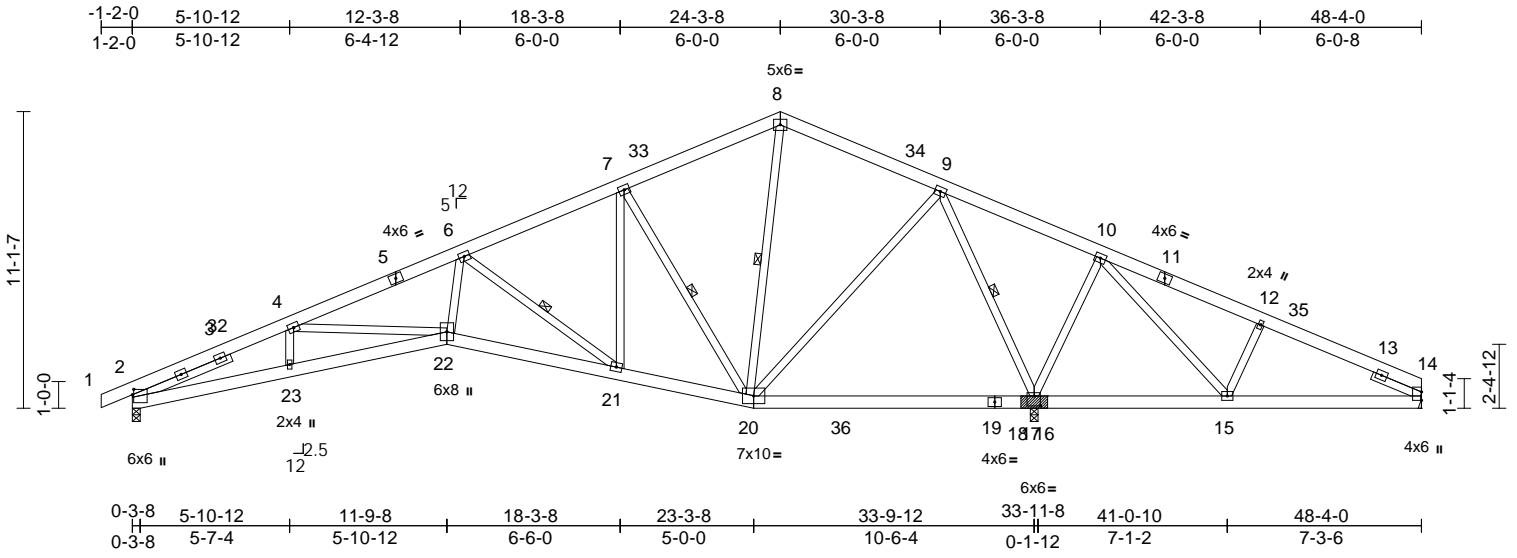
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T1C	Truss Type Roof Special	Qty 5	Ply 1	Roman-Roof Job Reference (optional)	E14707735
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:51  
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Page: 1



Scale = 1:86.4

Plate Offsets (X, Y): [2:0-2-7,0-0-9], [17:0-2-12,0-4-8]

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	0.43	Vert(LL)	0.20	22-23	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.32	22-23	>999	180
BCLL	0.0*	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.14	17	n/a	n/a
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS						
									Weight: 368 lb	FT = 20%

LUMBER	
TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -- 4-0-0, Right 2x4 SP No.3 -- 2-0-0

WEBS	
4-22	=-236/214, 6-22=-280/1234,
7-20	=-1126/484, 8-20=-64/86,
9-20	=-306/1269, 9-17=-2207/837,
10-17	=-650/409, 10-15=-293/715,
12-15	=-412/304, 7-21=-207/829,
6-21	=-1631/621, 4-23=-24/115

LOAD CASE(S) Standard

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 4-0-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 7-20, 8-20, 9-17, 6-21
REACTIONS	(size) 2=0-3-8, 14= Mechanical, 17=(0-3-8 + bearing block), (req. 0-4-7)
	Max Horiz 2=242 (LC 10)
	Max Uplift 2=-464 (LC 11), 14=-269 (LC 20), 17=-1019 (LC 11)
	Max Grav 2=1156 (LC 1), 14=203 (LC 21), 17=2823 (LC 1)

**NOTES**

- 1) 2x6 SP No.2 bearing block 12" long at jt. 17 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-0 to 3-8-0, Interior (1) 3-8-0 to 24-3-8, Exterior (2) 24-3-8 to 29-1-8, Interior (1) 29-1-8 to 48-4-0 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
- 4) All plates are 4x5 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) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1019 lb uplift at joint 17, 269 lb uplift at joint 14 and 464 lb uplift at joint 2.
- 9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/27, 2-3=-1191/433, 3-32=-2899/1048, 4-32=-2892/1060, 4-5=-2649/929, 5-6=-2572/945, 6-7=-1087/517, 7-33=-460/365, 8-33=-399/390, 8-34=-387/384, 9-34=-460/359, 9-10=-368/1514, 10-11=-103/851, 11-12=-128/804, 12-35=-127/797, 13-35=-141/762, 13-14=-124/56
BOT CHORD	2-23=-900/2752, 22-23=-911/2781, 21-22=-646/2354, 20-21=-142/1028, 20-36=-485/326, 19-36=-485/326, 18-19=-485/326, 17-18=-485/326, 16-17=-1072/494, 15-16=-1072/494, 14-15=-685/185



August 6, 2020

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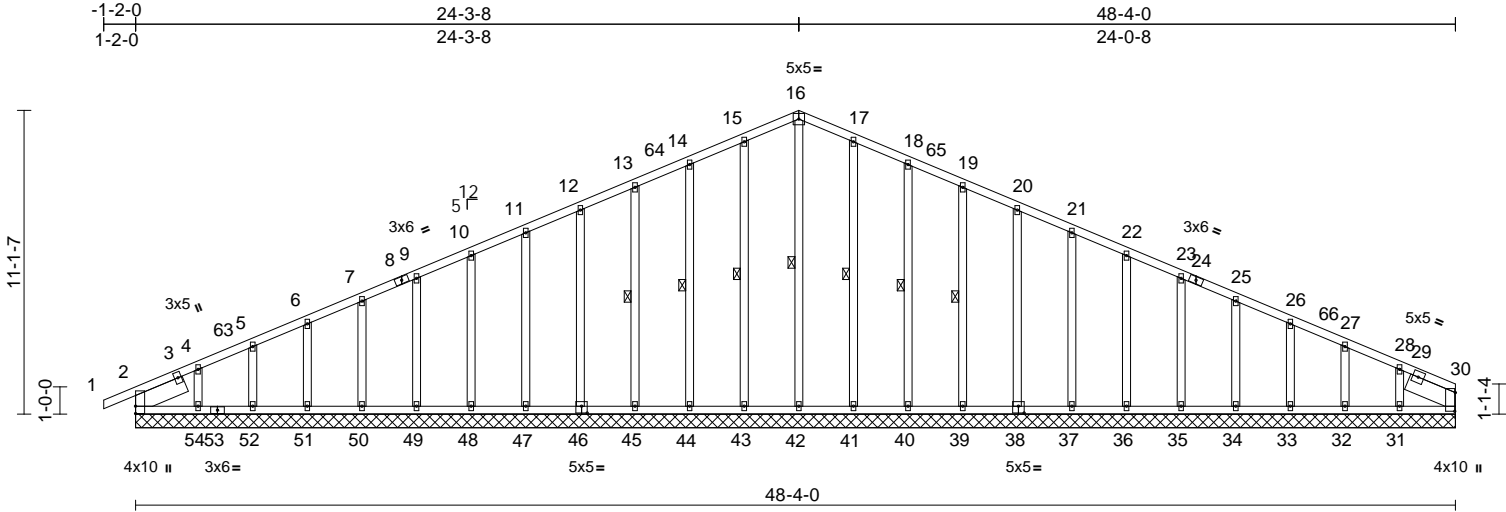
Job P-7005-1	Truss T1GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707736
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:51

Page: 1

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Scale = 1:84.4

Plate Offsets (X, Y): [2:Edge,0-0-0], [30:0-8-3,0-0-4], [38:0-2-8,0-3-0], [46:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	30	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 362 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3  
SLIDER Left 2x8 SP No.2 -- 2-0-0, Right 2x8 SP No.2 -- 1-11-8

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 16-42, 15-43, 14-44, 13-45, 17-41, 18-40, 19-39

**REACTIONS** (size)  
2=48-4-0, 30=48-4-0, 31=48-4-0, 32=48-4-0, 33=48-4-0, 34=48-4-0, 35=48-4-0, 36=48-4-0, 37=48-4-0, 38=48-4-0, 39=48-4-0, 40=48-4-0, 41=48-4-0, 42=48-4-0, 43=48-4-0, 44=48-4-0, 45=48-4-0, 46=48-4-0, 47=48-4-0, 48=48-4-0, 49=48-4-0, 50=48-4-0, 51=48-4-0, 52=48-4-0, 54=48-4-0, 55=48-4-0, 59=48-4-0  
Max Horiz 2=242 (LC 10), 55=242 (LC 10)  
Max Uplift 2=-28 (LC 9), 30=-13 (LC 10), 31=-163 (LC 11), 32=-61 (LC 11), 33=-80 (LC 11), 34=-75 (LC 11), 35=-76 (LC 11), 36=-76 (LC 11), 37=-77 (LC 11), 38=-76 (LC 11), 39=-75 (LC 11), 40=-84 (LC 11), 41=-61 (LC 11), 43=-61 (LC 11), 44=-84 (LC 11), 45=-75 (LC 11), 46=-76 (LC 11), 47=-76 (LC 11), 48=-76 (LC 11), 49=-76 (LC 11), 50=-75 (LC 11), 51=-79 (LC 11), 52=-65 (LC 11), 54=-137 (LC 11), 55=-28 (LC 9), 59=-13 (LC 10)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-193/163, 3-4=-185/174, 4-63=-168/135, 5-63=-157/148, 5-6=-158/142, 6-7=-145/133, 7-8=-133/117, 8-9=-119/125, 9-10=-121/170, 10-11=-108/222, 11-12=-96/273, 12-13=-109/324, 13-64=-127/370, 14-64=-113/374, 14-15=-146/429, 15-16=-162/472, 16-17=-162/476, 17-18=-146/433, 18-65=-113/379, 19-65=-127/370, 19-20=-109/328, 20-21=-91/276, 21-22=-73/225, 22-23=-55/173, 23-24=-32/122, 24-25=-55/117, 25-26=-65/71, 26-66=-62/56, 27-66=-74/47, 27-28=-114/63, 28-29=-188/85, 29-30=-60/101

**BOT CHORD** 2-54=-64/175, 53-54=-64/175, 52-53=-64/175, 51-52=-64/175, 50-51=-64/175, 49-50=-64/175, 48-49=-64/175, 47-48=-64/175, 46-47=-64/175, 45-46=-64/175, 44-45=-64/175, 43-44=-64/175, 42-43=-64/175, 41-42=-64/175, 40-41=-64/175, 39-40=-64/175, 38-39=-64/175, 37-38=-64/176, 36-37=-64/176, 35-36=-64/176, 34-35=-64/176, 33-34=-64/176, 32-33=-64/176, 31-32=-64/176, 30-31=-64/176



August 6, 2020

Continued on page 2

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

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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Roman-Roof	E14707736
P-7005-1	T1GE	Common Supported Gable	1	1	Job Reference (optional)	

Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:51  
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Page: 2

WEBS  
 16-42=-219/37, 15-43=-127/175,  
 14-44=-120/183, 13-45=-120/113,  
 12-46=-120/109, 11-47=-120/109,  
 10-48=-120/109, 9-49=-120/109,  
 7-50=-120/110, 6-51=-120/110,  
 5-52=-122/122, 4-54=-147/230,  
 17-41=-127/175, 18-40=-120/183,  
 19-39=-120/113, 20-38=-120/110,  
 21-37=-120/110, 22-36=-120/109,  
 23-35=-120/110, 25-34=-120/109,  
 26-33=-120/114, 27-32=-119/163,  
 28-31=-146/270

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust)  
 Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
 B=20ft; L=48ft; eave=2ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Corner (3) -1-2-0 to  
 3-8-0, Exterior (2) 3-8-0 to 24-3-8, Corner (3) 24-3-8 to  
 29-1-8, Exterior (2) 29-1-8 to 48-4-0 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) 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) \* This truss has been designed for a live load of 20.0psf  
 on the bottom chord in all areas where a rectangle  
 3-06-00 tall by 2-00-00 wide will fit between the bottom  
 chord and any other members.
- 8) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 28 lb uplift at joint  
 2, 61 lb uplift at joint 43, 84 lb uplift at joint 44, 75 lb  
 uplift at joint 45, 76 lb uplift at joint 46, 76 lb uplift at joint  
 47, 76 lb uplift at joint 48, 76 lb uplift at joint 49, 75 lb  
 uplift at joint 50, 79 lb uplift at joint 51, 65 lb uplift at joint  
 52, 137 lb uplift at joint 54, 61 lb uplift at joint 41, 84 lb  
 uplift at joint 40, 75 lb uplift at joint 39, 76 lb uplift at joint  
 38, 77 lb uplift at joint 37, 76 lb uplift at joint 36, 76 lb  
 uplift at joint 35, 75 lb uplift at joint 34, 80 lb uplift at joint  
 33, 61 lb uplift at joint 32, 163 lb uplift at joint 31, 13 lb  
 uplift at joint 30, 28 lb uplift at joint 2 and 13 lb uplift at  
 joint 30.
- 9) This truss is designed in accordance with the 2015  
 International Building Code section 2306.1 and  
 referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

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

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



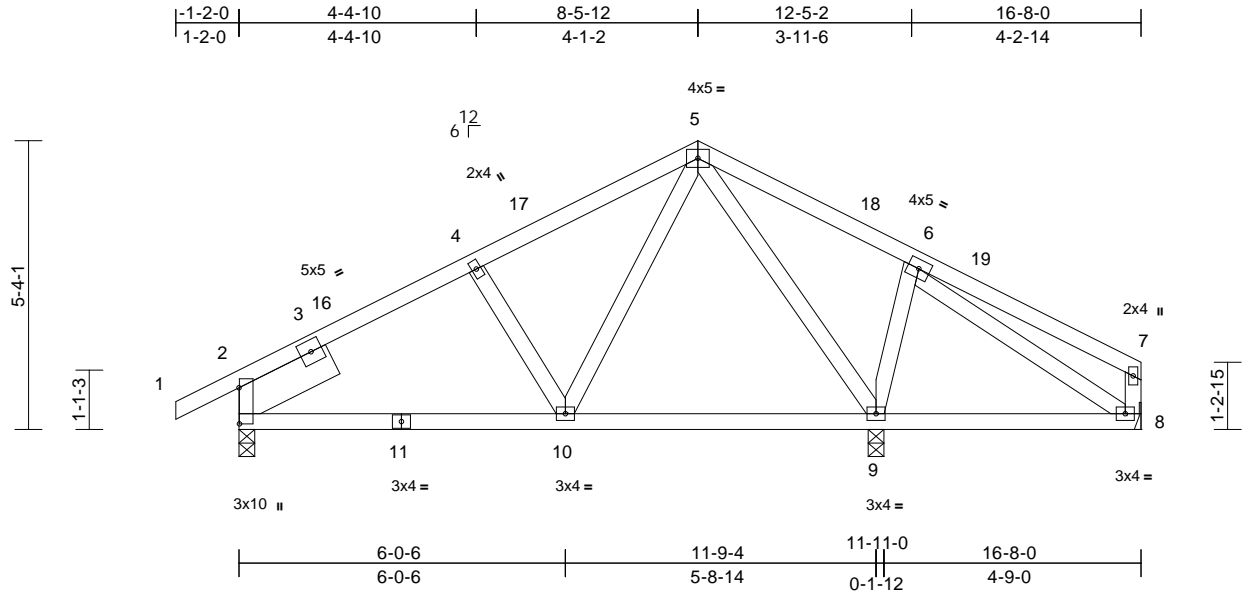
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T2	Truss Type Common	Qty 2	Ply 1	Roman-Roof Job Reference (optional)	E14707737
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:52  
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Page: 1



Scale = 1:42.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.01	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 94 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x8 SP No.2 -- 2-0-0

**BRACING**

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

**REACTIONS**

(size) 2=0-3-8, 8= Mechanical, 9=0-3-8  
 Max Horiz 2=144 (LC 10)  
 Max Uplift 2=-234 (LC 11), 8=-44 (LC 11), 9=-271 (LC 11)  
 Max Grav 2=510 (LC 1), 8=143 (LC 21), 9=777 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/31, 2-3=-84/20, 3-16=-478/207, 4-16=-466/223, 4-17=-387/217, 5-17=-330/233, 5-18=-10/156, 6-18=-31/88, 6-19=-60/95, 7-19=-100/83, 7-8=-123/108  
 BOT CHORD 2-11=-118/428, 10-11=-118/428, 9-10=-4/193, 8-9=-60/51  
 WEBS 4-10=-199/194, 5-10=-106/308, 5-9=-477/132, 6-9=-267/237, 6-8=-70/99

**NOTES**

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

- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
 Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
 B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Exterior (2) -1-2-0 to 1-10-0, Interior (1) 1-10-0 to 8-5-12, Exterior (2) 8-5-12 to 11-5-12, Interior (1) 11-5-12 to 16-6-4 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
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 2, 271 lb uplift at joint 9 and 44 lb uplift at joint 8.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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



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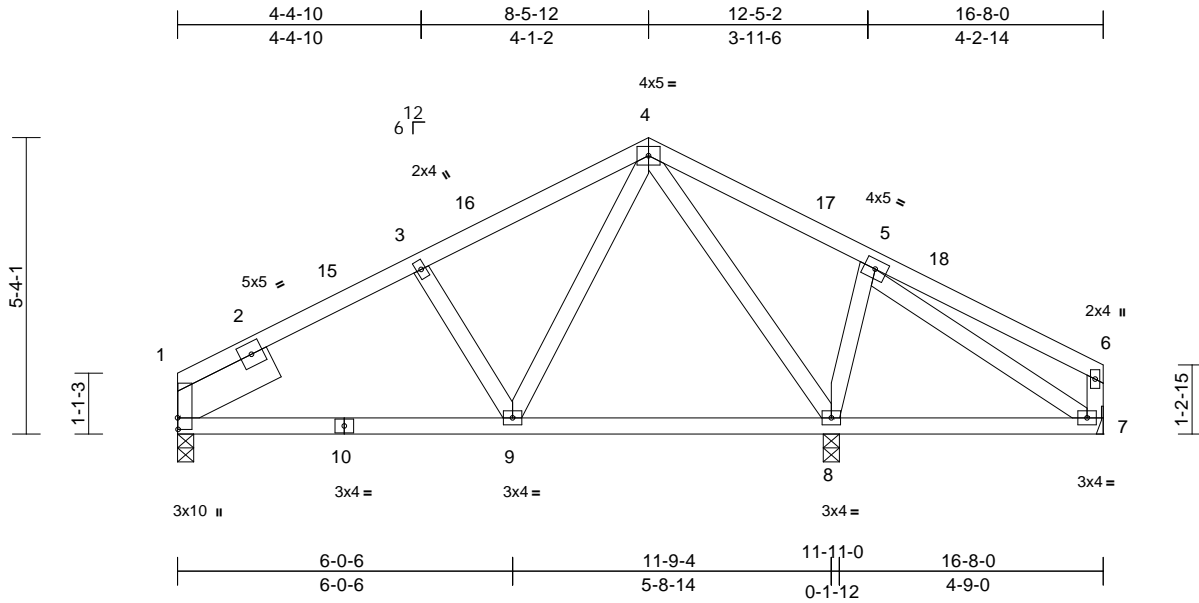


Job P-7005-1	Truss T2A	Truss Type Common	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707738
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:52  
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Page: 1



Scale = 1:41.5

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.01	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 93 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x8 SP No.2 -- 2-0-0

**BRACING**

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

**REACTIONS**

(size) 1=0-3-8, 7= Mechanical, 8=0-3-8  
 Max Horiz 1=132 (LC 10)  
 Max Uplift 1=-163 (LC 11), 7=-49 (LC 11), 8=-265 (LC 11)  
 Max Grav 1=441 (LC 1), 7=147 (LC 21), 8=764 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-96/0, 2-15=-494/221, 3-15=-427/231, 3-16=-403/225, 4-16=-346/241, 4-17=-14/138, 5-17=-34/113, 5-18=-61/96, 6-18=-101/84, 6-7=-123/108  
 BOT CHORD 1-10=-120/443, 9-10=-120/443, 8-9=-3/202, 7-8=-45/43  
 WEBS 3-9=-205/198, 4-9=-111/315, 4-8=-466/130, 5-8=-264/236, 5-7=-68/81

**NOTES**

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

- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
 Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft;  
 B=20ft; L=20ft; 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 8-5-12, Exterior (2) 8-5-12 to 11-5-12, Interior (1) 11-5-12 to 16-6-4 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
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 1, 265 lb uplift at joint 8 and 49 lb uplift at joint 7.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



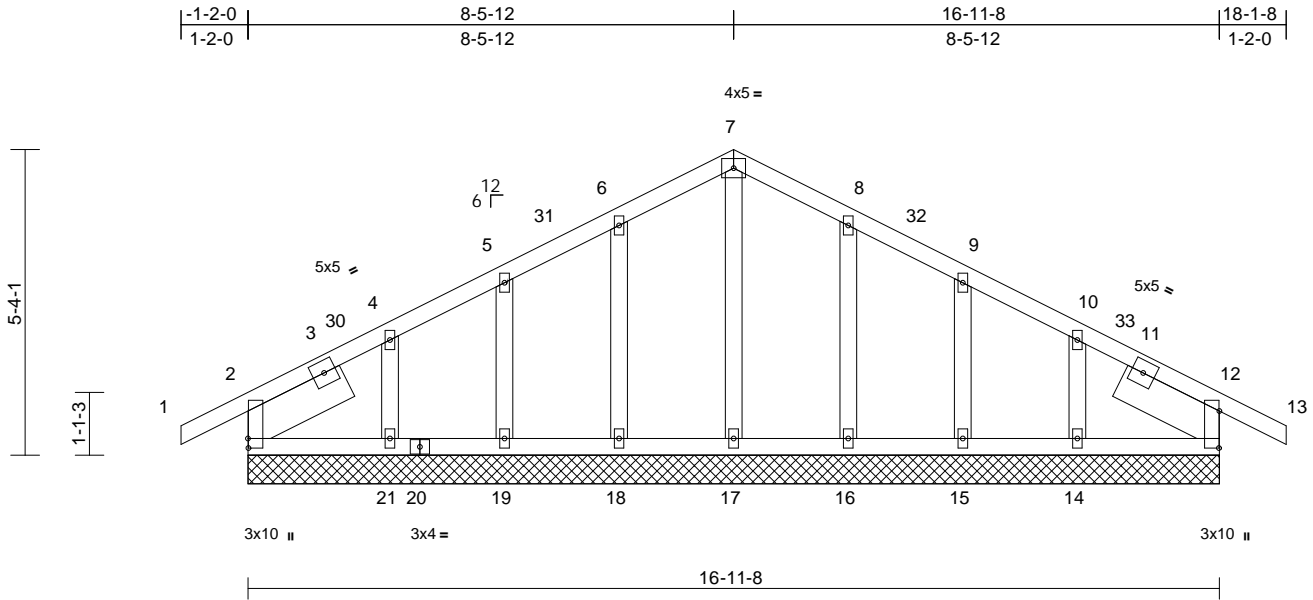
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T2GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707739
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:52  
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Page: 1



Scale = 1:40.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	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	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 102 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x8 SP No.2 -- 2-0-0, Right 2x8 SP No.2 -- 2-0-0

**BOT CHORD** 2-21=-22/68, 20-21=-22/68, 19-20=-22/68, 18-19=-22/68, 17-18=-22/68, 16-17=-22/68, 15-16=-22/68, 14-15=-22/68, 12-14=-22/68  
**WEBS** 7-17=-108/9, 6-18=-129/200, 5-19=-118/122, 4-21=-138/157, 8-16=-129/200, 9-15=-118/121, 10-14=-130/156

9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

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

**REACTIONS** (size)  
 2=16-11-8, 12=16-11-8, 14=16-11-8, 15=16-11-8, 16=16-11-8, 17=16-11-8, 18=16-11-8, 19=16-11-8, 21=16-11-8, 22=16-11-8, 26=16-11-8  
 Max Horiz 2=112 (LC 10), 22=112 (LC 10)  
 Max Uplift 2=-105 (LC 11), 12=-105 (LC 11), 14=-108 (LC 11), 15=-79 (LC 11), 16=-85 (LC 11), 18=-85 (LC 11), 19=-79 (LC 11), 21=-108 (LC 11), 22=-105 (LC 11), 26=-105 (LC 11)  
 Max Grav 2=198 (LC 1), 12=198 (LC 1), 14=184 (LC 17), 15=155 (LC 1), 16=169 (LC 21), 17=120 (LC 11), 18=169 (LC 20), 19=155 (LC 1), 21=195 (LC 16), 22=198 (LC 1), 26=198 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/31, 2-3=-47/44, 3-30=-85/57, 4-30=-81/67, 4-5=-84/142, 5-31=-81/198, 6-31=-72/203, 6-7=-104/266, 7-8=-104/269, 8-32=-72/207, 9-32=-81/201, 9-10=-61/145, 10-33=-45/65, 11-33=-56/59, 11-12=-47/44, 12-13=0/31

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 1-2-0 to 1-10-0, Exterior (2) 1-10-0 to 8-5-12, Corner (3) 8-5-12 to 11-5-12, Exterior (2) 11-5-12 to 18-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 2, 105 lb uplift at joint 12, 85 lb uplift at joint 18, 79 lb uplift at joint 19, 108 lb uplift at joint 21, 85 lb uplift at joint 16, 79 lb uplift at joint 15, 108 lb uplift at joint 14, 105 lb uplift at joint 2 and 105 lb uplift at joint 12.



August 6, 2020

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

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



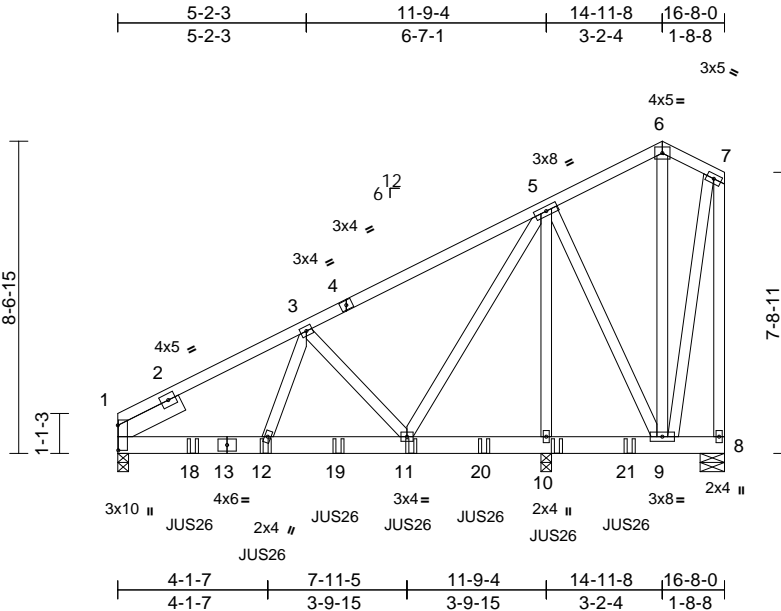
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss T2GRD	Truss Type Common Girder	Qty 1	Ply 2	Roman-Roof Job Reference (optional)	E14707740
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:53  
ID:4hK8oXpCSlvuobaZglvHlysXsB-P5DMb7VfBMaeB898SaAmFva5LVhjtktkOyQpOyqdo

Page: 1



Scale = 1:63.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.03	11-12	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.03	11-12	>999	180
BCLL	0.0*	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	10	n/a	n/a
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS						
										Weight: 292 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 -- 2-0-0

**BRACING**

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

**REACTIONS**

(size) 1=0-3-8, 8=0-8-0, 10=0-3-8  
 Max Horiz 1=371 (LC 30)  
 Max Uplift 1=-525 (LC 7), 8=-185 (LC 4), 10=-1911 (LC 24)  
 Max Grav 1=883 (LC 16), 8=167 (LC 37), 10=1317 (LC 29)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-513/401, 2-3=-1005/692, 3-4=-633/365, 4-5=-549/397, 5-6=-171/186, 6-7=-171/208, 7-8=-114/272  
 BOT CHORD 1-18=-701/941, 13-18=-701/941, 12-13=-701/941, 12-19=-598/833, 11-19=-598/833, 11-20=-235/169, 10-20=-235/169, 10-21=-235/169, 9-21=-235/169, 8-9=-134/120  
 WEBS 3-12=-462/348, 3-11=-533/497, 5-11=-751/1007, 5-10=-894/899, 5-9=-367/252, 6-9=-181/167, 7-9=-294/121

**NOTES**

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

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; 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
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 525 lb uplift at joint 1, 1911 lb uplift at joint 10 and 185 lb uplift at joint 8.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 14-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (lb/ft)  
 Vert: 1-6=-60, 6-7=-60, 8-14=-20  
 Concentrated Loads (lb)  
 Vert: 12=-183 (B), 11=-183 (B), 10=433 (B), 18=-183 (B), 19=-183 (B), 20=-183 (B), 21=433 (B)



August 6, 2020

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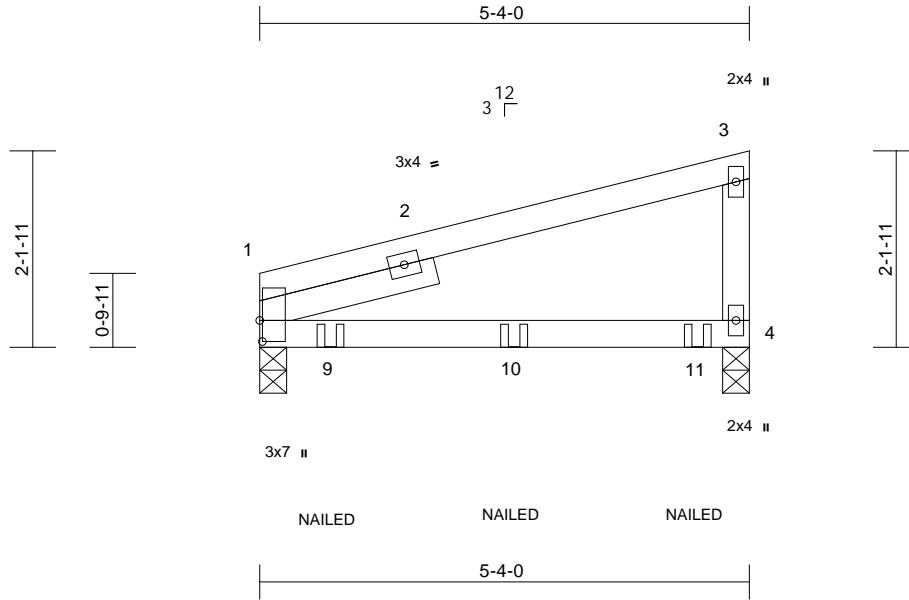
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T3GRD	Truss Type Monopitch Girder	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707741
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:53  
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Page: 1



Scale = 1:25.1

Plate Offsets (X, Y): [1:0-2-12,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	0.09	4-7	>722	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.14	4-7	>461	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.04	1	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -- 2-0-0

- 5) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.  
 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (lb/ft)  
 Vert: 1-3=-60, 4-5=-20  
 Concentrated Loads (lb)  
 Vert: 9=-125 (B), 10=-123 (B), 11=-132 (B)

**BRACING**

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

**REACTIONS** (size) 1=0-3-8, 4=0-3-8

Max Horiz 1=82 (LC 6)  
 Max Uplift 1=-147 (LC 7), 4=-171 (LC 7)  
 Max Grav 1=382 (LC 1), 4=413 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-498/109, 2-3=-49/40, 3-4=-170/100  
 BOT CHORD 1-9=-160/130, 9-10=-32/29, 10-11=-32/29, 4-11=-32/29

**NOTES**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust)  
 Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
 B=20ft; L=20ft; 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
- 2) \* 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.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 1 and 171 lb uplift at joint 4.
- 4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



August 6, 2020

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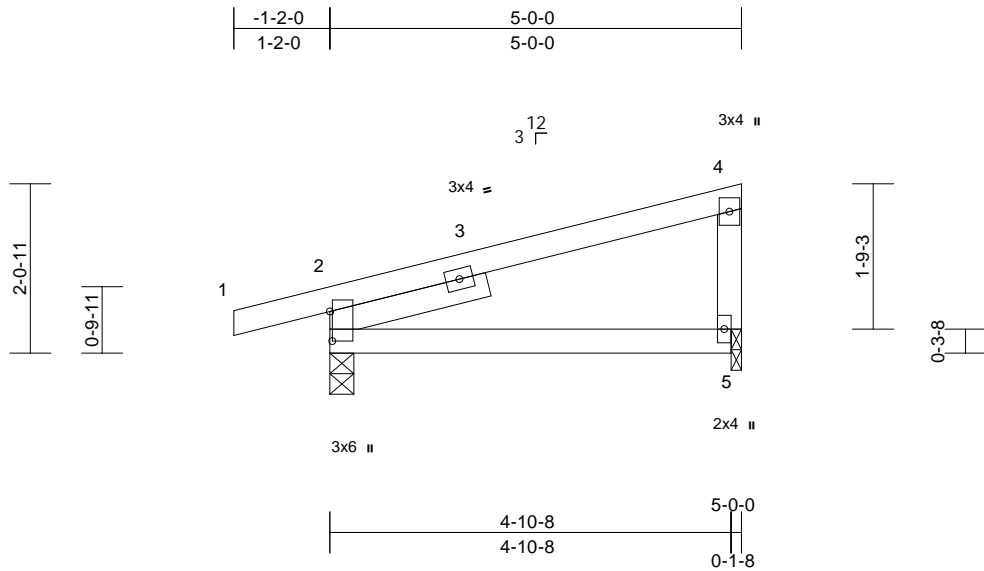
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss T4	Truss Type Monopitch	Qty 5	Ply 1	Roman-Roof Job Reference (optional)	E14707742
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:54  
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Page: 1



Scale = 1:28

Plate Offsets (X, Y): [2:0-4-5,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	0.01	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	5-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MR							Weight: 22 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -- 2-0-0

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 88 lb uplift at joint 5.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

#### BRACING

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

**LOAD CASE(S)** Standard

#### REACTIONS

(size) 2=0-3-8, 5=0-1-8  
Max Horiz 2=141 (LC 11)  
Max Uplift 2=-124 (LC 11), 5=-88 (LC 11)  
Max Grav 2=273 (LC 1), 5=186 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-116/45, 3-4=-112/50,  
4-5=-120/150  
BOT CHORD 2-5=-214/145

#### NOTES

- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed;  
MWFRS (directional) and C-C Exterior (2) -1-2-0 to 1-10-0, Interior (1) 1-10-0 to 4-10-4 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
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.



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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

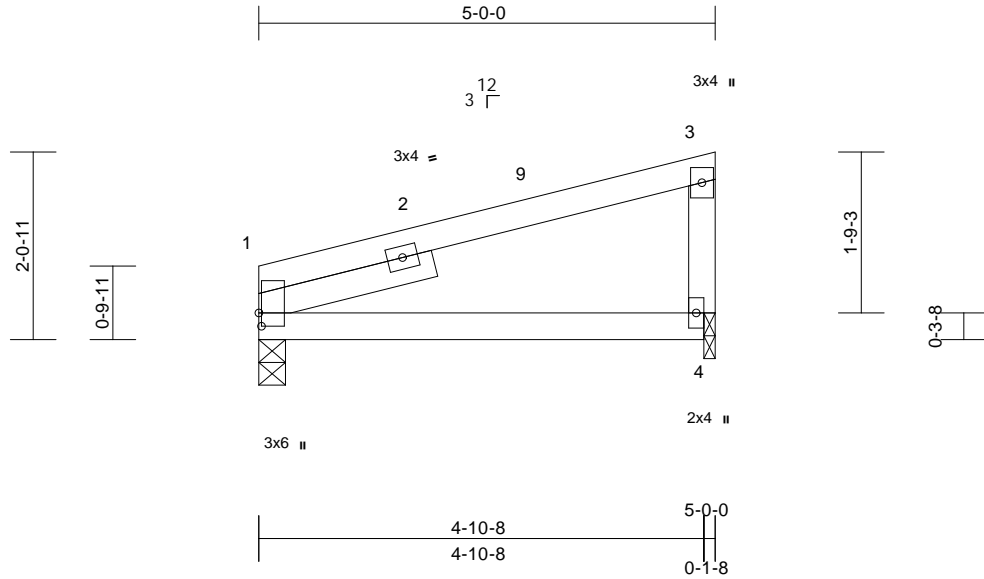
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss T4A	Truss Type Monopitch	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707743
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:54  
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Page: 1



Scale = 1:25.2

Plate Offsets (X, Y): [1:0-1-12,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MR							Weight: 20 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x4 SP No.1
- BOT CHORD 2x4 SP No.1
- OTHERS 2x4 SP No.3
- SLIDER Left 2x4 SP No.3 -- 2-0-0

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 1 and 95 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**BRACING**

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

**LOAD CASE(S)** Standard

**REACTIONS**

- (size) 1=0-3-8, 4=0-1-8
- Max Horiz 1=119 (LC 11)
- Max Uplift 1=-46 (LC 11), 4=-95 (LC 11)
- Max Grav 1=194 (LC 1), 4=194 (LC 1)

**FORCES**

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-116/21, 2-9=-112/67, 3-9=-109/74, 3-4=-124/151
- BOT CHORD 1-4=-221/161

**NOTES**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; 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 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) \* 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.
- 3) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.



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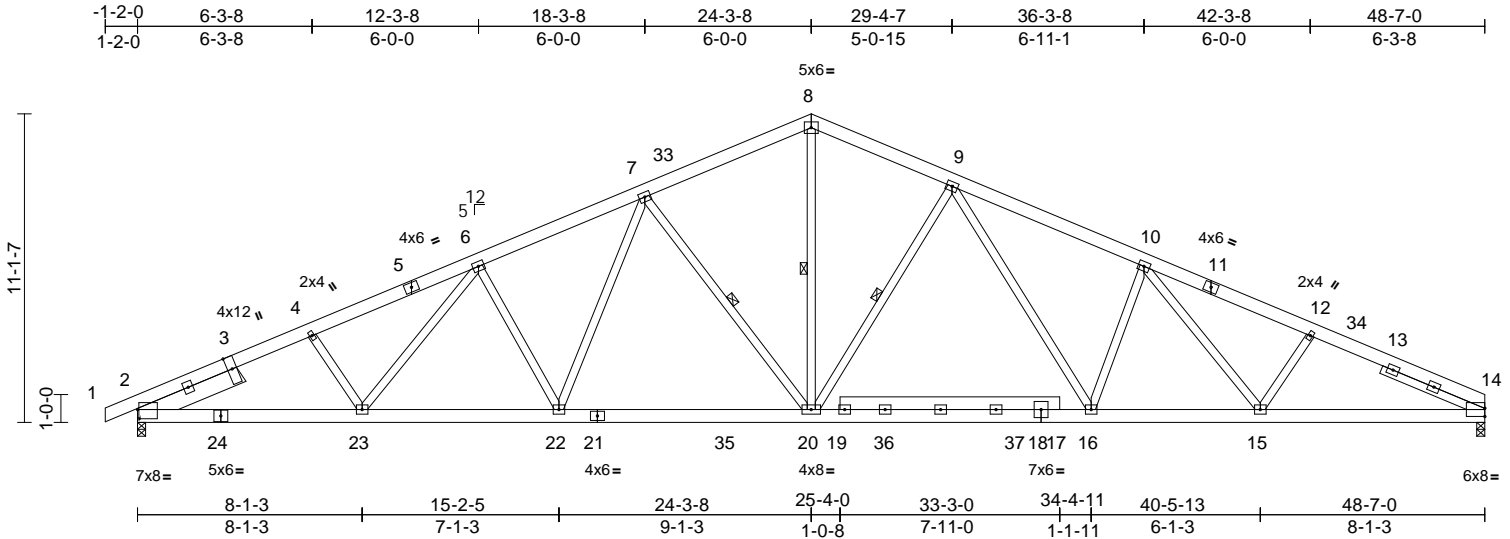
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss T5	Truss Type Common	Qty 5	Ply 1	Roman-Roof Job Reference (optional)	E14707744
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:54  
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Page: 1



Scale = 1:83.1

Plate Offsets (X, Y): [2:0-0-8,0-4-0], [14:Edge,0-3-9]

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	0.70	Vert(LL)	0.27	20-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.46	20-22	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.13	14	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 394 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\* 19-17:2x6 SP No.2  
 SLIDER Left 2x8 SP No.2 -- 4-0-0, Right 2x4 SP No.3 -- 4-0-0

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-9-12 oc bracing.  
 WEBS 1 Row at midpt 7-20, 8-20, 9-20

**REACTIONS**

(size) 2=0-3-8, 14=0-3-8  
 Max Horiz 2=244 (LC 10)  
 Max Uplift 2=-774 (LC 11), 14=-701 (LC 11)  
 Max Grav 2=2014 (LC 1), 14=1942 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/27, 2-3=-3714/1367, 3-4=-3665/1386, 4-5=-3575/1369, 5-6=-3504/1385, 6-7=-3284/1347, 7-33=-2501/1091, 8-33=-2443/1116, 8-9=-2493/1126, 9-10=-3375/1408, 10-11=-3509/1392, 11-12=-3581/1375, 12-34=-3619/1393, 13-34=-3671/1380, 13-14=-1439/482  
 BOT CHORD 2-24=-1166/3397, 23-24=-1166/3397, 22-23=-1042/3267, 21-22=-814/2800, 21-35=-814/2800, 20-35=-814/2800, 19-20=-783/2645, 19-36=-783/2645, 36-37=-783/2645, 18-37=-783/2645, 17-18=-783/2645, 16-17=-783/2645, 15-16=-1050/3197, 14-15=-1172/3313  
 WEBS 4-23=-139/181, 6-23=-46/211, 6-22=-494/329, 7-22=-219/734, 7-20=-876/455, 8-20=-646/1600, 9-20=-825/466, 9-16=-300/830, 10-16=-527/361, 10-15=-56/200, 12-15=-115/175

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=49ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-2-0 to 3-8-5, Interior (1) 3-8-5 to 24-3-8, Exterior (2) 24-3-8 to 29-4-7, Interior (1) 29-4-7 to 48-7-0 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 4x5 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 774 lb uplift at joint 2 and 701 lb uplift at joint 14.
- 6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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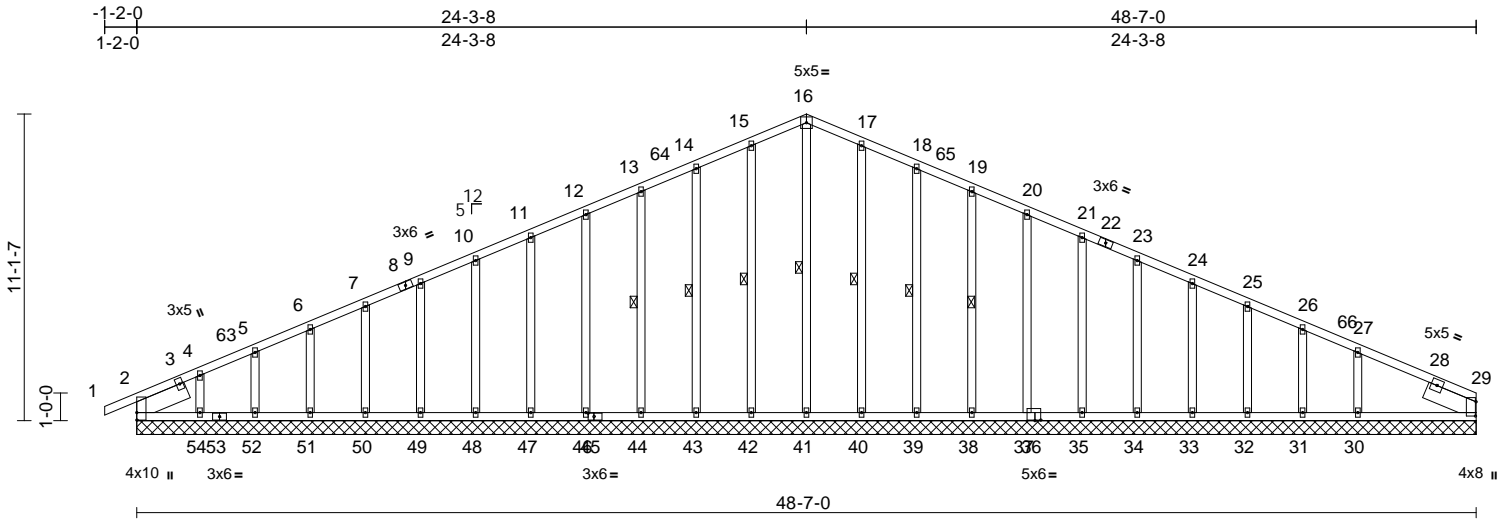
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss T5GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707745
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:55  
ID:m0W9SuEVxMeVLLAA5kzNROysXQA-tHnkpTWHygiVolkK0Hh?n771Av27LKluy1hzLqyqdoZ

Page: 1



Scale = 1:83.6

Plate Offsets (X, Y): [2:Edge,0-0-0], [29:0-6-3,0-0-4], [37:0-2-8,0-0-4], [45:0-2-8,0-1-8]

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	29	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 361 lb	FT = 20%

LUMBER		Max Grav	2=249 (LC 17), 29=176 (LC 1), 30=341 (LC 17), 31=85 (LC 1), 32=178 (LC 21), 33=156 (LC 1), 34=161 (LC 21), 35=160 (LC 1), 37=160 (LC 21), 38=160 (LC 1), 39=161 (LC 21), 40=164 (LC 21), 41=257 (LC 11), 42=166 (LC 20), 43=160 (LC 1), 44=160 (LC 20), 46=160 (LC 20), 47=160 (LC 20), 48=160 (LC 1), 49=160 (LC 20), 50=160 (LC 1), 51=159 (LC 20), 52=165 (LC 1), 54=197 (LC 16), 55=249 (LC 17), 59=176 (LC 1)	BOT CHORD	2-54=-31/133, 53-54=-31/133, 52-53=-31/133, 51-52=-31/133, 50-51=-31/133, 49-50=-31/133, 48-49=-31/133, 47-48=-31/133, 46-47=-31/133, 45-46=-31/133, 44-45=-31/133, 43-44=-31/133, 42-43=-31/133, 41-42=-31/133, 40-41=-31/133, 39-40=-31/133, 38-39=-31/133, 37-38=-31/133, 36-37=-31/133, 35-36=-31/133, 34-35=-31/133, 33-34=-31/133, 32-33=-31/133, 31-32=-31/133, 30-31=-31/133, 29-30=-31/133
TOP CHORD	2x4 SP No.1				
BOT CHORD	2x4 SP No.1				
OTHERS	2x4 SP No.3				
SLIDER	Left 2x8 SP No.2 -- 2-0-0, Right 2x8 SP No.2 -- 2-0-0				
BRACING					
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
WEBS	1 Row at midpt	16-41, 15-42, 14-43, 13-44, 17-40, 18-39, 19-38			

REACTIONS	(size)	2=48-7-0, 29=48-7-0, 30=48-7-0, 31=48-7-0, 32=48-7-0, 33=48-7-0, 34=48-7-0, 35=48-7-0, 37=48-7-0, 38=48-7-0, 39=48-7-0, 40=48-7-0, 41=48-7-0, 42=48-7-0, 43=48-7-0, 44=48-7-0, 46=48-7-0, 47=48-7-0, 48=48-7-0, 49=48-7-0, 50=48-7-0, 51=48-7-0, 52=48-7-0, 54=48-7-0, 55=48-7-0, 59=48-7-0	FORCES	(lb) - Maximum Compression/Maximum Tension
Max Horiz	2=244 (LC 10), 55=244 (LC 10)		TOP CHORD	1-2=0/27, 2-3=-233/161, 3-4=-225/173, 4-63=-204/133, 5-63=-194/147, 5-6=-195/141, 6-7=-183/131, 7-8=-174/166, 8-9=-156/171, 9-10=-164/222, 10-11=-155/273, 11-12=-146/325, 12-13=-153/376, 13-64=-171/418, 14-64=-157/427, 14-15=-190/481, 15-16=-205/542, 16-17=-205/555, 17-18=-190/512, 18-65=-157/457, 19-65=-171/449, 19-20=-153/407, 20-21=-135/355, 21-22=-109/304, 22-23=-117/300, 23-24=-99/253, 24-25=-86/203, 25-26=-90/145, 26-66=-98/123, 27-66=-109/114, 27-28=-96/47, 28-29=-112/79
Max Uplift	2=-37 (LC 11), 30=-206 (LC 11), 31=-18 (LC 11), 32=90 (LC 11), 33=-73 (LC 11), 34=-77 (LC 11), 35=-76 (LC 11), 37=-76 (LC 11), 38=-75 (LC 11), 39=-85 (LC 11), 40=-58 (LC 11), 42=-58 (LC 11), 43=-84 (LC 11), 44=-75 (LC 11), 46=-76 (LC 11), 47=-76 (LC 11), 48=-76 (LC 11), 49=-76 (LC 11), 50=-76 (LC 11), 51=-78 (LC 11), 52=-69 (LC 11), 54=-120 (LC 11), 55=-37 (LC 11)			



August 6, 2020

Continued on page 2

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

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



818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Roman-Roof	E14707745
P-7005-1	T5GE	Common Supported Gable	1	1	Job Reference (optional)	

Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:55

Page: 2

ID:m0W9SuEVxMeVVLAA5kzNROysXQA-tHnkpTWHygiVolkK0Hh?n77IAv27KLjuy1hzLqyqdoZ

WEBS  
 16-41=-275/67, 15-42=-126/171,  
 14-43=-120/185, 13-44=-120/113,  
 12-46=-120/109, 11-47=-120/110,  
 10-48=-120/109, 9-49=-120/109,  
 7-50=-120/110, 6-51=-119/110,  
 5-52=-124/125, 4-54=-141/218,  
 17-40=-124/172, 18-39=-121/185,  
 19-38=-120/113, 20-37=-120/110,  
 21-35=-120/110, 23-34=-120/110,  
 24-33=-118/107, 25-32=-130/126,  
 26-31=-77/61, 27-30=-231/347

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust)  
 Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
 B=20ft; L=49ft; eave=2ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Corner (3) -1-2-0 to  
 3-8-5, Exterior (2) 3-8-5 to 24-3-8, Corner (3) 24-3-8 to  
 29-1-13, Exterior (2) 29-1-13 to 48-7-0 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) 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) \* This truss has been designed for a live load of 20.0psf  
 on the bottom chord in all areas where a rectangle  
 3-06-00 tall by 2-00-00 wide will fit between the bottom  
 chord and any other members.
- 8) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 37 lb uplift at joint  
 2, 58 lb uplift at joint 42, 84 lb uplift at joint 43, 75 lb  
 uplift at joint 44, 76 lb uplift at joint 46, 76 lb uplift at joint  
 47, 76 lb uplift at joint 48, 76 lb uplift at joint 49, 76 lb  
 uplift at joint 50, 78 lb uplift at joint 51, 69 lb uplift at joint  
 52, 120 lb uplift at joint 54, 58 lb uplift at joint 40, 85 lb  
 uplift at joint 39, 75 lb uplift at joint 38, 76 lb uplift at joint  
 37, 76 lb uplift at joint 35, 77 lb uplift at joint 34, 73 lb  
 uplift at joint 33, 90 lb uplift at joint 32, 18 lb uplift at joint  
 31, 206 lb uplift at joint 30 and 37 lb uplift at joint 2.
- 9) This truss is designed in accordance with the 2015  
 International Building Code section 2306.1 and  
 referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

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

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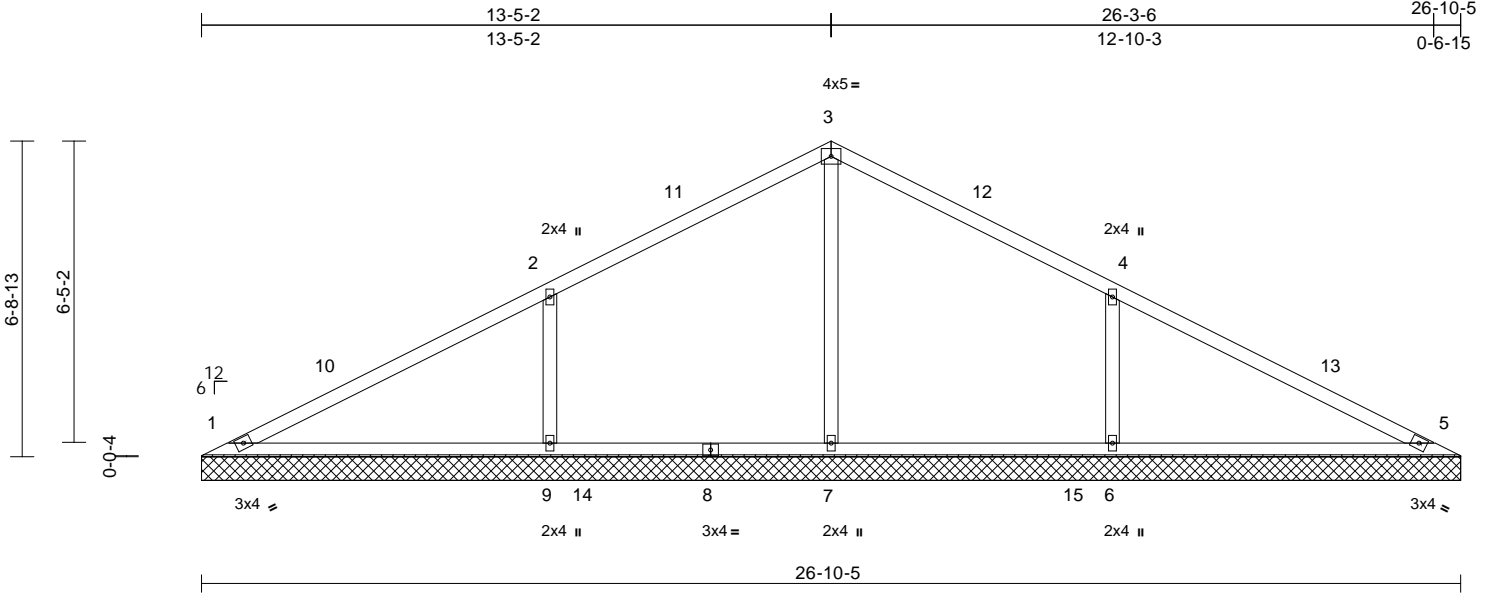
818 Soundside Road  
 Edenton, NC 27932

Job P-7005-1	Truss V1	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707746
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:55  
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Page: 1



Scale = 1:49.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

(size) 1=26-10-5, 5=26-10-5, 6=26-10-5, 7=26-10-5, 9=26-10-5  
Max Horiz 1=149 (LC 10)  
Max Uplift 1=65 (LC 11), 5=65 (LC 11), 6=331 (LC 11), 9=331 (LC 11)  
Max Grav 1=233 (LC 1), 5=233 (LC 1), 6=673 (LC 17), 7=534 (LC 16), 9=673 (LC 16)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-152/80, 2-10=-111/129, 2-11=-139/184, 3-11=-90/213, 3-12=-90/213, 4-12=-134/184, 4-13=-57/83, 5-13=-106/18

BOT CHORD 1-9=-32/96, 9-14=-32/96, 8-14=-32/96, 7-8=-32/96, 7-15=-32/96, 6-15=-32/96, 5-6=-32/96

WEBS 3-7=-257/32, 2-9=-461/402, 4-6=-461/402

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=27ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 13-5-10, Exterior (2) 13-5-10 to 16-5-10, Interior (1) 16-5-10 to 26-10-13 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

- 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 1, 65 lb uplift at joint 5, 331 lb uplift at joint 9 and 331 lb uplift at joint 6.
- 8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



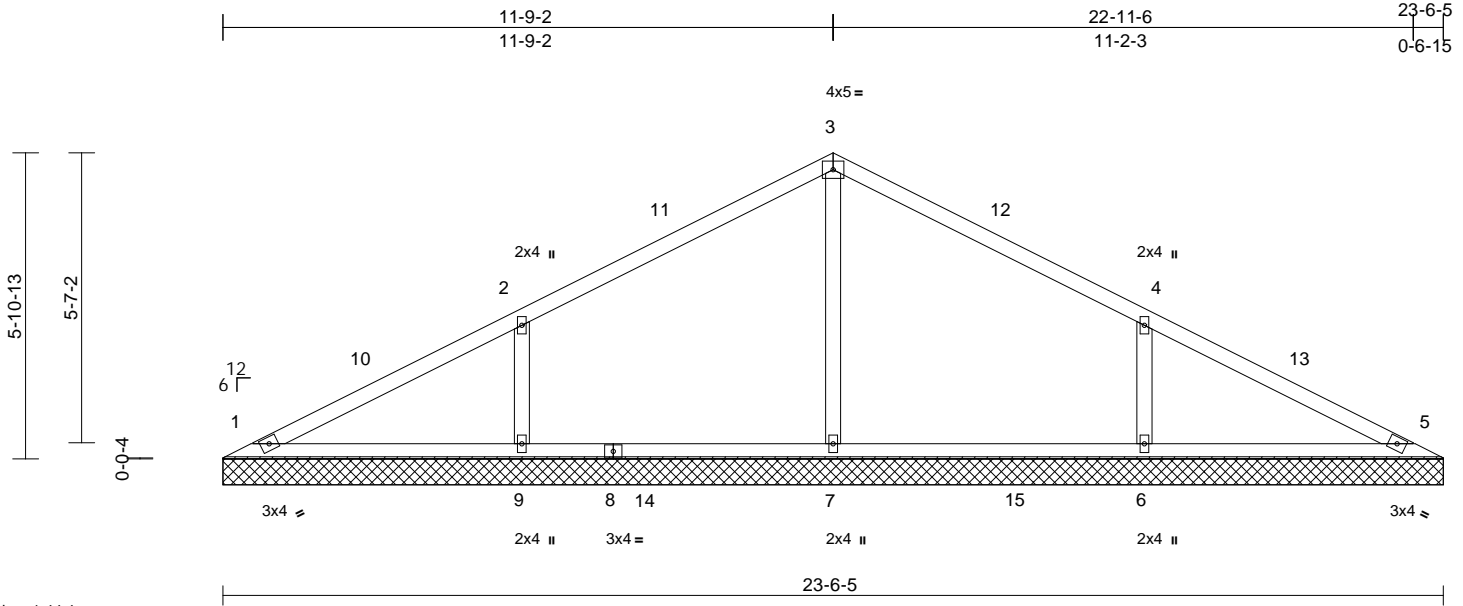
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V2	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707747
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:56  
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Page: 1



Scale = 1:44.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS** (size)

1=23-6-5, 5=23-6-5, 6=23-6-5, 7=23-6-5, 9=23-6-5  
Max Horiz 1=130 (LC 10)  
Max Uplift 1=-41 (LC 11), 5=-41 (LC 11), 6=-283 (LC 11), 9=-283 (LC 11)  
Max Grav 1=173 (LC 1), 5=173 (LC 1), 6=544 (LC 17), 7=539 (LC 16), 9=544 (LC 16)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-134/72, 2-10=-97/101, 2-11=-136/164, 3-11=-80/181, 3-12=-80/181, 4-12=-132/164, 4-13=-43/60, 5-13=-94/18  
BOT CHORD 1-9=-26/76, 8-9=-26/76, 8-14=-26/76, 7-14=-26/76, 7-15=-26/76, 6-15=-26/76, 5-6=-26/76  
WEBS 3-7=-284/73, 2-9=-399/347, 4-6=-399/347

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 11-9-10, Exterior (2) 11-9-10 to 14-9-10, Interior (1) 14-9-10 to 23-6-13 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

- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 41 lb uplift at joint 5, 283 lb uplift at joint 9 and 283 lb uplift at joint 6.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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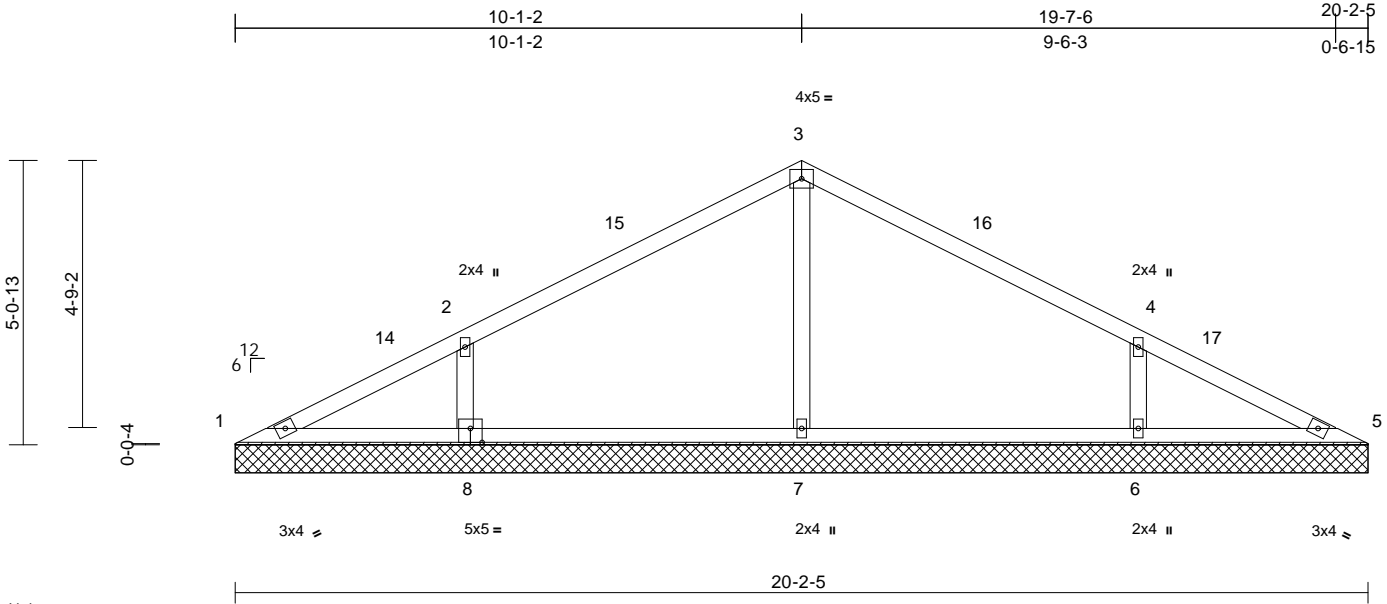
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V3	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707748
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:56  
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Page: 1



Scale = 1:41.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 73 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x4 SP No.1
- BOT CHORD 2x4 SP No.1
- OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

- (size) 1=20-2-5, 5=20-2-5, 6=20-2-5, 7=20-2-5, 8=20-2-5, 13=20-2-5
- Max Horiz 1=-114 (LC 9)
- Max Uplift 1=-34 (LC 21), 6=-250 (LC 11), 7=-85 (LC 11), 8=-240 (LC 11)
- Max Grav 1=62 (LC 20), 6=477 (LC 21), 7=686 (LC 1), 8=462 (LC 20)

**FORCES**

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-14=-130/294, 2-14=-117/319, 2-15=-22/254, 3-15=-4/335, 3-16=0/334, 4-16=-2/253, 4-17=-107/330, 5-17=-120/301
- BOT CHORD 1-8=-222/137, 7-8=-232/150, 6-7=-232/150, 5-6=-232/150
- WEBS 3-7=-566/192, 2-8=-355/300, 4-6=-364/309

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 10-1-10, Exterior (2) 10-1-10 to 13-1-10, Interior (1) 13-1-10 to 20-2-13 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

- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 85 lb uplift at joint 7, 240 lb uplift at joint 8 and 250 lb uplift at joint 6.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



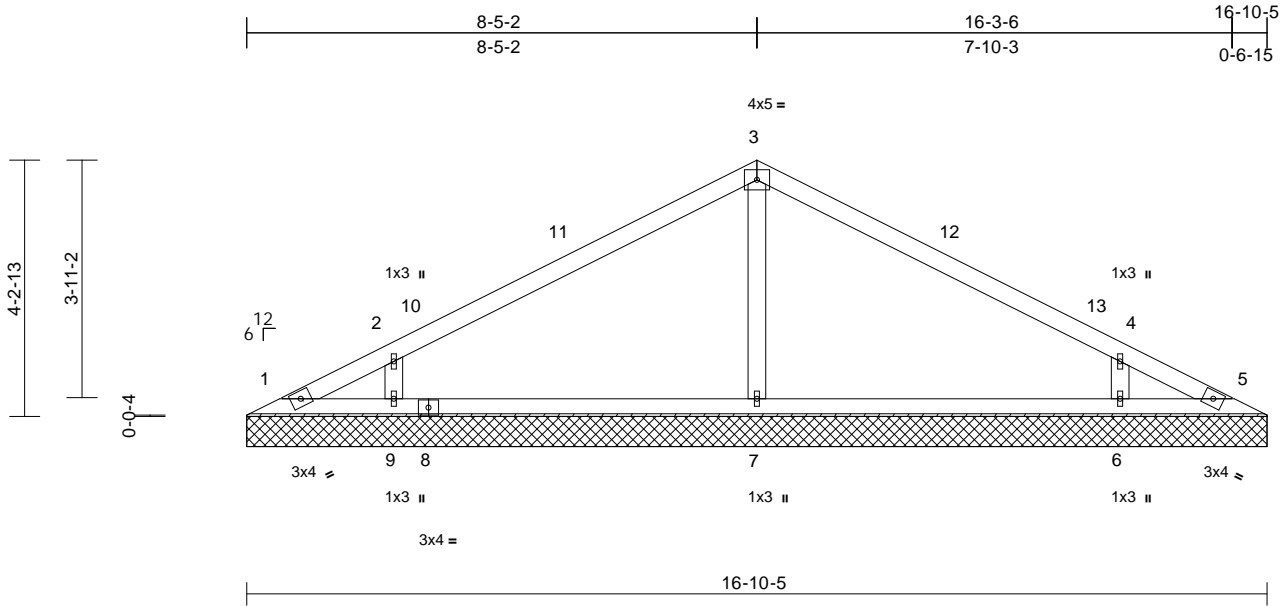
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V4	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707749
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:56  
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Page: 1



Scale = 1:38.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

(size) 1=16-10-5, 5=16-10-5, 6=16-10-5, 7=16-10-5, 9=16-10-5  
Max Horiz 1=-91 (LC 9)  
Max Uplift 1=-55 (LC 9), 5=-41 (LC 17), 6=-247 (LC 11), 7=-61 (LC 11), 9=-247 (LC 11)  
Max Grav 1=50 (LC 11), 5=50 (LC 11), 6=454 (LC 21), 7=424 (LC 1), 9=454 (LC 20)

- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 1, 41 lb uplift at joint 5, 61 lb uplift at joint 7, 247 lb uplift at joint 9 and 247 lb uplift at joint 6.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-89/83, 2-10=-133/88, 10-11=-120/104, 3-11=-64/120, 3-12=-58/120, 12-13=-117/104, 4-13=-132/88, 4-5=-65/49  
BOT CHORD 1-9=-14/57, 8-9=-14/57, 7-8=-14/57, 6-7=-14/57, 5-6=-14/57  
WEBS 3-7=-295/136, 2-9=-366/318, 4-6=-366/318

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 8-5-10, Exterior (2) 8-5-10 to 11-5-10, Interior (1) 11-5-10 to 16-10-13 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



August 6, 2020

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

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



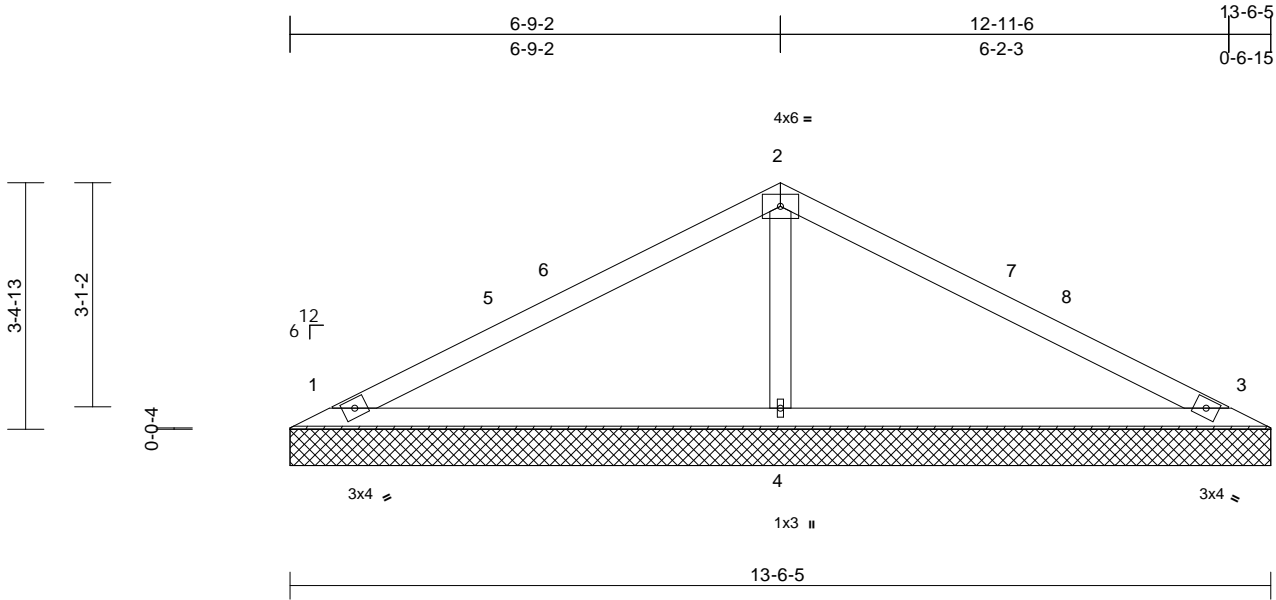
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V5	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707750
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:56  
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Page: 1



Scale = 1:31.8

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	0.42	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S						Weight: 45 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x4 SP No.1
- BOT CHORD 2x4 SP No.1
- OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

- (size) 1=13-6-5, 3=13-6-5, 4=13-6-5
- Max Horiz 1=-72 (LC 9)
- Max Uplift 1=-104 (LC 11), 3=-104 (LC 11), 4=-149 (LC 11)
- Max Grav 1=229 (LC 20), 3=229 (LC 21), 4=533 (LC 1)

**FORCES**

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-5=-131/70, 5-6=-72/71, 2-6=-61/90, 2-7=-46/88, 7-8=-55/68, 3-8=-131/67
- BOT CHORD 1-4=-5/58, 3-4=-5/58
- WEBS 2-4=-351/207

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 6-9-10, Exterior (2) 6-9-10 to 9-9-10, Interior (1) 9-9-10 to 13-6-13 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
- 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.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 1, 104 lb uplift at joint 3 and 149 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



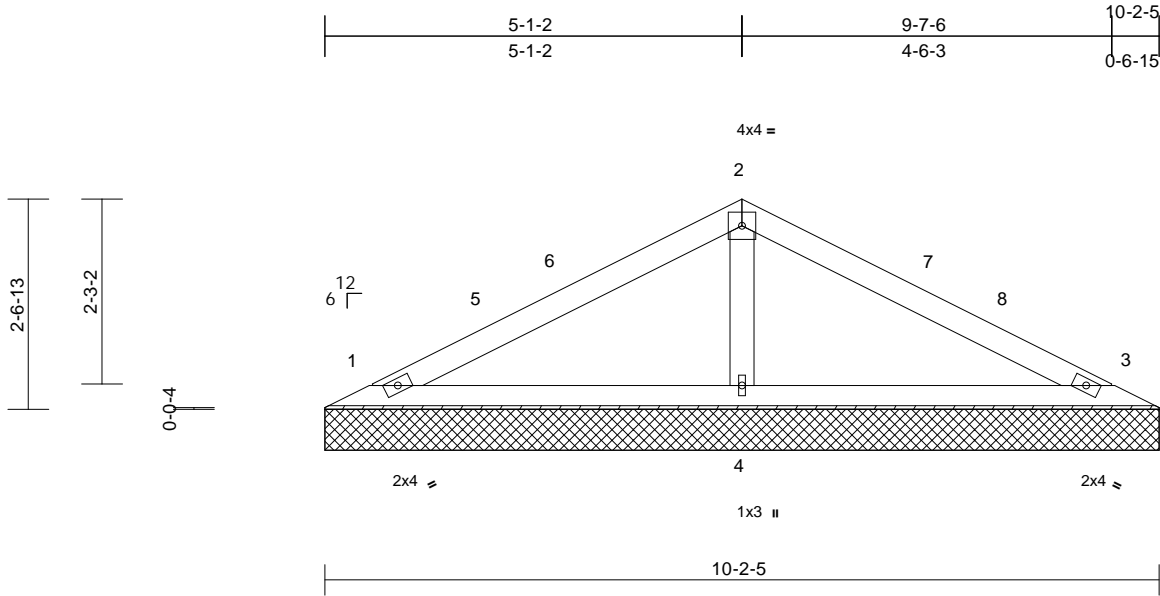
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V6	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707751
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:57  
ID:fawBnYcKIOGCYERwmx2eGeyraVq-IsStRVY9Eb44fITvhQEIPlo74IXk8Kf?wey9yqdoW

Page: 1



Scale = 1:28.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

#### BRACING

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

#### REACTIONS

(size) 1=10-2-5, 3=10-2-5, 4=10-2-5  
Max Horiz 1=52 (LC 10)  
Max Uplift 1=-76 (LC 11), 3=-76 (LC 11),  
4=-109 (LC 11)  
Max Grav 1=167 (LC 20), 3=167 (LC 21),  
4=389 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-96/59, 5-6=-52/61, 2-6=-42/75,  
2-7=-35/72, 7-8=-40/58, 3-8=-96/56  
BOT CHORD 1-4=-4/42, 3-4=-4/42  
WEBS 2-4=-256/166

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 5-1-10, Exterior (2) 5-1-10 to 8-1-10, Interior (1) 8-1-10 to 10-2-13 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
- 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 76 lb uplift at joint 1, 76 lb uplift at joint 3 and 109 lb uplift at joint 4.
- 8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



August 6, 2020

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

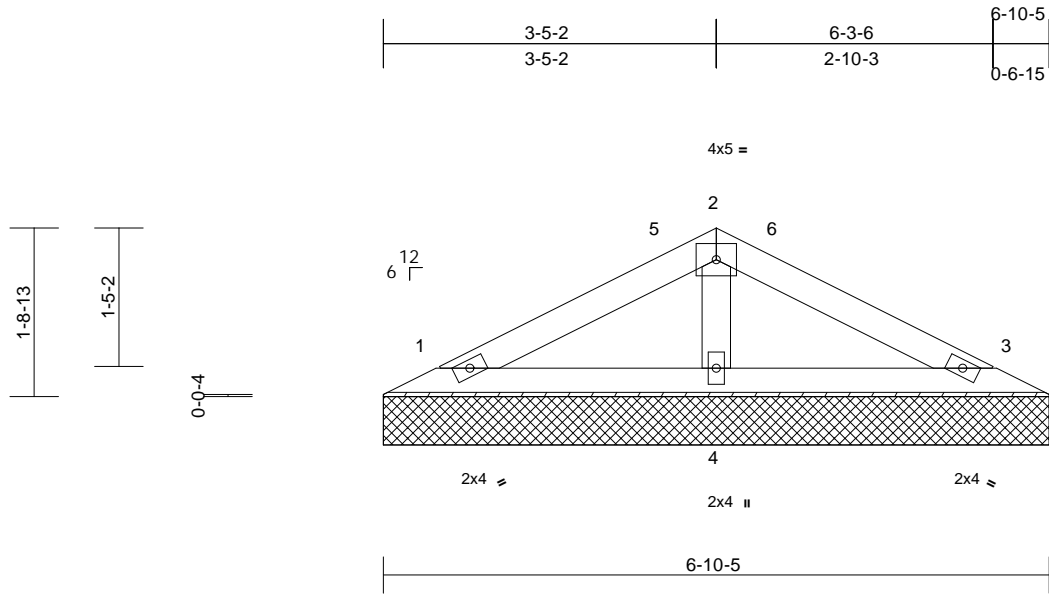
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V7	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707752
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 E Jul 22 2020 Print: 8.330 E Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 12:35:03  
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Page: 1



Scale = 1:23.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
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) 1=116/6-10-5, 3=116/6-10-5, 4=222/6-10-5  
Max Horiz 1=-33 (LC 9)  
Max Uplift 1=-59 (LC 11), 3=-59 (LC 11), 4=-46 (LC 11)

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

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 3-5-10, Exterior (2) 3-5-10 to 6-5-10, Interior (1) 6-5-10 to 6-10-13 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 1, 59 lb uplift at joint 3 and 46 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

#### LOAD CASE(S)

- Standard  
Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-60, 2-3=-60, 1-3=-20



August 6, 2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

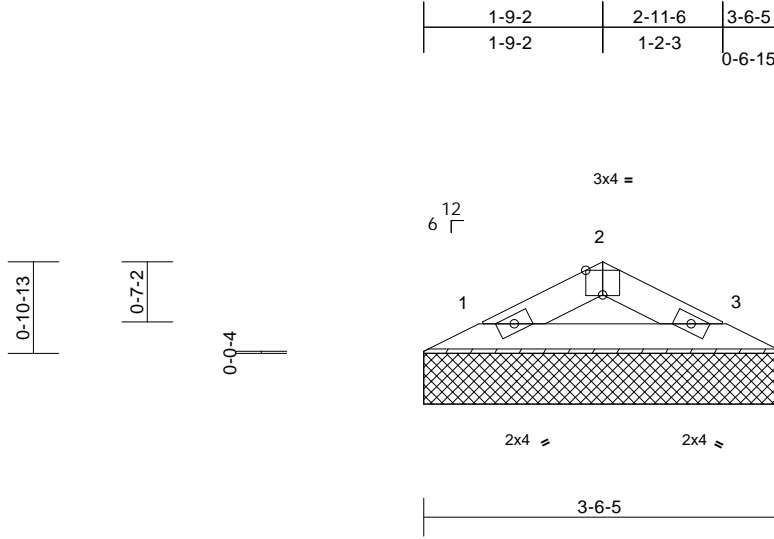


Job P-7005-1	Truss V8	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707753
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:57  
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Page: 1



Scale = 1:22.7

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	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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	IBC2015/TPI2014	Matrix-P							Weight: 9 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 3-6-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**

(size) 1=3-6-5, 3=3-6-5  
Max Horiz 1=-14 (LC 9)  
Max Uplift 1=-34 (LC 11), 3=-34 (LC 11)  
Max Grav 1=94 (LC 1), 3=94 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-91/88, 2-3=-91/88  
BOT CHORD 1-3=-53/70

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1 and 34 lb uplift at joint 3.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

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



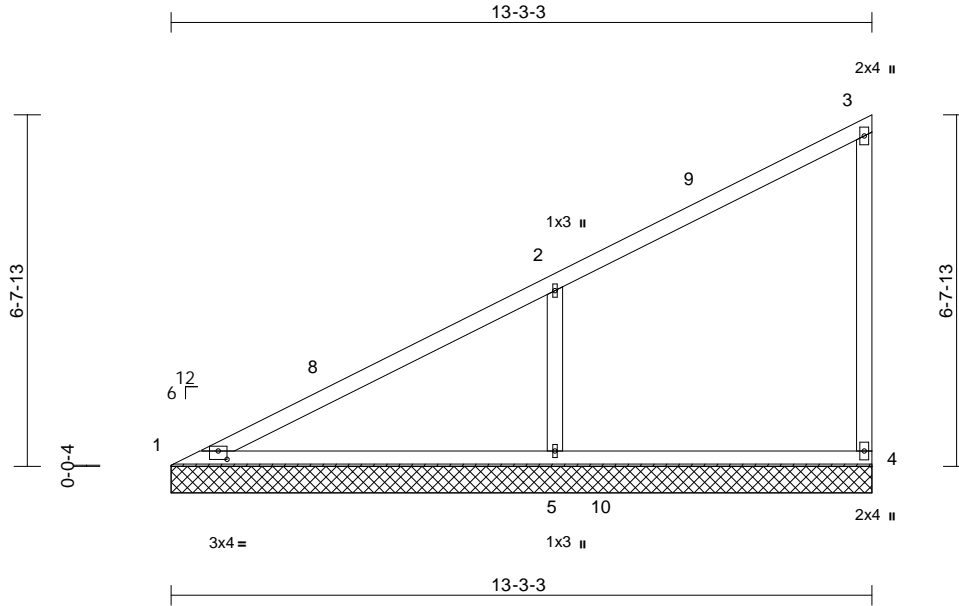
818 Soundside Road  
Edenton, NC 27932

Job P-7005-1	Truss V9	Truss Type Valley	Qty 1	Ply 1	Roman-Roof Job Reference (optional)	E14707754
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Peak Truss Builders, LLC, New Hill, NC - 27562,

Run: 8.33 S Jul 22 2020 Print: 8.330 S Jul 22 2020 MiTek Industries, Inc. Thu Aug 06 07:55:57  
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Page: 1



Scale = 1:43.6

Plate Offsets (X, Y): [1:0-2-0,0-1-14]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 54 lb	FT = 20%

**LUMBER**

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

(size) 1=13-3-3, 4=13-3-3, 5=13-3-3  
Max Horiz 1=311 (LC 8)  
Max Uplift 1=8 (LC 11), 4=57 (LC 8), 5=333 (LC 11)  
Max Grav 1=236 (LC 17), 4=253 (LC 16), 5=715 (LC 16)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-432/225, 2-8=-330/263, 2-9=-193/102, 3-9=-166/144, 3-4=-142/181  
BOT CHORD 1-5=-233/415, 5-10=-131/147, 4-10=-131/147  
WEBS 2-5=-456/372

**NOTES**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;  
B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed;  
MWFRS (directional) and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 13-1-15 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 6-0-0 oc.

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 4, 8 lb uplift at joint 1 and 333 lb uplift at joint 5.
- 7) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



August 6, 2020

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

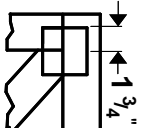
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



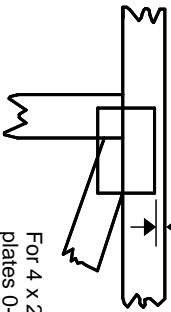
818 Soundside Road  
Edenton, NC 27932

# 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



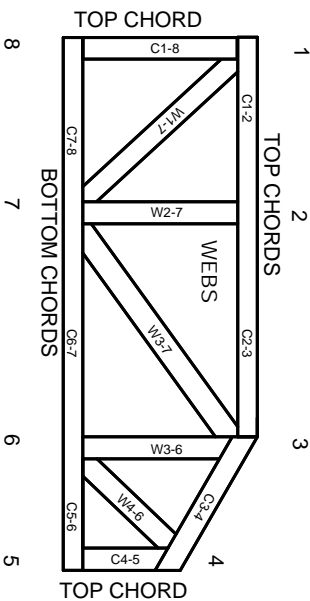
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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 T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.