

Trenco  
818 Soundside Rd  
Edenton, NC 27932

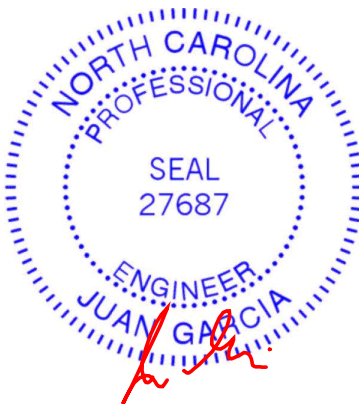
Re: CoastRoof  
McKee - Winston - Lot 993 Academy Glen

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

Pages or sheets covered by this seal: I43415886 thru I43415945

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

North Carolina COA: C-0844



October 29,2020

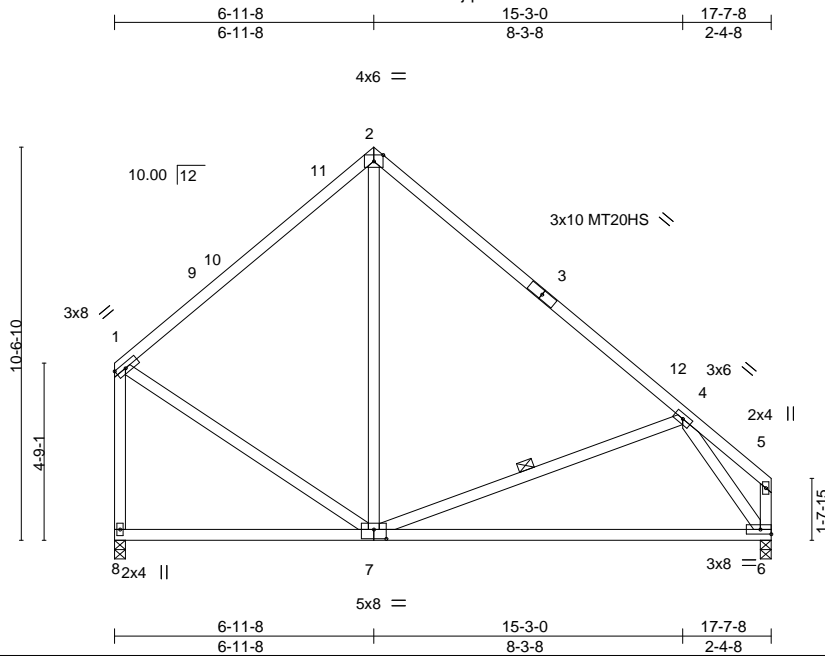
Garcia, Juan

**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 COASTROOF	Truss A01	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415886
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:18 2020 Page 1  
ID:jqCdRHblrruLU73I5XDfb5zc7xm-Xlo5A4ckZB8Rn?ZGsSAB34K36wIDDE3StfN0Z4yOYt3



Scale = 1:61.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.87	Vert(LL) -0.30	6-7	>694	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(CT) -0.60	6-7	>345	240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Horz(CT) 0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL) -0.01	7-8	>999	240		
	Code IRC2015/TP12014						Weight: 114 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-7

**REACTIONS.**

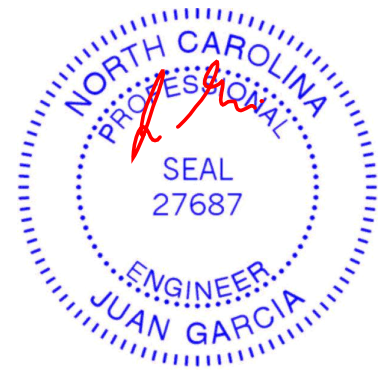
(size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-247(LC 8)  
 Max Grav 8=693(LC 1), 6=693(LC 1)

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

TOP CHORD 1-8=-648/77, 1-2=-534/100, 2-4=-583/110  
 BOT CHORD 6-7=-83/488  
 WEBS 2-7=0/271, 1-7=-16/383, 4-7=-259/213, 4-6=-790/227

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-11-8, Exterior(2) 6-11-8 to 11-2-7, Interior(1) 11-2-7 to 17-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



October 29,2020

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818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss A01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415887
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:23 2020 Page 1  
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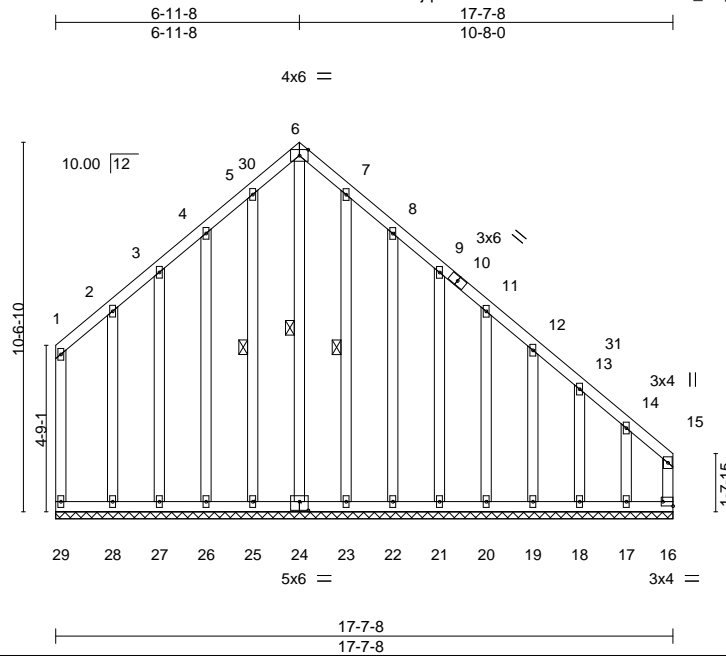


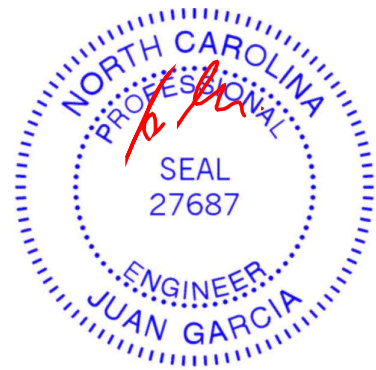
Plate Offsets (X,Y)--	[6:0-3-0,Edge], [16:Edge,0-1-8], [24:0-3-0,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 16 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 185 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 6-24, 5-25, 7-23
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 17-7-8.  
 (lb) - Max Horz 29=-247(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 29, 24, 25, 26, 27, 28, 23, 22, 21, 20, 19, 18 except 16=-350(LC 11), 17=-355(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 29, 24, 25, 26, 27, 28, 23, 22, 21, 20, 19, 18 except 16=440(LC 8), 17=382(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 14-15=-316/273, 15-16=-274/220  
 WEBS 6-24=-257/194

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 2-11-8, Interior(1) 2-11-8 to 6-11-8, Exterior(2) 6-11-8 to 10-11-8, Interior(1) 10-11-8 to 17-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 24, 25, 26, 27, 28, 23, 22, 21, 20, 19, 18 except (jt=lb) 16=350, 17=355.

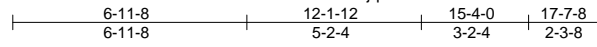


October 29,2020

Job COASTROOF	Truss A01T	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415888
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:26 2020 Page 1  
ID:jqCdRHblrruLU73I5XDfb5zc7xm-lrH7rpilge9JkEApK8J3NmFRM8cd5q6eiuJRqdyOYsx



7x14 MT20HS ||

Scale = 1:68.5

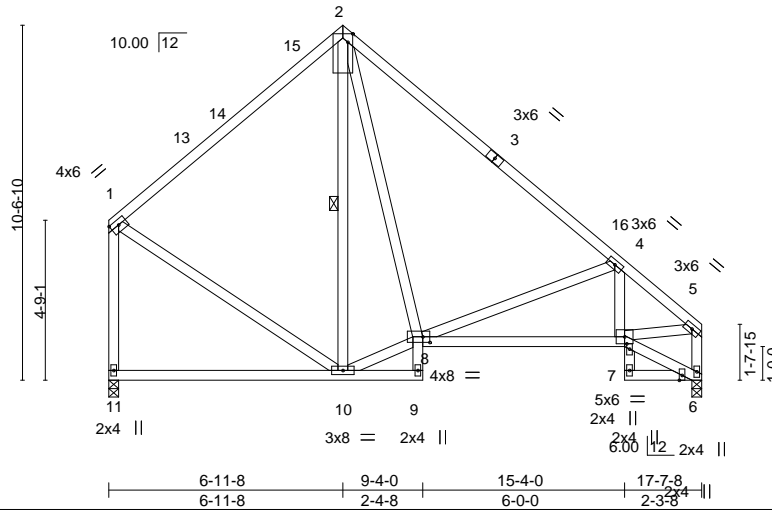


Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [2:0-3-0,0-1-12], [7:0-1-14,0-1-0], [8:0-2-8,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.06 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.12 10-11	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	0.03 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.01 7-8	>999	240		Weight: 134 lb FT = 20%

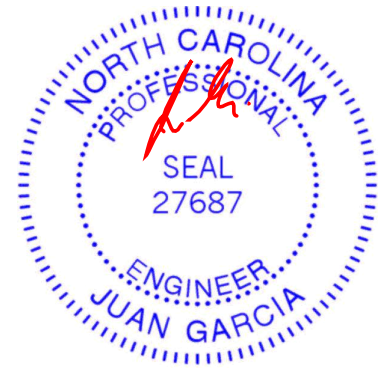
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-11,5-6: 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

**REACTIONS.** (size) 11=0-3-8, 6=0-3-8  
Max Horz 11=-248(LC 8)  
Max Grav 11=693(LC 1), 6=693(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-11=-631/87, 1-2=-522/108, 2-4=-674/116, 4-5=-886/75, 5-6=-669/33  
BOT CHORD 7-8=-91/733  
WEBS 2-8=0/346, 1-10=-26/366, 8-10=0/428, 4-8=-419/205, 5-7=-90/776

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-11-8, Exterior(2) 6-11-8 to 11-2-7, Interior(1) 11-2-7 to 17-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



October 29,2020

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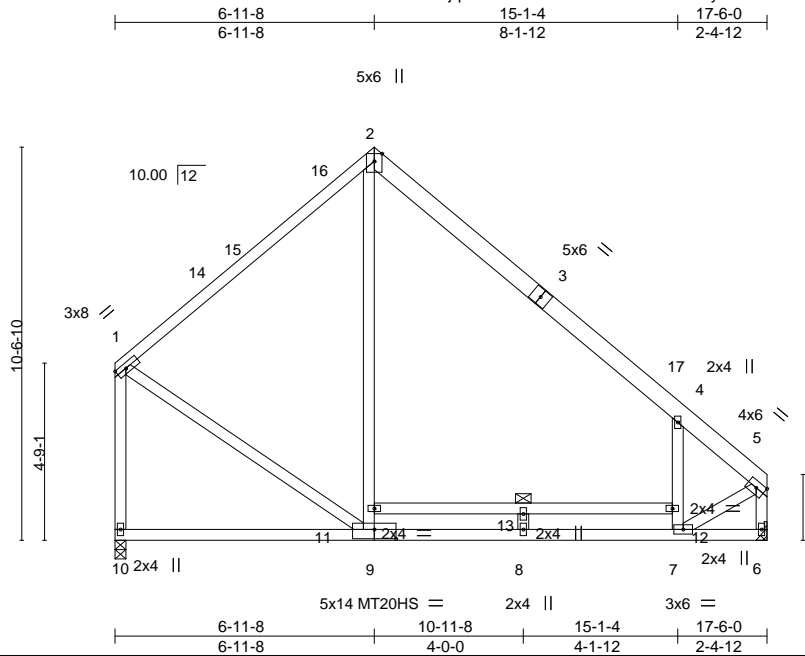


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss A02	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415889
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:29 2020 Page 1  
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Scale = 1:61.8

Plate Offsets (X,Y)-- [9:0-7-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.76	Vert(LL)	-0.29	7-8	>704	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.81	Vert(CT)	-0.42	7-8	>490	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	0.22	7-8	>923		
	Code IRC2015/TPI2014						Weight: 127 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2 \*Except\*  
1-2: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
6-9: 2x4 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
1-10,5-6,11-12: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 11-12

**REACTIONS.**

(size) 10=0-3-8, 6=Mechanical  
Max Horz 10=-247(LC 8)  
Max Grav 10=730(LC 20), 6=772(LC 19)

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

TOP CHORD 1-10=-704/93, 1-2=-585/112, 2-4=-571/100, 4-5=-642/0, 5-6=-746/0  
BOT CHORD 8-9=0/515, 7-8=0/515  
WEBS 2-11=0/337, 1-9=-30/480, 5-7=-21/485

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-11-8, Exterior(2) 6-11-8 to 11-2-7, Interior(1) 11-2-7 to 17-4-4 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
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-60, 2-5=-60, 6-10=-20
- Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-50, 2-5=-50, 6-10=-20, 11-12=-30
- Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25



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Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	McKee - Winston - Lot 993 Academy Glen	I43415889
COASTROOF	A02	COMMON	99	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:29 2020 Page 2  
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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-20, 6-10=-40, 11-12=-40

18) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-20, 6-10=-20, 11-12=-40

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-58, 2-5=-44, 6-10=-20, 11-12=-30

Horz: 1-10=16, 1-2=8, 2-5=6, 5-6=6

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-44, 2-5=-58, 6-10=-20, 11-12=-30

Horz: 1-10=-6, 1-2=-6, 2-5=-8, 5-6=-16

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-16=-34, 2-16=-41, 2-5=-46, 6-10=-20, 11-12=-30

Horz: 1-10=15, 1-16=-16, 2-16=-9, 2-5=4, 5-6=2

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-46, 2-3=-41, 3-5=-34, 6-10=-20, 11-12=-30

Horz: 1-10=-2, 1-2=-4, 2-3=9, 3-5=16, 5-6=-15

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-50, 2-5=-20, 6-10=-20, 11-12=-30

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-50, 6-10=-20, 11-12=-30

**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 COASTROOF	Truss B01	Truss Type ROOF TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen	I43415890
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:33 2020 Page 1  
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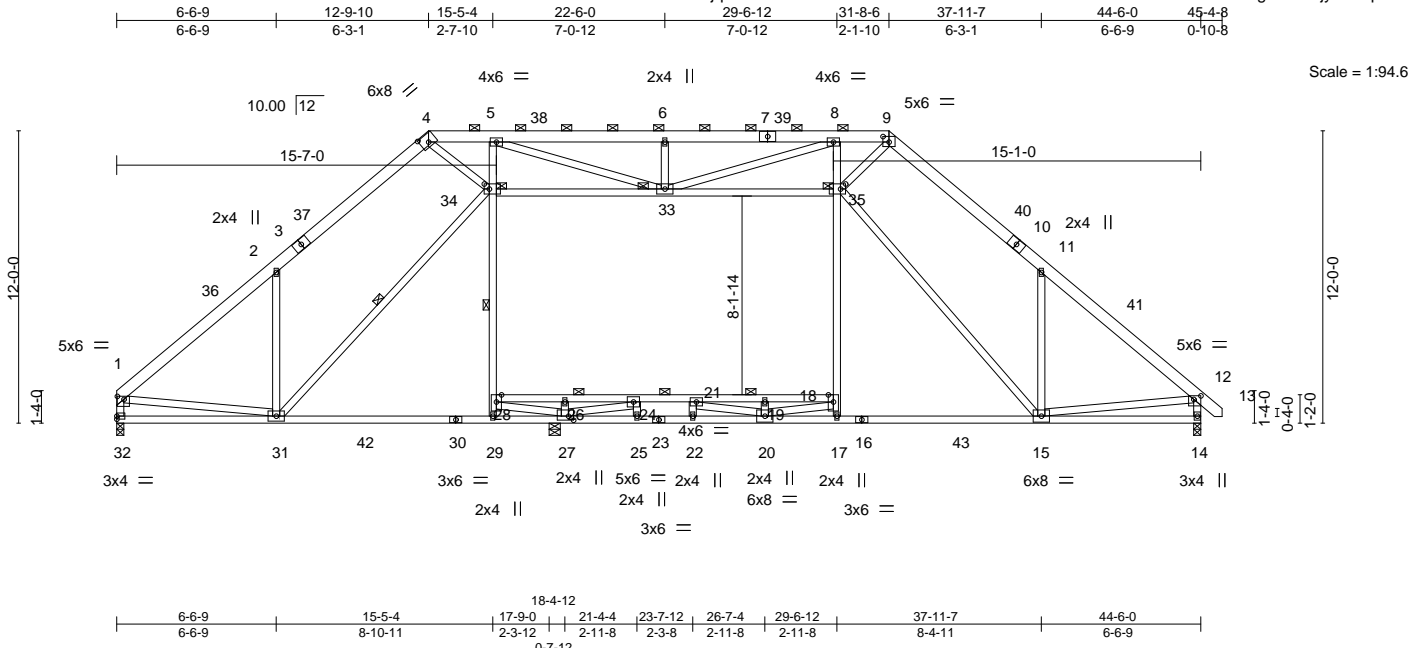


Plate Offsets (X,Y)--	[1:0-3-4,0-1-8], [4:0-4-0,0-3-12], [9:0-3-0,0-2-12], [12:0-3-8,0-1-12], [27:0-2-8,0-2-0], [34:0-2-8,0-2-8], [35:0-2-8,0-2-8]
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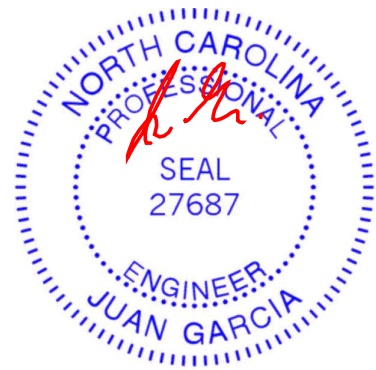
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.30 15-17 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.94	Vert(CT) -0.58 15-17 >541 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.07 14 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 15-17 >999 240	Weight: 394 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-2 max.): 4-9.
BOT CHORD 2x4 SP No.1 *Except* 18-28: 2x4 SP No.2, 16-23,23-30: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-11-0 oc bracing: 18-28
WEBS 2x4 SP No.3 *Except* 5-29,8-17,34-35,31-34,15-35,1-32,12-14: 2x4 SP No.2	WEBS 1 Row at midpt 28-34, 31-34
	JOINTS 1 Brace at Jt(s): 33, 34, 35

**REACTIONS.** (size) 32=0-3-8, 27=0-5-8, 14=0-3-8  
Max Horz 32=-248(LC 8)  
Max Grav 32=1814(LC 2), 27=1168(LC 26), 14=2074(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2195/0, 2-4=-2052/136, 4-5=-2483/187, 5-6=-3558/184, 6-8=-3558/184, 8-9=-3355/8, 9-11=-2639/41, 11-12=-2565/0, 1-32=-1748/0, 12-14=-2036/0  
BOT CHORD 31-32=-191/420, 29-31=0/1498, 27-29=0/1217, 25-27=0/2526, 22-25=0/2526, 20-22=0/2526, 17-20=0/1723, 15-17=0/1563, 26-28=-14/1450, 24-26=-13/1440, 21-24=-1230/150, 19-21=-1478/0, 18-19=-1485/0  
WEBS 2-31=-287/322, 28-29=0/467, 28-34=-155/444, 5-34=-604/223, 17-18=0/332, 18-35=0/947, 8-35=-579/244, 11-15=-542/259, 33-34=-259/952, 33-35=-52/1913, 24-25=0/273, 19-20=-365/0, 26-27=-432/0, 27-28=-1197/113, 24-27=-2378/0, 20-21=-54/583, 18-20=0/1358, 6-33=-441/132, 8-33=-405/636, 5-33=-188/1326, 4-34=-62/1214, 9-35=0/2140, 31-34=-361/401, 15-35=-272/674, 1-31=0/1345, 12-15=0/1803

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-7-2, Interior(1) 4-7-2 to 12-9-10, Exterior(2) 12-9-10 to 17-3-0, Interior(1) 17-3-0 to 31-8-6, Exterior(2) 31-8-6 to 36-1-13, Interior(1) 36-1-13 to 45-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 5x8 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Ceiling dead load (5.0 psf) on member(s). 33-34, 33-35; Wall dead load (5.0psf) on member(s).28-34, 18-35
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 24-26, 21-24, 19-21, 18-19
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Attic room checked for L/360 deflection.



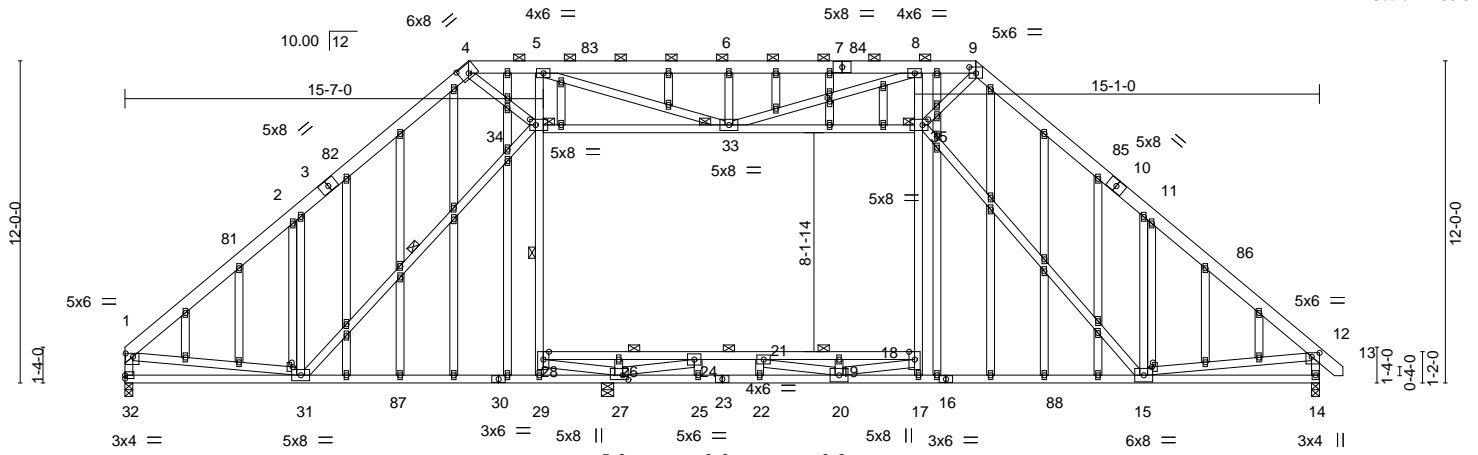
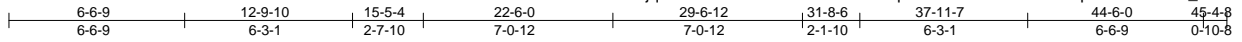
October 29,2020

Job COASTROOF	Truss B01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen	I43415891
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:42 2020 Page 1

ID:jqCdRHblruLU7315XDfb5zc7xm-qwFACHvvnvZA2fhOtGVbp18JEcbxerxY\_OOCHOhyOYsh



Scale = 1:85.8

Plate Offsets (X,Y)--	[1:0-3-4,0-1-8], [4:0-4-0,0-3-12], [9:0-3-0,0-2-12], [12:0-3-8,0-1-12], [15:0-2-0,0-0-8], [27:0-2-8,0-2-0], [31:0-2-0,0-0-8], [34:0-2-8,0-2-8], [35:0-2-8,0-2-8], [61:0-1-10,0-1-0]
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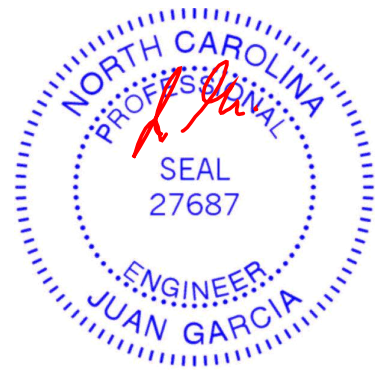
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.30	15-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.58	15-17	>541		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.07	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.10	15-17	>999		
								Weight: 551 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-2 max.): 4-9.
BOT CHORD 2x4 SP No.1 *Except* 18-28: 2x4 SP No.2, 16-23,23-30: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.3 *Except* 5-29,8-17,34-35,31-34,15-35,1-32,12-14: 2x4 SP No.2	WEBS 3-11-0 oc bracing: 18-28
OTHERS 2x4 SP No.3	JOINTS 1 Row at midpt 28-34, 31-34 1 Brace at Jt(s): 33, 34, 35

**REACTIONS.** (size) 32=0-3-8, 27=0-5-8, 14=0-3-8  
 Max Horz 32=-248(LC 8)  
 Max Grav 32=1814(LC 2), 27=1168(LC 26), 14=2074(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2195/0, 2-4=-2052/136, 4-5=-2483/187, 5-6=-3558/184, 6-8=-3558/184,  
 8-9=-3355/8, 9-11=-2639/41, 11-12=-2565/0, 1-32=-1748/0, 12-14=-2036/0  
 BOT CHORD 31-32=-191/420, 29-31=0/1498, 27-29=0/1217, 25-27=0/2526, 22-25=0/2526,  
 20-22=0/2526, 17-20=0/1723, 15-17=0/1563, 26-28=-14/1450, 24-26=-13/1440,  
 21-24=-1230/150, 19-21=-1478/0, 18-19=-1485/0  
 WEBS 2-31=-287/322, 28-29=0/467, 28-34=-155/444, 5-34=-604/223, 17-18=0/332,  
 18-35=0/947, 8-35=-579/244, 11-15=-542/259, 33-34=-259/952, 33-35=-52/1913,  
 24-25=0/273, 19-20=-365/0, 26-27=-432/0, 27-28=-1197/113, 24-27=-2378/0,  
 20-21=-54/583, 18-20=0/1358, 6-33=-441/132, 8-33=-405/636, 5-33=-188/1326,  
 4-34=-62/1214, 9-35=0/2140, 31-34=-361/401, 15-35=-272/674, 1-31=0/1345,  
 12-15=0/1803

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-7-2, Interior(1) 4-7-2 to 12-9-10, Exterior(2) 12-9-10 to 17-3-0, Interior(1) 17-3-0 to 31-8-6, Exterior(2) 31-8-6 to 36-1-13, Interior(1) 36-1-13 to 45-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (5.0 psf) on member(s). 33-34, 33-35; Wall dead load (5.0psf) on member(s).28-34, 18-35



October 29,2020

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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	McKee - Winston - Lot 993 Academy Glen	I43415891
COASTROOF	B01G	GABLE	99	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:42 2020 Page 2  
 ID:jqCdRHblruLU7315XDfb5zc7xm-qwFACHvzvZA2fhOtGVbp18JEcbxerX\_Y\_OOCHOhyOYsh

**NOTES-**

- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 24-26, 21-24, 19-21, 18-19
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

**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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



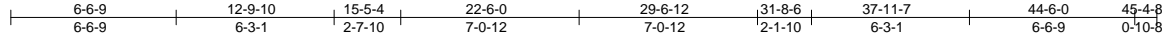
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss B01T	Truss Type ROOF TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen	I43415892
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:45 2020 Page 1

ID:jqCdRHblruLU73I5XDfb5zc7xm-EVwJrJxfCUYcW97Sxd9WfmXjHoz82HSR4MQx70yOYse



Scale = 1:91.2

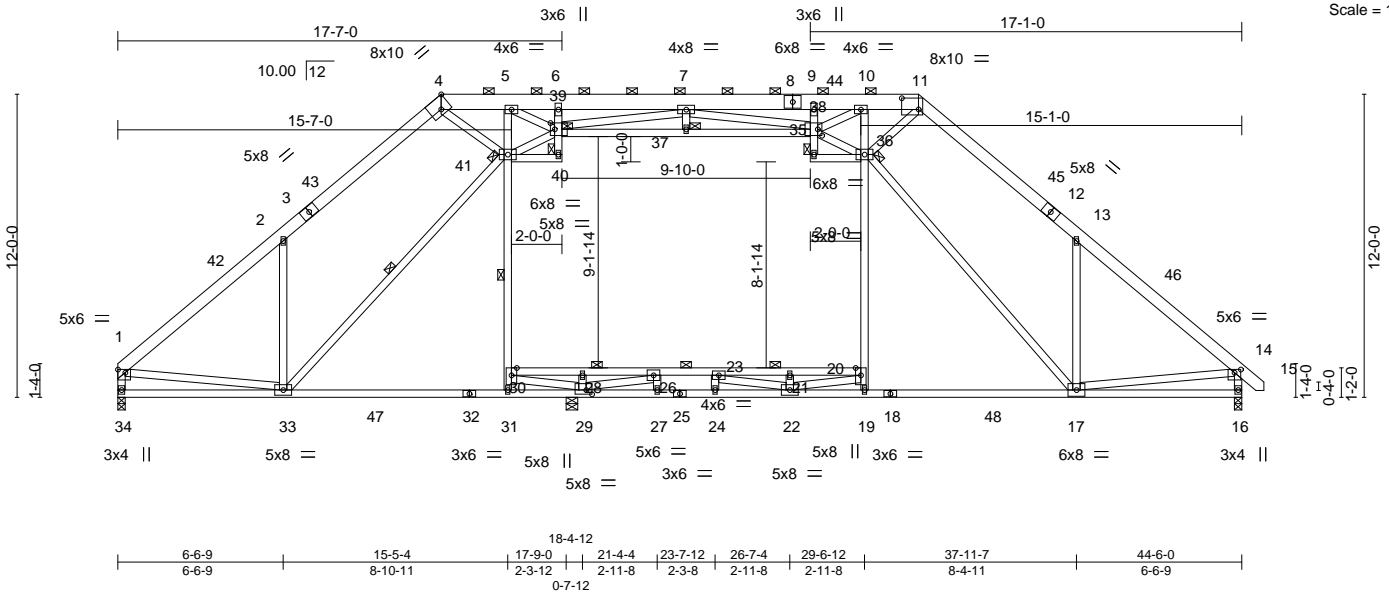


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-4-9,Edge], [11:0-8-0,0-5-5], [14:0-3-0,0-1-8], [29:0-2-12,0-2-0], [38:0-2-0,0-3-0], [39:0-2-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.32	17-19	>978	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.61	17-19	>507		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.08	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.11	17-19	>999		
								Weight: 416 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 4-8,8-11: 2x8 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-13 max.): 4-11.
BOT CHORD 2x4 SP No.2 *Except* 18-25,25-32: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 17-19. 4-1-0 oc bracing: 20-30
WEBS 2x4 SP No.3 *Except* 5-31,10-19,35-36,33-41,17-36,1-34,14-16,38-39,40-41: 2x4 SP No.2	WEBS 1 Row at midpt 30-41, 33-41 JOINTS 1 Brace at Jt(s): 35, 36, 37, 39, 40, 41

**REACTIONS.** (size) 34=0-3-8, 29=0-5-8, 16=0-3-8  
Max Horz 34=-246(LC 10)  
Max Grav 34=1739(LC 2), 29=1286(LC 26), 16=2021(LC 2)

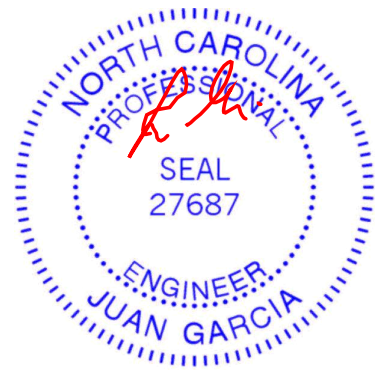
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**TOP CHORD** 1-2=-2083/0, 2-4=-1893/135, 4-5=-1990/150, 5-6=-3347/333, 6-7=-3438/347, 7-9=-4819/100, 9-10=-4709/91, 10-11=-3072/0, 11-13=-2499/35, 13-14=-2480/0, 1-34=-1674/0, 14-16=-1978/0

**BOT CHORD** 33-34=-190/437, 31-33=0/1481, 29-31=0/1191, 27-29=0/2307, 24-27=0/2307, 22-24=0/2307, 19-22=0/1669, 17-19=0/1551, 28-30=0/1773, 26-28=0/1762, 23-26=-1034/346, 21-23=-1364/0, 20-21=-1370/0

**WEBS** 2-33=-201/319, 30-31=0/464, 30-41=-234/357, 5-41=-553/148, 19-20=0/349, 20-36=0/935, 10-36=-950/48, 13-17=-461/253, 26-27=0/286, 21-22=-376/0, 28-29=-446/0, 29-30=-1464/68, 26-29=-2451/0, 22-23=-43/682, 20-22=0/1266, 10-38=-166/1879, 5-39=-203/1737, 4-41=-16/663, 11-36=0/1738, 33-41=-358/305, 17-36=-268/579, 1-33=0/1223, 14-17=0/1693, 37-39=-261/2780, 37-38=-261/2780, 6-39=-444/92, 9-38=-277/145, 39-41=-282/532, 7-39=-1045/151, 36-38=-29/1769, 7-38=-33/726

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-7-2, Interior(1) 4-7-2 to 12-9-10, Exterior(2) 12-9-10 to 17-5-4, Interior(1) 17-5-4 to 31-8-6, Exterior(2) 31-8-6 to 36-1-13, Interior(1) 36-1-13 to 45-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Ceiling dead load (5.0 psf) on member(s). 35-36, 37-39, 37-38, 40-41; Wall dead load (5.0psf) on member(s).30-41, 20-36
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-30, 26-28, 23-26, 21-23, 20-21
- Structural representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 29,2020

**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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	McKee - Winston - Lot 993 Academy Glen	I43415892
COASTROOF	B01T	ROOF TRUSS	99	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:45 2020 Page 2  
ID:jqCdRHblruLU73I5XDfb5zc7xm-EVwJrJxfCUIYcW97Sxd9WfmjHoz82HSR4MQx?0yOYse

**NOTES-**

10) Attic room checked for L/360 deflection.

**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/TP1 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 COASTROOF	Truss B02	Truss Type ROOF TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen	143415893
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:48 2020 Page 1  
ID:jqCdRHblrruLU73f5XDfb5zc7xm-f4cRTLzYVPwBNcs1dmiDHPZ110zoFfWtmJfcccLyOYsb

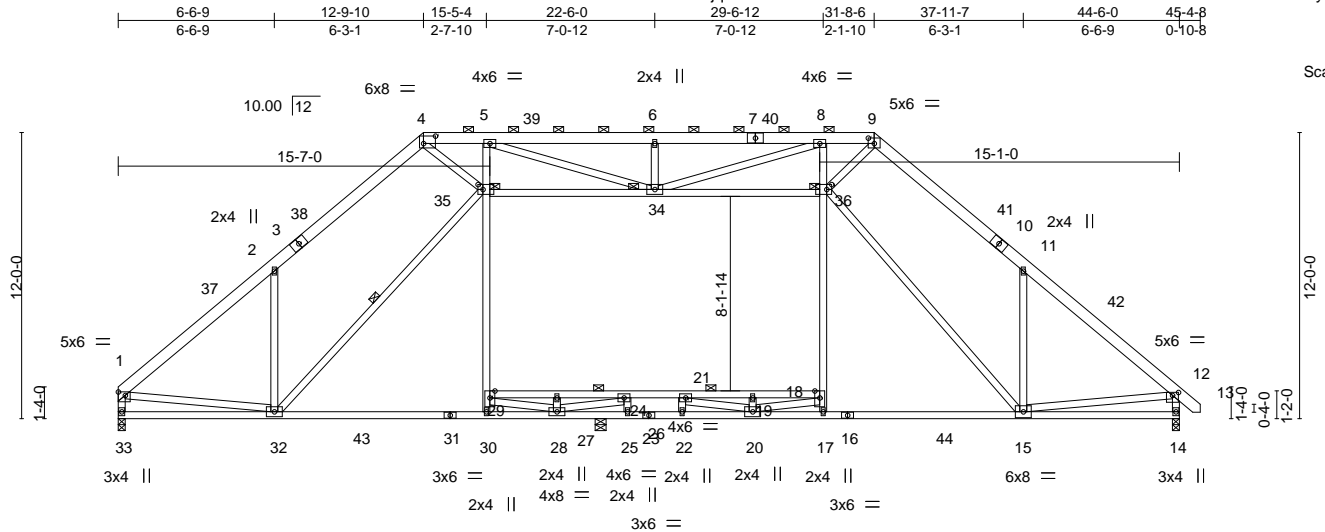


Plate Offsets (X,Y)--	[1:Edge,0-1-12], [4:0-6-0,0-3-12], [9:0-3-0,0-2-12], [12:0-3-0,0-1-8], [35:0-2-8,0-2-8], [36:0-2-8,0-2-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.46	Vert(LL)	-0.27	15-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.50	15-17	>575		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.07	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.09	15-17	>999	Weight: 394 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-14 max.): 4-9.
BOT CHORD 2x4 SP No.2 *Except* 18-29: 2x4 SP No.1, 16-23,23-31: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 26-28,25-26. 4-11-0 oc bracing: 18-29
WEBS 2x4 SP No.3 *Except* 5-30,8-17,35-36,32-35,15-36,1-33,12-14: 2x4 SP No.2	WEBS 1 Row at midpt 32-35
	JOINTS 1 Brace at Jt(s): 34, 35, 36

**REACTIONS.** (size) 33=0-3-8, 14=0-3-8, 26=0-5-8  
Max Horz 33=-248(LC 8)  
Max Grav 33=1870(LC 2), 14=2034(LC 2), 26=1133(LC 2)

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

<b>TOP CHORD</b>	1-2=-2287/0, 2-4=-2183/125, 4-5=-2740/153, 5-6=-3586/188, 6-8=-3586/188, 8-9=-3149/49, 9-11=-2529/65, 11-12=-2495/0, 1-33=-1811/0, 12-14=-1989/0
<b>BOT CHORD</b>	32-33=-195/388, 30-32=0/1528, 28-30=0/1386, 26-28=0/1314, 25-26=0/1314, 22-25=0/1314, 20-22=0/1314, 17-20=0/1623, 15-17=0/1560, 27-29=0/1204, 24-27=0/1195, 21-24=-215/887, 19-21=-964/0, 18-19=-969/0
<b>WEBS</b>	2-32=-327/313, 29-30=0/543, 29-35=-31/560, 5-35=-583/232, 17-18=0/356, 18-36=0/830, 8-36=-598/241, 11-15=-487/274, 34-35=-227/1221, 34-36=-109/1696, 24-25=-399/0, 19-20=-460/0, 27-28=-303/0, 28-29=-1036/33, 24-28=-925/0, 20-21=0/1204, 18-20=0/929, 6-34=-440/132, 8-34=-382/846, 5-34=-259/1139, 4-35=-29/1449, 9-36=0/1931, 32-35=-347/447, 15-36=-295/602, 1-32=0/1460, 12-15=0/1704

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-7-2, Interior(1) 4-7-2 to 12-9-10, Exterior(2) 12-9-10 to 17-3-0, Interior(1) 17-3-0 to 31-8-6, Exterior(2) 31-8-6 to 36-1-13, Interior(1) 36-1-13 to 45-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 5x8 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Ceiling dead load (5.0 psf) on member(s). 34-35, 34-36; Wall dead load (5.0psf) on member(s).29-35, 18-36
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 27-29, 24-27, 21-24, 19-21, 18-19
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Attic room checked for L/360 deflection.



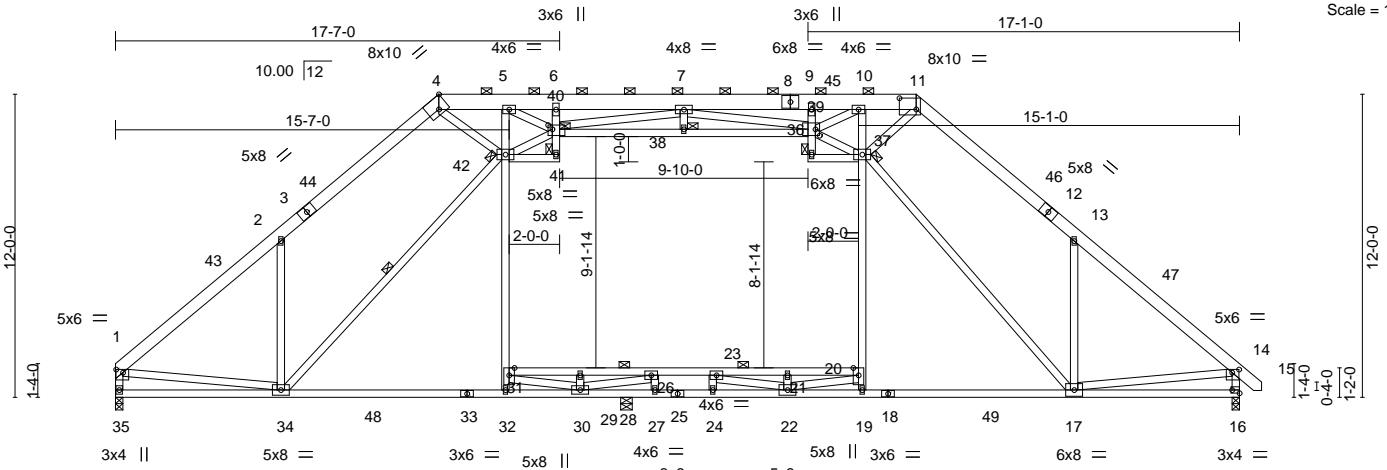
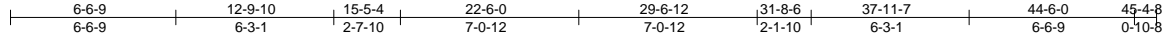
October 29,2020

Job COASTROOF	Truss B02T	Truss Type ROOF TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen	I43415894
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

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ID:jqCdRHblrruLU73i5XDfb5zc7xm-3ffHa5M0QoKJmE4acluGwu1Bm0D?WSONJSHtGDgyOYsY



Scale = 1:91.2

Plate Offsets (X,Y)--	[1:0-3-4,0-1-8], [4:0-4-9,Edge], [11:0-8-0,0-5-5], [14:0-3-4,0-1-8], [16:Edge,0-1-8], [39:0-2-0,0-3-0], [40:0-2-0,0-2-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.27	17-19	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.52	17-19	>552		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.07	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.10	17-19	>999		
								Weight: 416 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 4-8,8-11: 2x8 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-10 max.): 4-11.
BOT CHORD 2x4 SP No.2 *Except* 20-31: 2x4 SP No.1, 18-25,25-33: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 28-30,27-28. 5-1-0 oc bracing: 20-31
WEBS 2x4 SP No.3 *Except* 5-32,10-19,36-37,34-42,17-37,1-35,14-16,39-40,41-42: 2x4 SP No.2	WEBS 1 Row at midpt 34-42
	JOINTS 1 Brace at Jt(s): 36, 37, 38, 40, 41, 42

**REACTIONS.** (size) 35=0-3-8, 16=0-3-8, 28=0-5-8  
Max Horz 35=-246(LC 8)  
Max Grav 35=1832(LC 2), 16=2002(LC 2), 28=1200(LC 2)

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

**TOP CHORD** 1-2=-2223/0, 2-4=-2071/116, 4-5=-2359/108, 5-6=-3824/277, 6-7=-3922/290, 7-9=-4554/151, 9-10=-4447/141, 10-11=-2857/0, 11-13=-2408/57, 13-14=-2437/0, 1-35=-1772/0, 14-16=-1953/0

**BOT CHORD** 34-35=-193/411, 32-34=0/1547, 30-32=0/1395, 28-30=0/1157, 27-28=0/1157, 24-27=0/1157, 22-24=0/1157, 19-22=0/1590, 17-19=0/1578, 29-31=0/1385, 26-29=0/1376, 23-26=-196/1094, 21-23=-870/33, 20-21=-875/36

**WEBS** 2-34=-241/309, 31-32=0/545, 31-42=-67/522, 5-42=-667/128, 19-20=0/366, 20-37=0/820, 10-37=-820/66, 13-17=-394/270, 26-27=-429/0, 21-22=-471/0, 29-30=-304/0, 30-31=-1204/11, 26-30=-890/0, 22-23=0/1302, 20-22=-31/869, 10-39=-172/1861, 5-40=-194/1802, 4-42=0/998, 11-37=0/1511, 34-42=-343/350, 17-37=-292/491, 1-34=0/1371, 14-17=0/1604, 38-40=-257/2843, 38-39=-257/2843, 6-40=-402/108, 9-39=-326/139, 40-42=-236/880, 7-40=-705/242, 37-39=-99/1482, 7-39=-319/399

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-7-2, Interior(1) 4-7-2 to 12-9-10, Exterior(2) 12-9-10 to 17-5-4, Interior(1) 17-5-4 to 31-8-6, Exterior(2) 31-8-6 to 36-1-13, Interior(1) 36-1-13 to 45-2-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (5.0 psf) on member(s). 36-37, 38-40, 38-39, 41-42; Wall dead load (5.0psf) on member(s).31-42, 20-37
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 29-31, 26-29, 23-26, 21-23, 20-21
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



October 29,2020

**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 COASTROOF	Truss B03	Truss Type MONO HIP	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415895
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:53 2020 Page 1

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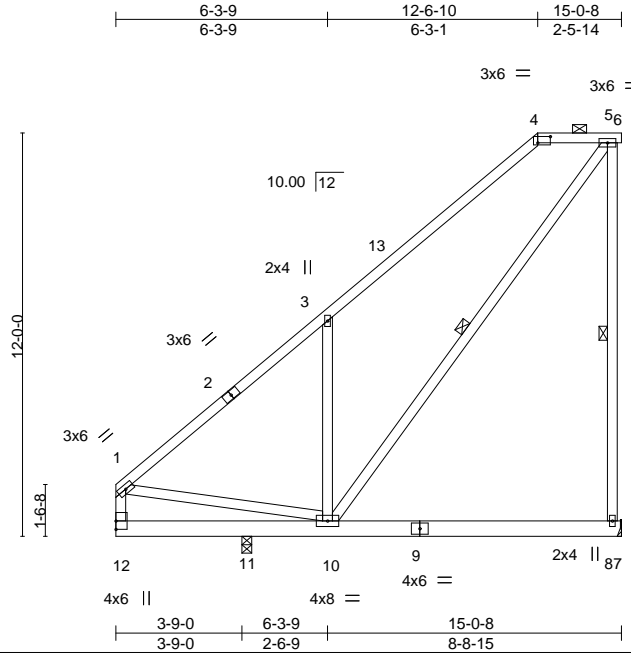


Plate Offsets (X,Y)-- [4:0-4-8,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.11	8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.18	8-10	>713	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) -0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MS	Wind(LL) 0.12	8-10	>999	240		
							Weight: 120 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 9-12: 2x6 SP DSS  
 WEBS 2x4 SP No.2 \*Except\*  
 1-10,3-10: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-10, 5-8

**REACTIONS.**

(size) 8=Mechanical, 11=0-3-8  
 Max Horz 11=307(LC 12)  
 Max Uplift 8=-192(LC 12)  
 Max Grav 8=473(LC 2), 11=787(LC 1)

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

TOP CHORD 1-12=-292/29, 1-3=-255/30, 3-4=-348/210  
 BOT CHORD 10-11=-389/242  
 WEBS 1-10=-6/346, 3-10=-514/270, 5-10=-373/393, 5-8=-347/280

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-6-10, Exterior(2) 12-6-10 to 15-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=192.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 29, 2020

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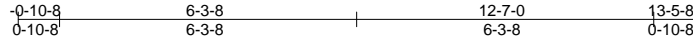
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss C01	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415896
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:54 2020 Page 1

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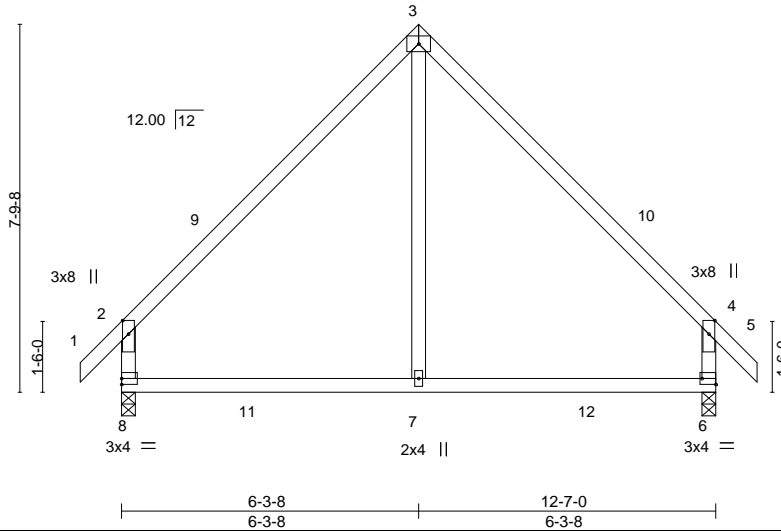


Plate Offsets (X,Y)-- [6:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL) -0.05	7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.35	Vert(CT) -0.09	7-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Horz(CT) 0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Wind(LL) -0.06	7-8	>999	240		
	Code IRC2015/TP12014						Weight: 63 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 3-7: 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) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-179(LC 10)  
 Max Grav 8=596(LC 20), 6=596(LC 19)

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

TOP CHORD 2-8=-503/124, 2-3=-535/92, 3-4=-535/92, 4-6=-503/124  
 BOT CHORD 7-8=-10/323, 6-7=-10/323  
 WEBS 3-7=0/330

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-3-8, Exterior(2) 6-3-8 to 10-6-7, Interior(1) 10-6-7 to 13-5-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29,2020

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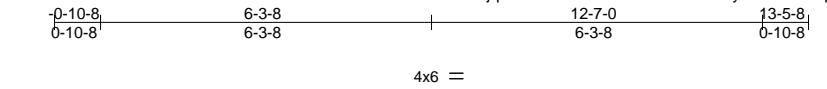


818 Soundside Road  
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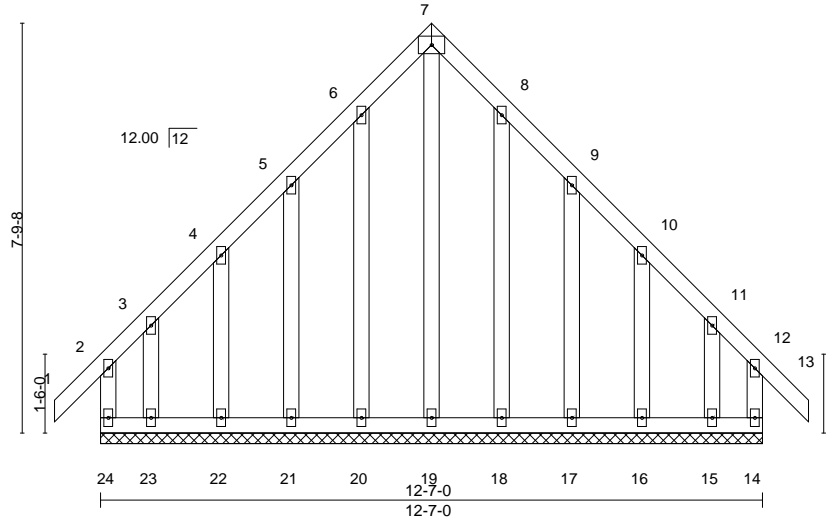
Job COASTROOF	Truss C01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415897
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:55 2020 Page 1  
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Scale = 1:43.8



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) -0.00	13	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.28	Horz(CT) -0.00	14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R						
							Weight: 110 lb	FT = 20%

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

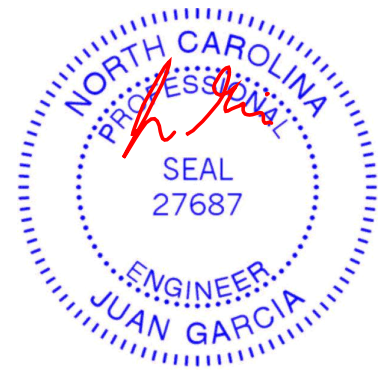
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 12-7-0.  
 (lb) - Max Horz 24=-179(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 21, 22, 18, 17, 16 except 24=-177(LC 8), 14=-159(LC 9), 23=-176(LC 9), 15=-163(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 7-19=-272/153

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-3-8, Exterior(2) 2-3-8 to 6-3-8, Corner(3) 6-3-8 to 9-3-8, Exterior(2) 9-3-8 to 13-5-8 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 21, 22, 18, 17, 16 except (jt=lb) 24=177, 14=159, 23=176, 15=163.



October 29, 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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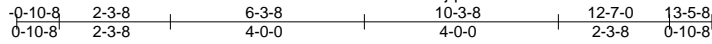
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	McKee - Winston - Lot 993 Academy Glen	I43415898
COASTROOF	C01T	SPECIAL	99	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 16:48:54 2020 Page 1  
 ID:jqCdRHblrruLU73l5XDfb5zc7xm-FnxJoFYi\_vAzoTvH9n9hFCulcGN1tDScyz4lZryOV0t



4x6 =

Scale = 1:47.5

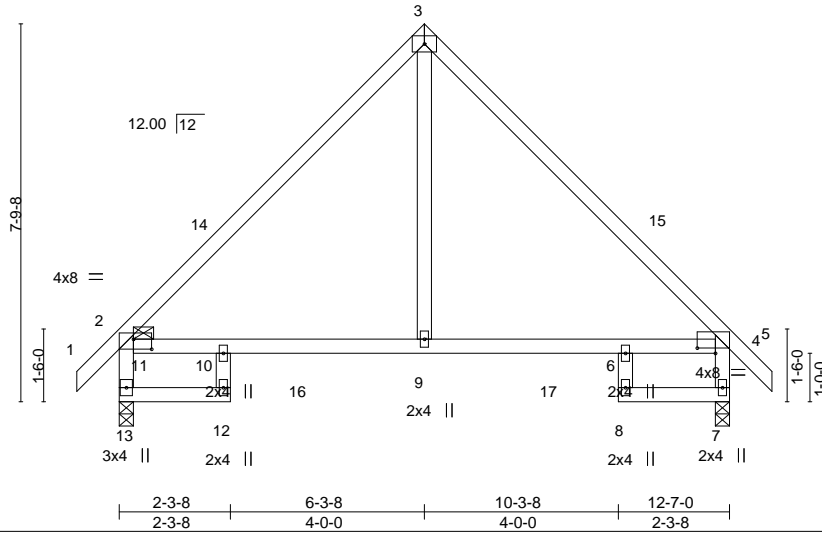


Plate Offsets (X,Y)-- [2:0-1-12,0-1-12], [2:0-4-8,0-2-8], [4:0-4-8,0-1-5], [11:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) 0.08 9-10 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.11 9-10 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.10 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 70 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-13,4-7: 2x4 SP No.2	

**REACTIONS.** (size) 13=0-3-8, 7=0-3-8  
 Max Horz 13=-177(LC 10)  
 Max Grav 13=566(LC 20), 7=567(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-13=-577/92, 2-11=-534/118, 2-14=-554/34, 3-14=-439/69, 3-15=-483/83,  
 4-15=-592/45, 4-7=-541/93  
 BOT CHORD 10-11=-10/377, 10-16=-10/377, 9-16=-10/377, 9-17=-10/377, 6-17=-10/377, 4-6=-8/378  
 WEBS 3-9=0/326

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-3-8, Exterior(2) 6-3-8 to 10-6-7, Interior(1) 10-6-7 to 13-5-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.



October 29,2020

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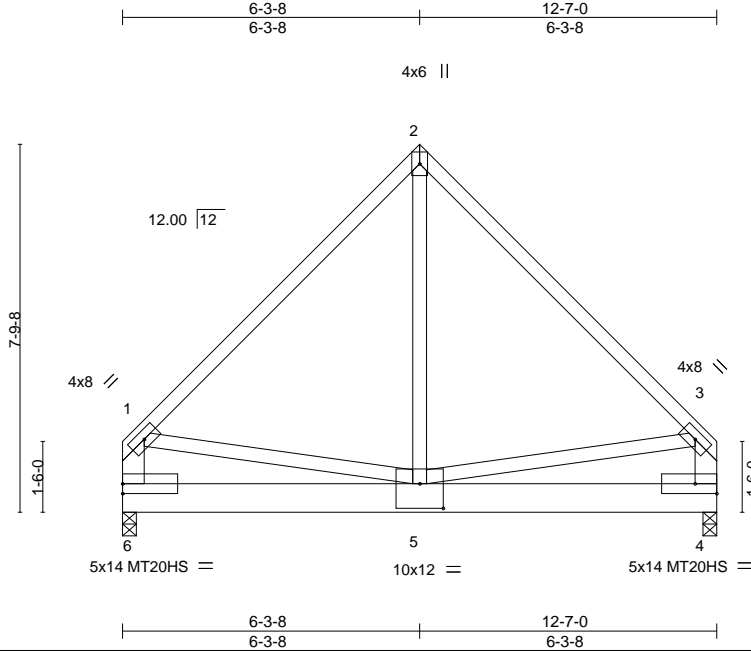


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss C02-1PL	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415899
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:58 2020 Page 1  
ID:jqCdRHblrruLU73I5XDfb5zc7xm-M?DDZI5p8UBma9dyCsuZgW\_xv2Y\_bGuL3t47ymYOYsR



Scale = 1:48.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	Vert(LL) -0.04	5-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.08	5-6	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.53	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MS	Wind(LL) 0.03	5-6	>999	240		
							Weight: 98 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.2 \*Except\*  
1-6,3-4: 2x6 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 6=0-3-8, 4=0-3-8  
Max Horz 6=155(LC 5)  
Max Uplift 6=-176(LC 9), 4=-176(LC 8)  
Max Grav 6=2664(LC 15), 4=2684(LC 15)

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

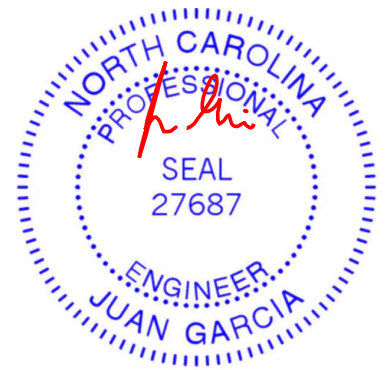
TOP CHORD 1-6=-1621/128, 1-2=-1929/195, 2-3=-1984/195, 3-4=-1640/129  
BOT CHORD 5-6=-183/601, 4-5=-108/466  
WEBS 2-5=-132/2307, 3-5=-42/929, 1-5=-40/924

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=176, 4=176.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-60, 2-3=-60, 4-6=-364(F=-344)



October 29,2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

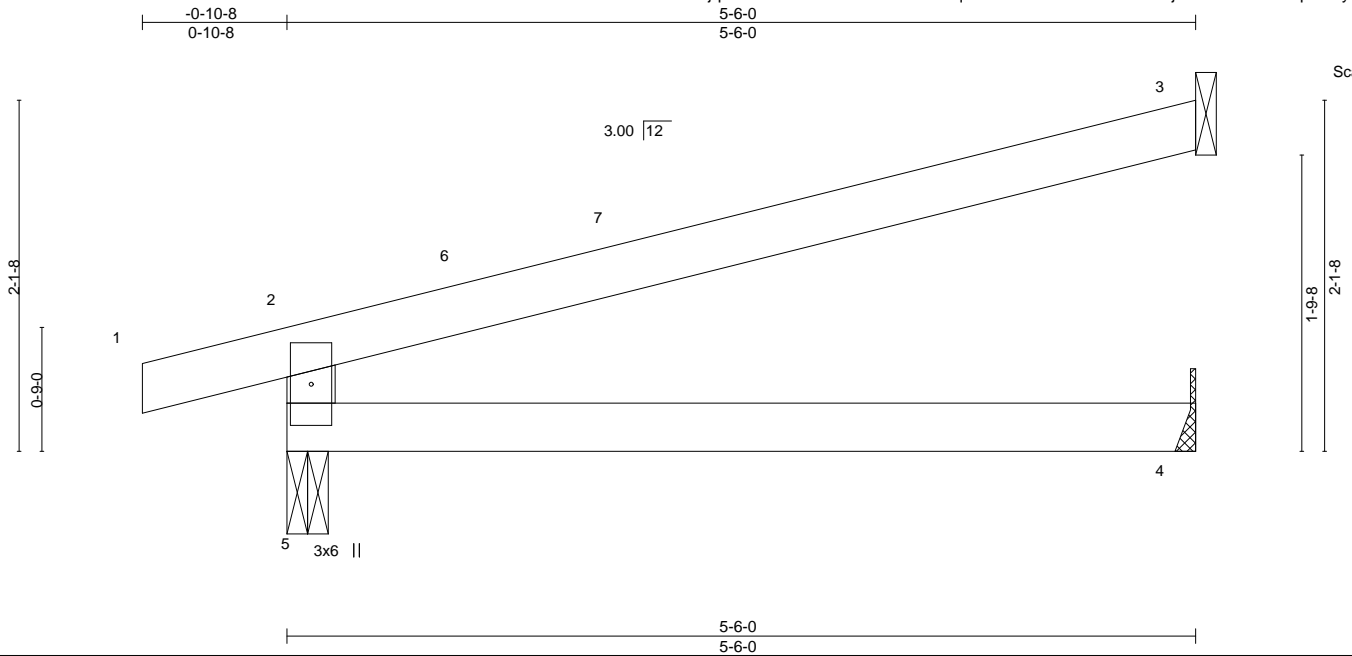
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss CP01	Truss Type JACK	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415900
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:26:59 2020 Page 1

ID:jqCdRHblrruLU73I5XDfb5zc7xm-qBmbn56RvnJdCJC9mZPoDjWAKSu2KrNUIXphVCyOySQ



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.03	4-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.08	4-5	>790		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.03	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-MR	Wind(LL)	0.07	4-5	>852	Weight: 18 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

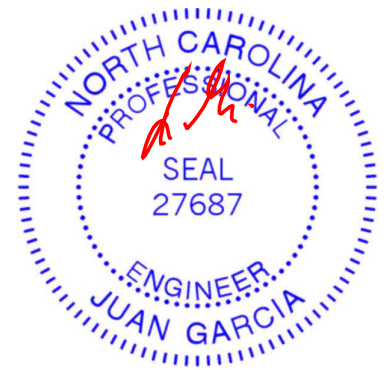
#### REACTIONS.

(size) 5=0-3-0, 3=Mechanical, 4=Mechanical  
Max Horz 5=45(LC 8)  
Max Uplift 5=-80(LC 8), 3=-50(LC 8), 4=-13(LC 8)  
Max Grav 5=279(LC 1), 3=143(LC 1), 4=99(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.



October 29, 2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

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Edenton, NC 27932

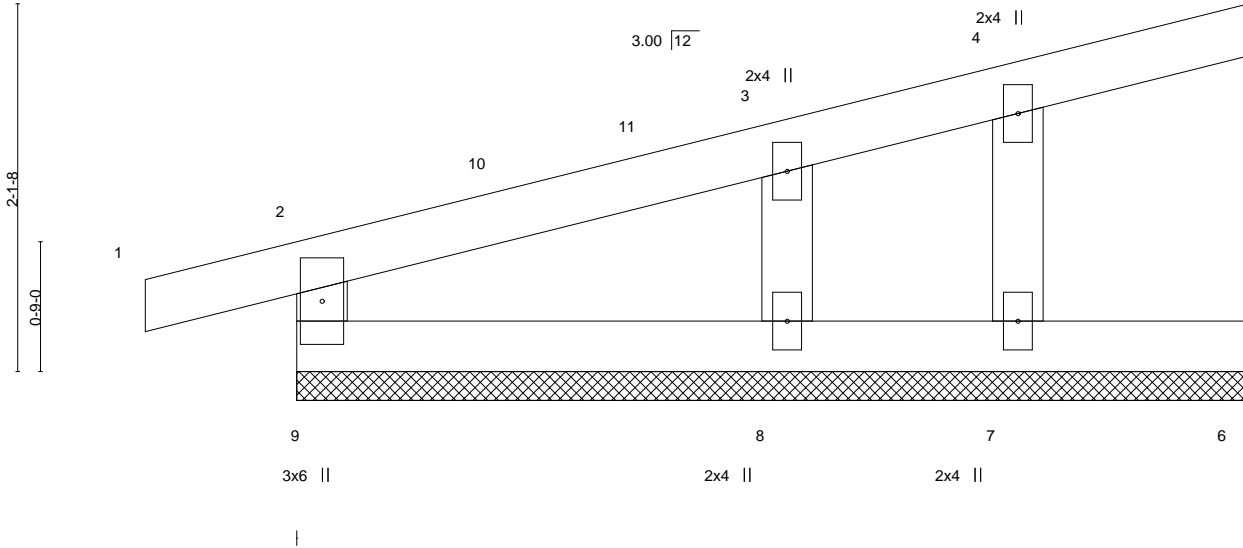
Job COASTROOF	Truss CP01G	Truss Type GABLE	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415901
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:00 2020 Page 1  
ID:jqCdRHblruLU73I5XDfb5zc7xm-INK\_\_R74g5RUpsmLKHw1mx3R2rIO3ICeXBZE1eyOYsP



Scale = 1:13.3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	Vert(LL) 0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT) 0.00	1	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT) -0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 22 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 5-6-0.  
 (lb) - Max Horz 9=46(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 5, 7, 8  
 Max Grav All reactions 250 lb or less at joint(s) 9, 5, 6, 7, 8

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 5, 7, 8.



October 29, 2020

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818 Soundside Road  
 Edenton, NC 27932

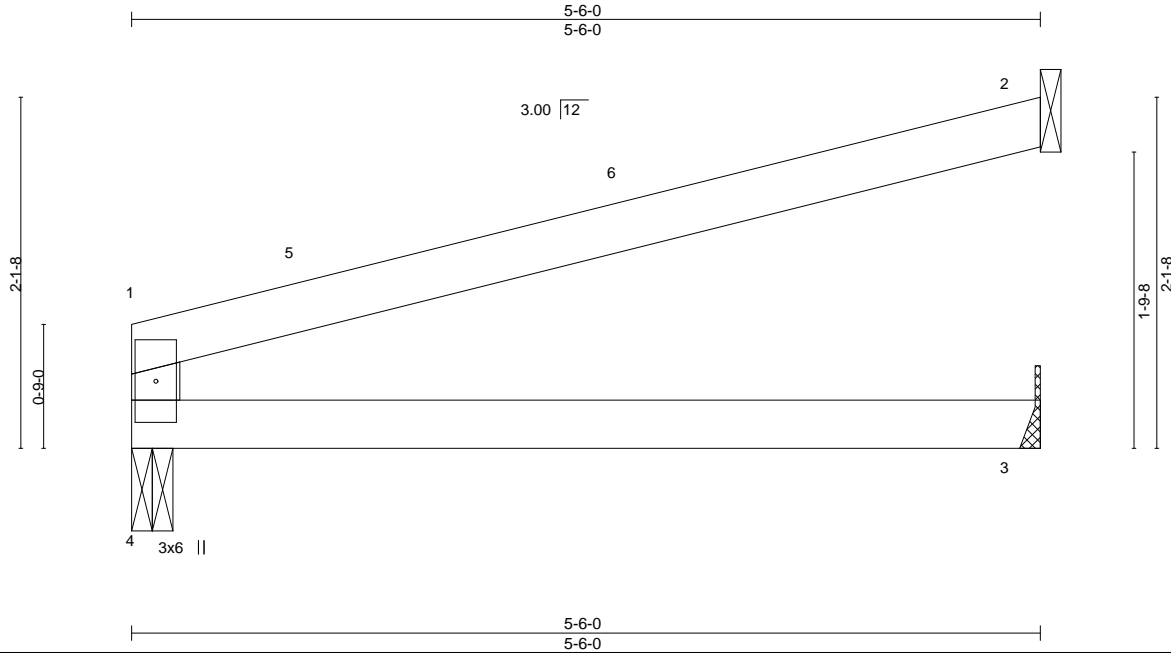
Job COASTROOF	Truss CP02	Truss Type JACK	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415902
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:00 2020 Page 1

ID:jqCdRHblrruLU73l5XDfb5zc7xm-INK\_\_R74g5RUpSmLKHw1mx3LlrEB3ldeXBZE1eyOYsP



Scale = 1:13.9

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.47	Vert(LL) -0.03	3-4	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.32	Vert(CT) -0.08	3-4	>772	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.03	2	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MR	Wind(LL) 0.08	3-4	>839	240		Weight: 17 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

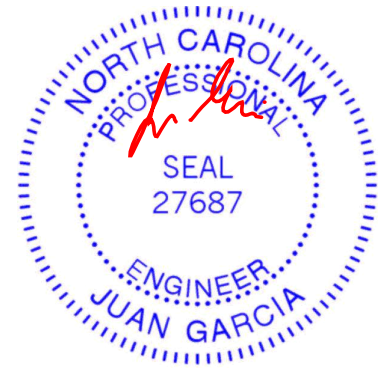
**REACTIONS.**

(size) 4=0-3-0, 2=Mechanical, 3=Mechanical  
 Max Horz 4=36(LC 12)  
 Max Uplift 4=-48(LC 8), 2=-51(LC 8), 3=-14(LC 8)  
 Max Grav 4=212(LC 1), 2=147(LC 1), 3=100(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 3.



October 29, 2020

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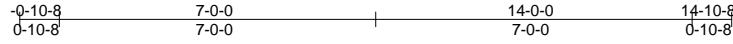


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss D01	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415903
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:01 2020 Page 1  
ID:jqCdRHblrluLU73I5XDfb5zc7xm-mauMBn7iRPZLRcLXt\_RGI8cUOFYZoanlrloZ5yOYsO



4x6 =

Scale = 1:51.0

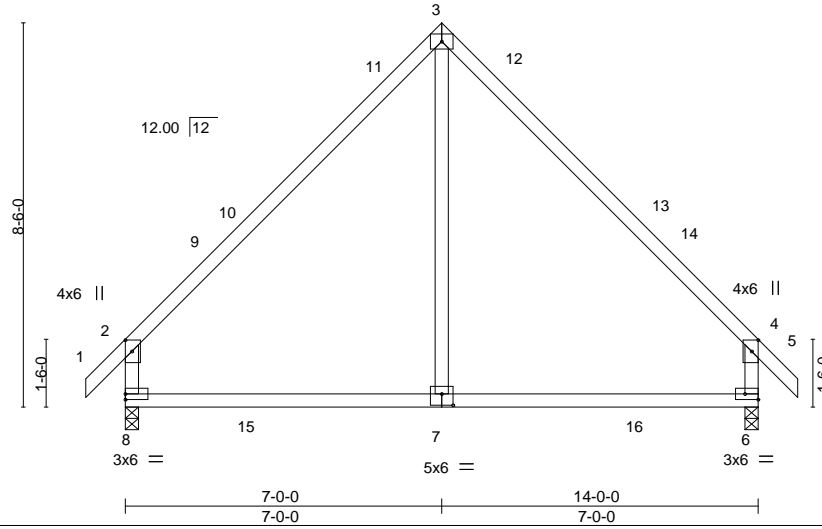


Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [4:0-3-0,0-1-12], [6:Edge,0-1-8], [7:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	Vert(LL) -0.08	7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(CT) -0.13	7-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Horz(CT) 0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Wind(LL) -0.08	7-8	>999	240		
	Code IRC2015/TP12014						Weight: 70 lb	FT = 20%

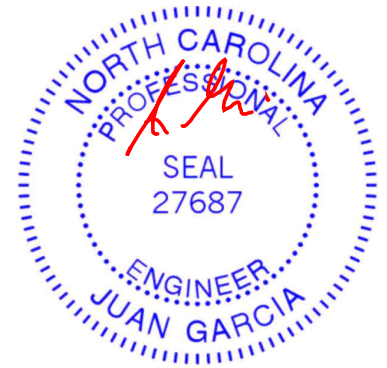
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 3-7: 2x4 SP No.3

**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) 8=0-3-8, 6=0-3-8  
 Max Horz 8=193(LC 11)  
 Max Grav 8=667(LC 20), 6=667(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-565/127, 2-3=-612/95, 3-4=-612/95, 4-6=-565/127  
 BOT CHORD 7-8=-8/372, 6-7=-8/372  
 WEBS 3-7=0/386

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 14-10-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29, 2020

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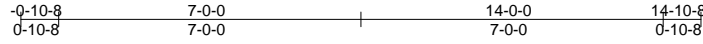


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss D01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415904
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:03 2020 Page 1  
ID:jqCdRHblrruLU73l5XDfb5zc7xm-jy06cT9yz0p3gwVw?PTkNZhyZ3J2GZO4D9nuezyOYsM



4x6 =

Scale = 1:53.4

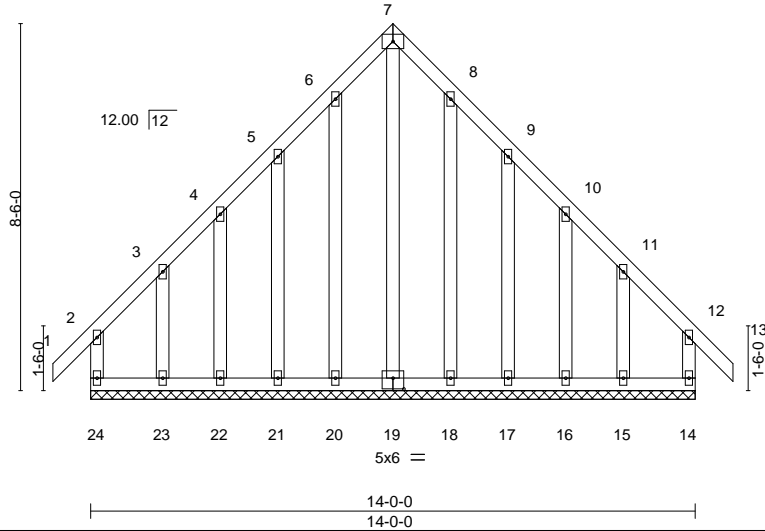


Plate Offsets (X,Y)-- [19:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	Vert(LL)	-0.00	13	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	-0.00	13	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-R						
	Code IRC2015/TPI2014						Weight: 124 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 14'-0"-0."  
 (lb) - Max Horz 24=193(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 21, 22, 18, 17, 16 except 24=129(LC 8), 14=117(LC 9), 23=138(LC 9), 15=133(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15 except 19=254(LC 13)

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

TOP CHORD 6-7=193/255, 7-8=193/255  
 WEBS 7-19=304/186

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 7-0-0, Corner(3) 7-0-0 to 10-0-0, Exterior(2) 10-0-0 to 14-10-8 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1'-4" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 21, 22, 18, 17, 16 except (jt=lb) 24=129, 14=117, 23=138, 15=133.



October 29, 2020

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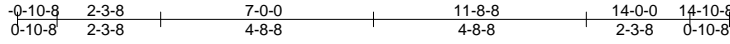
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss D01T	Truss Type SPECIAL	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415905
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:04 2020 Page 1

ID:jqCdRHbllrLU7315XDFb5zc7xm-B9aUqAakKxwL446Z7\_zwnEzpTYQ?3KESpXSAQyOYsL



4x6 =

Scale = 1:51.0

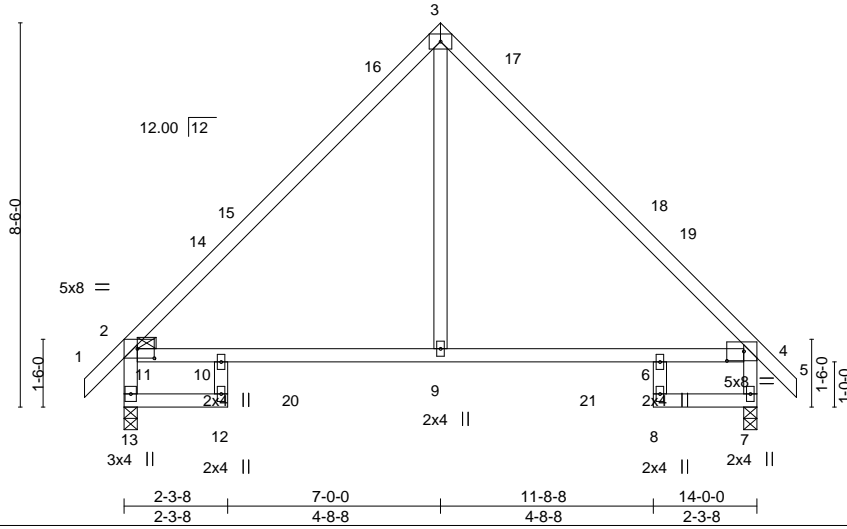


Plate Offsets (X,Y)-- [2:0-1-12,0-1-12], [2:0-4-8,0-2-8], [4:0-4-8,0-2-8], [11:0-0-0,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	0.11	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.16	9-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.14	7	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MR						
								Weight: 76 lb	FT = 20%

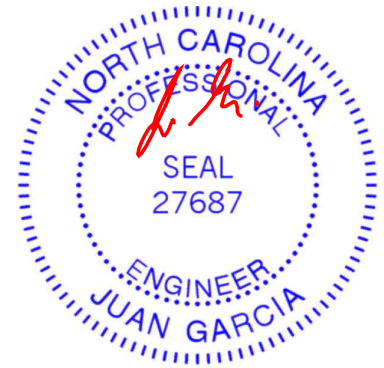
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 2-13,4-7: 2x4 SP No.2

**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) 13=0-3-8, 7=0-3-8  
 Max Horz 13=-191(LC 10)  
 Max Grav 13=637(LC 20), 7=638(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-13=-655/95, 2-11=-598/122, 2-3=-637/74, 3-4=-674/85, 4-7=-616/95  
 BOT CHORD 10-11=-8/428, 9-10=-8/428, 6-9=-8/428, 4-6=-5/430  
 WEBS 3-9=0/388

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 14-10-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29,2020

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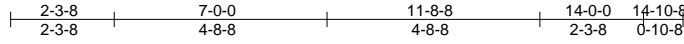
818 Soundside Road  
 Edenton, NC 27932



Job COASTROOF	Truss D02T	Truss Type SPECIAL	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415906
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:04 2020 Page 1  
ID:jqCdRHblrrLU73l5XDfb5zc7xm-B9aUqpAakKxwl446Z7\_zwnEyQTYi?3KESpXSAQyOYsL



4x6 =

Scale = 1:51.0

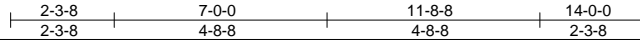
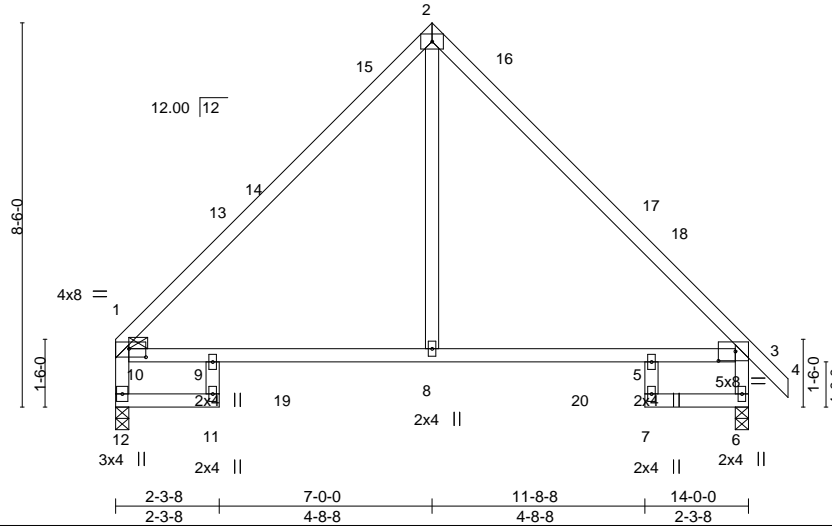


Plate Offsets (X,Y)-- [1:0-1-12,0-1-12], [1:0-4-8,0-2-4], [3:0-4-8,0-2-8], [10:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	Vert(LL) 0.10	8-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.15	8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.12	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MR						
							Weight: 74 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-12,3-6: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 12=0-3-8, 6=0-3-8  
Max Horz 12=-184(LC 8)  
Max Grav 12=594(LC 20), 6=640(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-12=-591/52, 1-10=-534/83, 1-2=-633/67, 2-3=-675/82, 3-6=-618/94  
BOT CHORD 9-10=-6/430, 8-9=-6/430, 5-8=-6/430, 3-5=-4/432  
WEBS 2-8=0/386

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 14-10-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29, 2020

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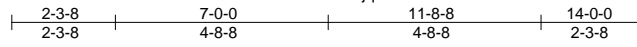


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss D03T	Truss Type SPECIAL	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415907
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:05 2020 Page 1  
ID:jqCdRHblruLU73i5XDfb5zc7xm-fl8t19ACVd3nwEfl6qWCT\_m7Bst9kWaNgTG?isyOYsk



4x6 =

Scale = 1:51.0

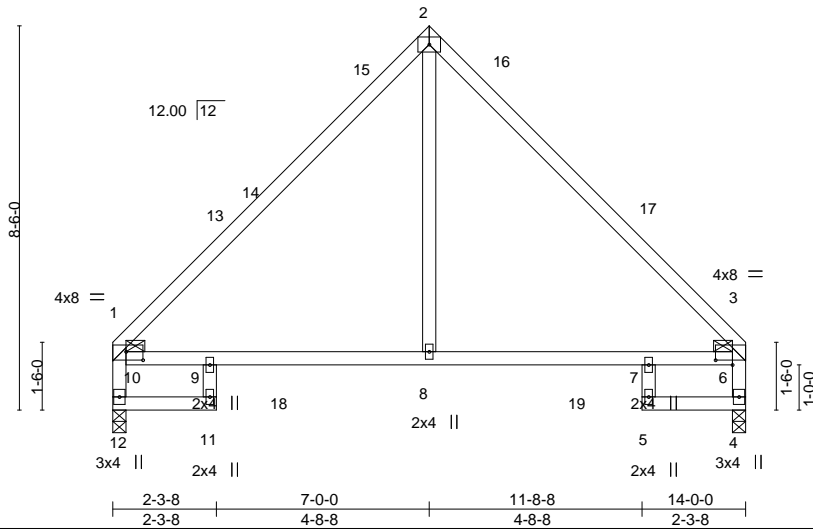


Plate Offsets (X,Y)-- [1:0-1-12,0-1-12], [1:0-4-8,0-2-4], [3:0-1-12,0-1-12], [3:0-4-8,0-1-4], [6:0-0-0,0-1-12], [10:0-0-0,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	0.11	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.15	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.10	4	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MR						
								Weight: 73 lb	FT = 20%

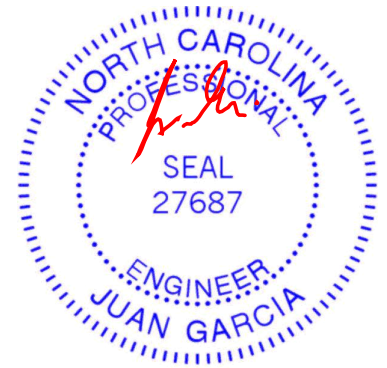
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-12,3-4: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 12=0-3-8, 4=0-3-8  
Max Horz 12=-172(LC 10)  
Max Grav 12=596(LC 20), 4=596(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-12=-591/55, 1-10=-534/82, 1-2=-635/68, 2-3=-668/84, 4-6=-569/56, 3-6=-530/81  
BOT CHORD 9-10=-16/422, 8-9=-16/422, 7-8=-16/422, 6-7=-16/422  
WEBS 2-8=0/386

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 13-10-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29,2020

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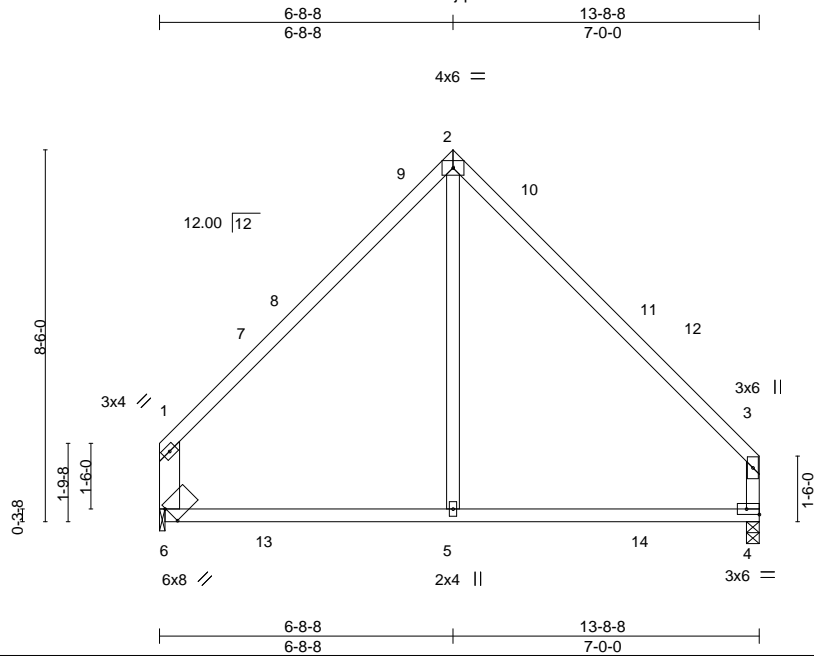


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss D04	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415908
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:06 2020 Page 1  
ID:jqCdRHblruLU73I5XDfb5zc7xm-7XiFFVBrGxCeXNEVgY1R?CJIPGCJTz2Wv70ZFlyOYsJ



Scale = 1:52.7

Plate Offsets (X,Y)-- [4:Edge,0-1-8], [6:0-0-3,0-4-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.11	4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.19	4-5	>847	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MR	Wind(LL) -0.07	4-5	>999	240	Weight: 67 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x6 SP No.2 \*Except\*  
 3-4: 2x4 SP No.2, 2-5: 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.**

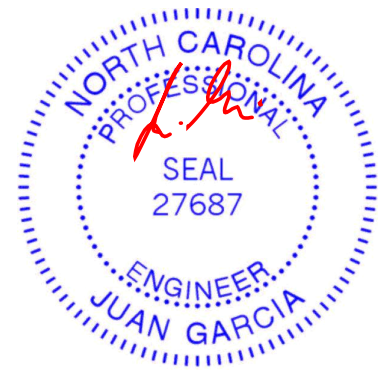
(size) 4=0-3-8, 6=0-1-8  
 Max Horz 6=176(LC 8)  
 Max Grav 4=610(LC 19), 6=619(LC 20)

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

TOP CHORD 1-6=-476/93, 1-2=-572/93, 2-3=-577/92, 3-4=-480/94  
 BOT CHORD 5-6=-19/344, 4-5=-19/344  
 WEBS 2-5=0/349

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-4 to 3-6-4, Interior(1) 3-6-4 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 13-10-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 6 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) 6.



October 29,2020

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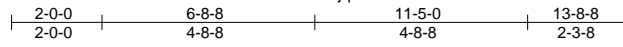


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss D04T	Truss Type SPECIAL	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415909
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:07 2020 Page 1  
ID:jqCdRHblrluLU73l5XDFb5zc7xm-bkFdSqCT1FKV9XphEFYgYPsTagalCQCg8nl6nlyOYsl



4x6 =

Scale = 1:51.0

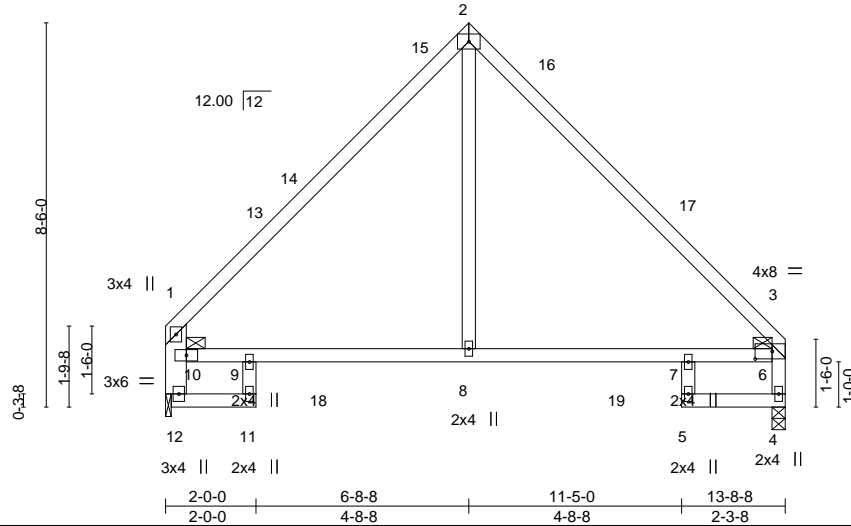


Plate Offsets (X,Y)-- [3:0-4-8,0-2-0], [6:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.75	Vert(LL)	0.09	8-9	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.45	Vert(CT)	-0.12	7-8	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.08	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR					Weight: 73 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 1-12: 2x6 SP No.2, 3-4: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 12=0-1-8  
 Max Horz 12=-176(LC 8)  
 Max Grav 4=580(LC 19), 12=588(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 10-12=-567/73, 1-10=-508/82, 1-2=-599/70, 2-3=-640/86, 4-6=-555/56, 3-6=-511/83  
 BOT CHORD 9-10=-21/401, 8-9=-21/401, 7-8=-21/401, 6-7=-21/401  
 WEBS 2-8=0/364

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-4 to 3-6-4, Interior(1) 3-6-4 to 7-0-0, Exterior(2) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 13-10-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 12.



October 29, 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



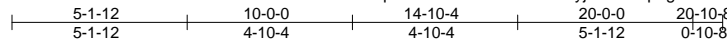
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss G01	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415910
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:08 2020 Page 1

ID:hwqUHzvaaVU85LTwHdxeyfjyRC1-3wp?gAD5nYSLnhOtoy3v4dOk54pSxI0pMRVfJBjByOYsH



4x6 =

Scale = 1:67.7

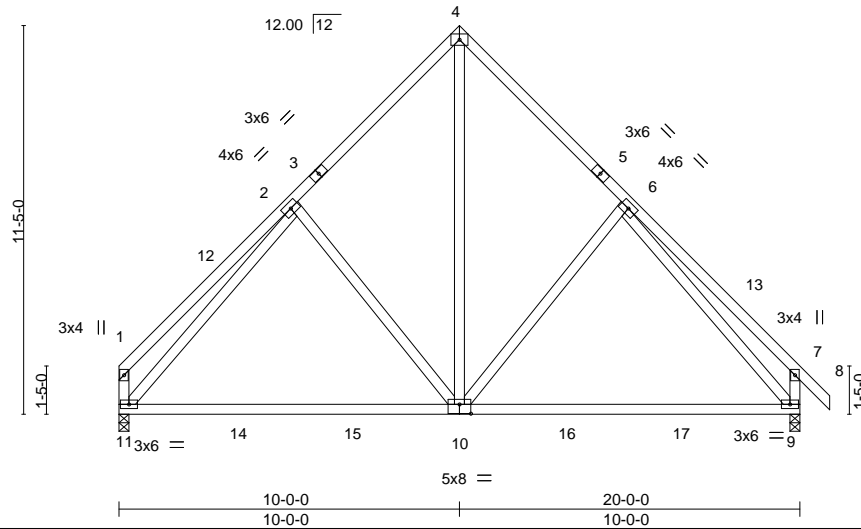


Plate Offsets (X,Y)-- [10:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL) -0.21	10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.40	9-10	>598	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MS	Wind(LL) 0.01	10	>999	240		
							Weight: 138 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 1-11,7-9: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 11=0-3-8, 9=0-3-8  
 Max Horz 11=-243(LC 10)  
 Max Grav 11=808(LC 20), 9=852(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-11=-308/96, 1-2=-337/102, 2-4=-678/148, 4-6=-677/144, 6-7=-369/151, 7-9=-393/149  
 BOT CHORD 10-11=-64/615, 9-10=0/522  
 WEBS 4-10=-105/568, 6-9=-576/0, 2-11=-588/4

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-0-0, Exterior(2) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 20-10-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29,2020

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818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss G01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415911
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:10 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjRC1-?Ixm4sELJAI30?XGvN5NA2T73th5Poh6qk\_mO3yOYsF

-0-10-8 10-0-0 20-0-0 20-10-8  
0-10-8 10-0-0 10-0-0 0-10-8

3x6 =

Scale = 1:71.4

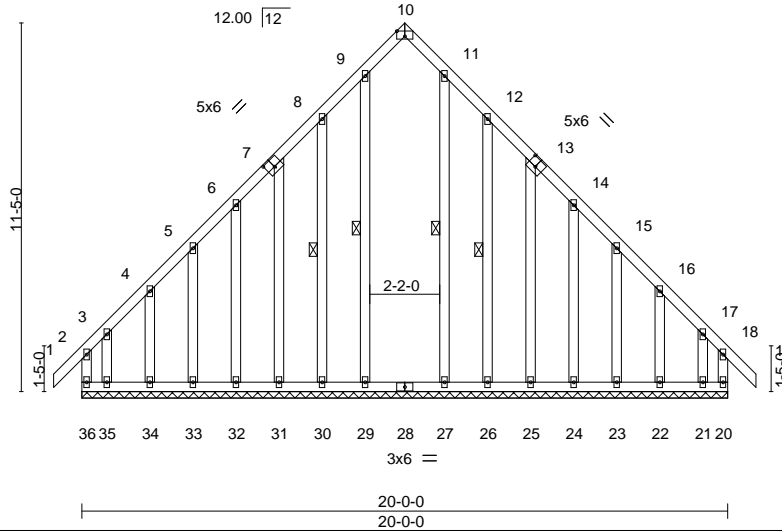


Plate Offsets (X,Y)-- [7:0-3-0,0-3-0], [10:0-3-0,Edge], [13:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.00	19	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.00	19	n/r	120		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.09	Horz(CT) -0.02	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R						
							Weight: 196 lb	FT = 20%

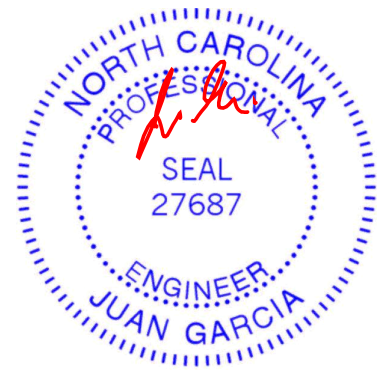
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 9-29, 8-30, 11-27, 12-26

**REACTIONS.** All bearings 20-0-0.  
 (lb) - Max Horz 36=-249(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except 36=-324(LC 8), 20=-269(LC 9), 35=-289(LC 9), 21=-249(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except 36=368(LC 11), 10=404(LC 13), 20=309(LC 10), 35=327(LC 10), 21=285(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 7-8=-197/263, 8-9=-249/324, 9-10=-284/370, 10-11=-284/370, 11-12=-249/324, 12-13=-197/263

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-4, Exterior(2) 2-1-4 to 10-0-0, Corner(3) 10-0-0 to 13-0-0, Exterior(2) 13-0-0 to 20-10-8 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.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except (jt=lb) 36=324, 20=269, 35=289, 21=249.



October 29, 2020

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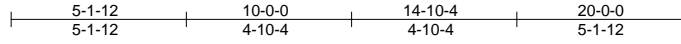
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss G02	Truss Type COMMON	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415912
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:11 2020 Page 1

ID:hwqUHzvaaVU85LTwHdxeyfjRC1-UVV8ICFz4Tqwe96ST5dciF0FLHq986jG3OjWwYOYsE



4x6 =

Scale = 1:67.7

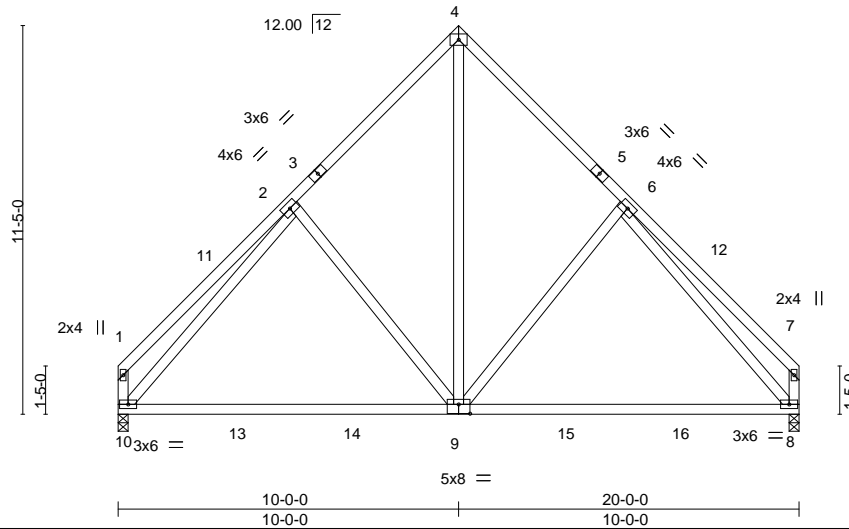


Plate Offsets (X,Y)-- [9:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.21	9-10	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.93	Vert(CT)	-0.40	9-10	>598		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL)	0.01	9	>999		
	Code IRC2015/TP12014						Weight: 136 lb	FT = 20%

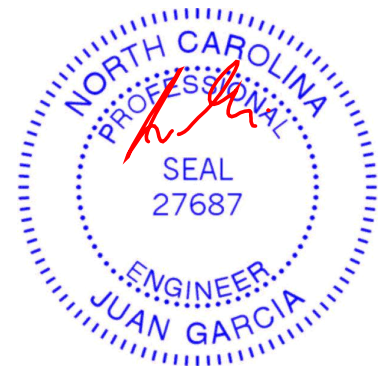
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 1-10,7-8: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 10=0-3-8, 8=0-3-8  
 Max Horz 10=229(LC 9)  
 Max Grav 10=810(LC 20), 8=810(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-10=-308/96, 1-2=-337/102, 2-4=-680/147, 4-6=-680/147, 6-7=-336/102, 7-8=-308/96  
 BOT CHORD 9-10=-72/606, 8-9=-6/516  
 WEBS 4-9=-105/571, 6-8=-589/3, 2-10=-590/3

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-0-0, Exterior(2) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 19-10-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 29,2020

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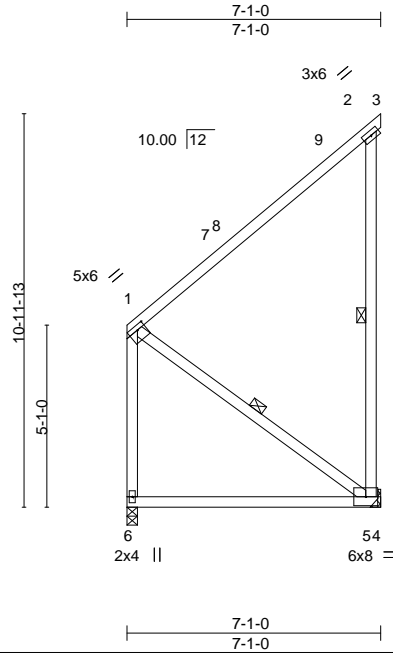
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss H01	Truss Type MONO TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415913
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:12 2020 Page 1

ID:jqCdRHllruLU73I5XDfb5zc7xm-yh3WVYGbrnynFlhe1o8rFTZLihlPthDPH2T1SyyOYsD



Scale: 3/16"=1'

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.08	5-6	>994	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.15	5-6	>516	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MS	Wind(LL)	-0.06	5-6	>999	240	Weight: 58 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 1-5: 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 8-0-6 oc bracing.  
 WEBS 1 Row at midpt 2-5, 1-5

**REACTIONS.**

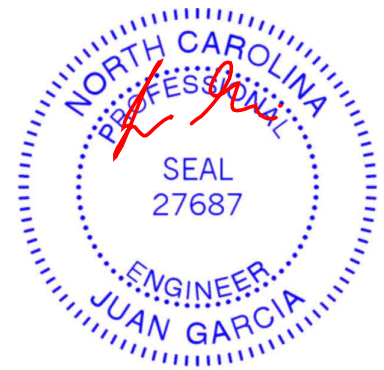
(size) 6=0-3-8, 5=Mechanical  
 Max Horz 6=310(LC 9)  
 Max Uplift 6=-84(LC 8), 5=-223(LC 9)  
 Max Grav 6=397(LC 20), 5=402(LC 19)

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

TOP CHORD 1-2=-260/249, 2-5=-290/211, 1-6=-341/225  
 BOT CHORD 5-6=-463/476  
 WEBS 1-5=-430/441

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 5=223.



October 29, 2020

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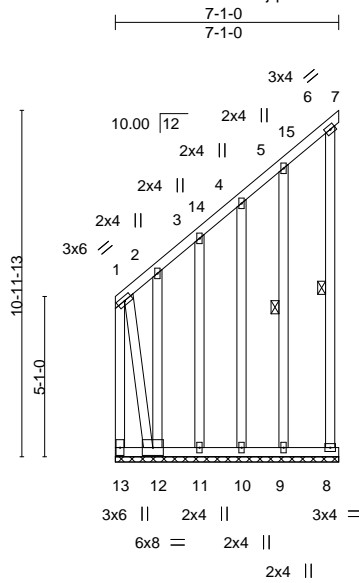
818 Soundside Road  
 Edenton, NC 27932



Job COASTROOF	Truss H01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415914
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:12 2020 Page 1  
ID:jqCdRHblrrLU73I5XDfb5zc7xm-yh3WVYGBrnynFIhe1o8rFTZLlhKQtZxPH2TtSyyOYsD



Scale = 1:73.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	-0.08	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 97 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 1-12: 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-5 oc bracing: 12-13.  
 WEBS 1 Row at midpt 6-8, 5-9

**REACTIONS.**

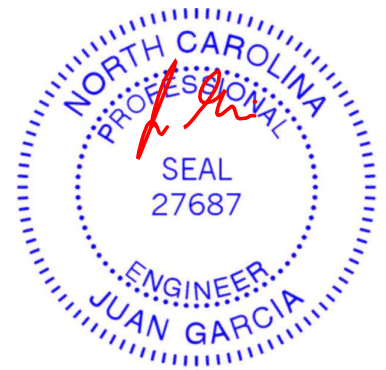
All bearings 7-1-0.  
 (lb) - Max Horz 13=311(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 7, 11, 10, 9 except 13=682(LC 10), 8=237(LC 11), 12=830(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 7, 8, 11, 10, 9 except 13=967(LC 9), 12=700(LC 10)

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

TOP CHORD 1-2=-299/309, 2-3=-309/319, 3-4=-246/259, 1-13=-1489/1463  
 BOT CHORD 12-13=-427/436  
 WEBS 1-12=-1358/1374

**NOTES-**

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 11, 10, 9 except (jt=lb) 13=682, 8=237, 12=830.



October 29, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss P01	Truss Type MONO TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415915
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:13 2020 Page 1

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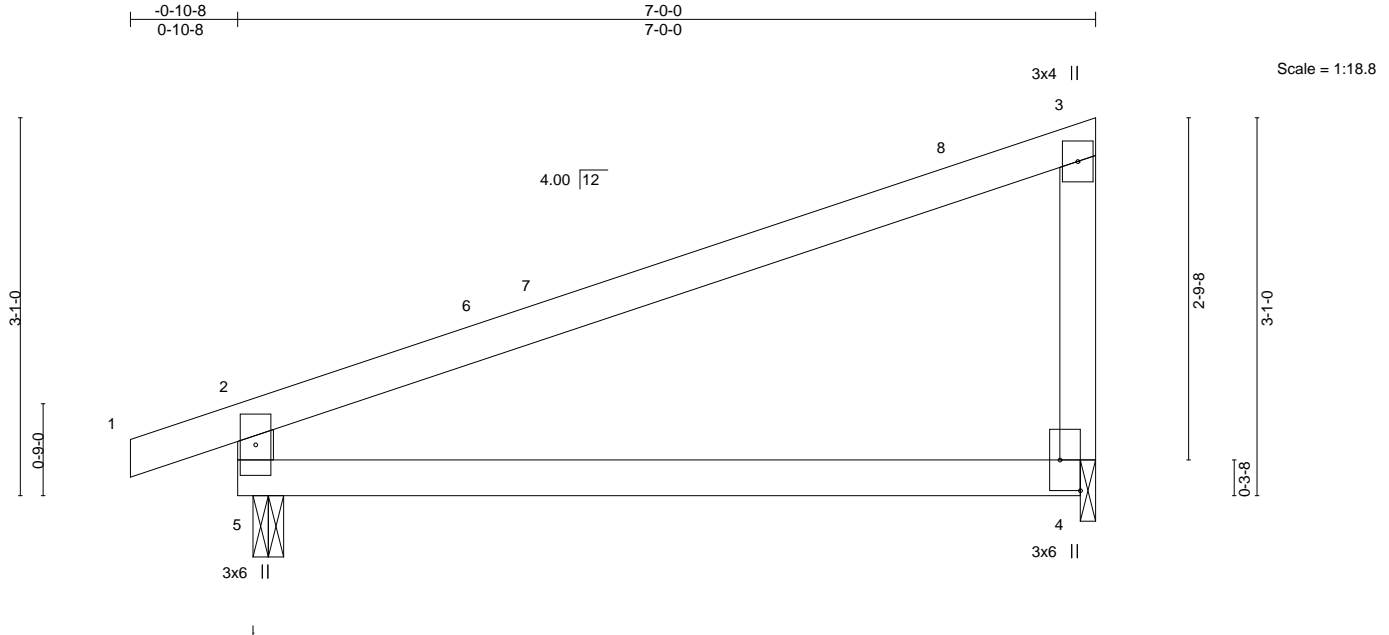


Plate Offsets (X,Y)--	[4:Edge,0-2-0]
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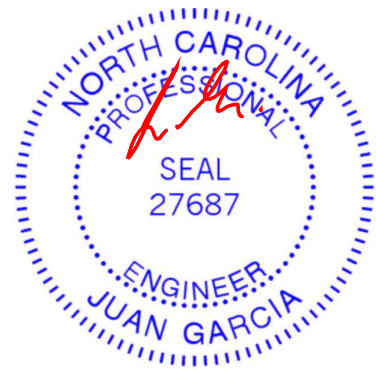
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.07	4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.15	4-5	>524	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MR	Wind(LL) 0.12	4-5	>649	240	Weight: 27 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 5=0-3-0, 4=0-1-8  
 Max Horz 5=95(LC 9)  
 Max Uplift 5=-96(LC 8), 4=-78(LC 8)  
 Max Grav 5=334(LC 1), 4=264(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-5=-285/132

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) 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.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.



October 29, 2020

Job COASTROOF	Truss P01G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415916
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:14 2020 Page 1

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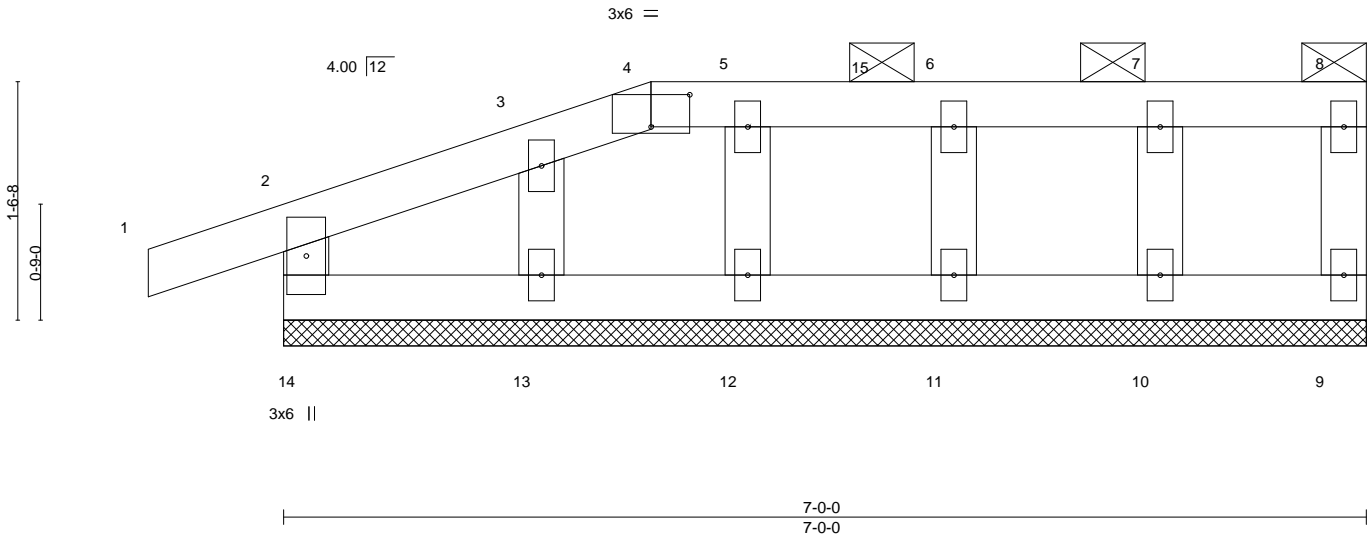


Plate Offsets (X,Y)--	[4:0-3-0,0-2-8]
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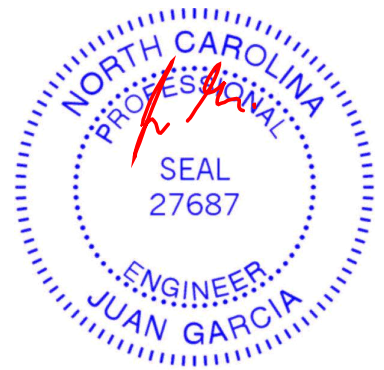
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Horz(CT) -0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R					Weight: 30 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 7-0-0.  
 (lb) - Max Horz 14=45(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 9, 10, 11, 12, 13  
 Max Grav All reactions 250 lb or less at joint(s) 14, 9, 10, 11, 12, 13

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-4-8, Exterior(2) 2-4-8 to 6-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 7) Gable studs spaced at 1-4-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 9, 10, 11, 12, 13.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 29, 2020

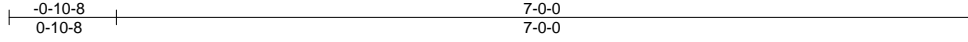
Job COASTROOF	Truss P02	Truss Type MONO TRUSS	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415917
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Builders FirstSource (Apex, NC),

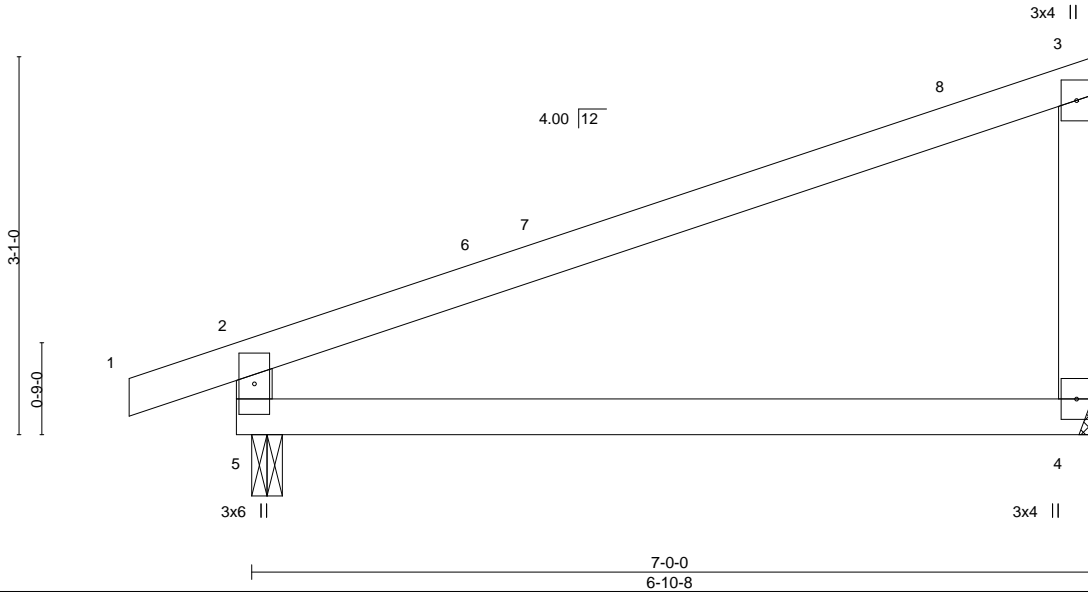
Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:14 2020 Page 1

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Scale = 1:18.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.07	4-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.15	4-5	>524		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-MR	Wind(LL)	0.12	4-5	>649	Weight: 27 lb	FT = 20%

**LUMBER-**

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

**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.**

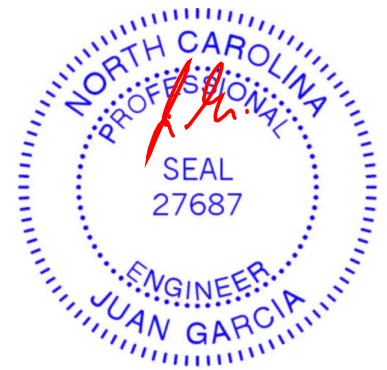
(size) 5=0-3-0, 4=Mechanical  
 Max Horz 5=95(LC 9)  
 Max Uplift 5=-96(LC 8), 4=-78(LC 8)  
 Max Grav 5=334(LC 1), 4=264(LC 1)

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

TOP CHORD 2-5=-285/132

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.



October 29, 2020

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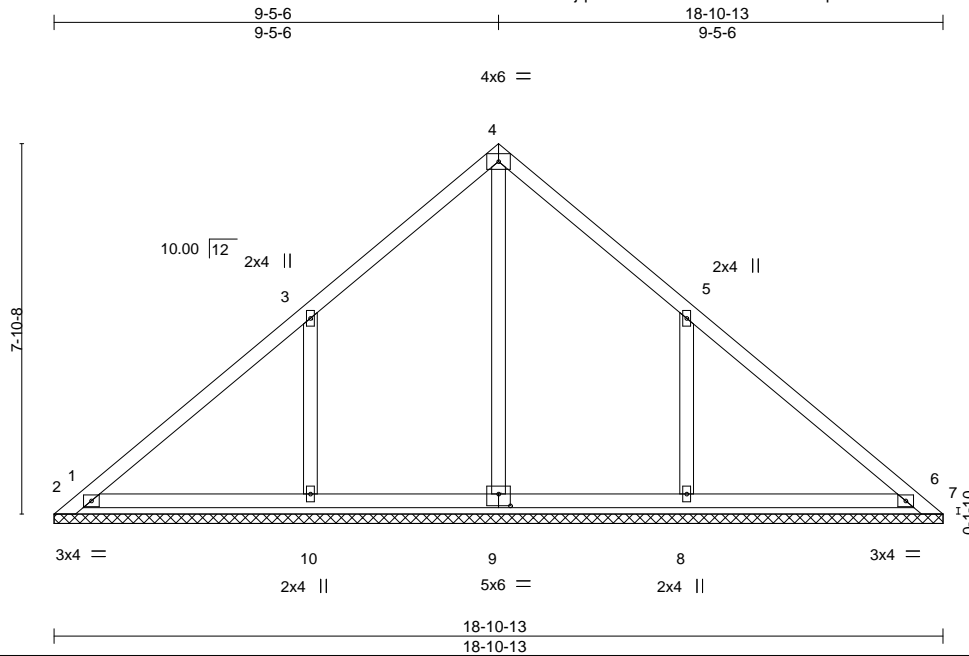


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss PB02	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415918
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:16 2020 Page 1  
ID:jqCdRHblrruLU7315XDfb5zc7xm-qS11LvJ6v0SDkw?QGeCnPJj6iljopV1?CgR4bjyOYs9



Scale = 1:49.0

Plate Offsets (X,Y)-- [9:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 85 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

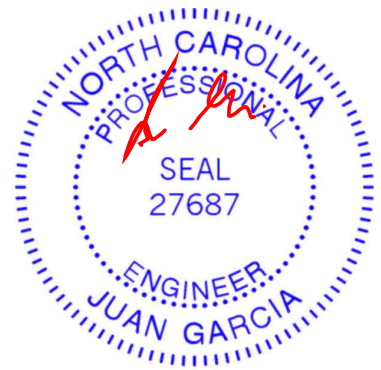
All bearings 18-10-13.  
(lb) - Max Horz 1=-152(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) except 1=-390(LC 19), 7=-309(LC 20), 2=-179(LC 12), 10=-136(LC 12), 8=-135(LC 13), 6=-126(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=578(LC 19), 9=364(LC 22), 10=462(LC 19), 8=461(LC 20), 6=550(LC 1)

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

TOP CHORD 1-2=-214/337  
WEBS 3-10=-306/192, 5-8=-306/192

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-2-12 to 3-2-12, Exterior(2) 3-2-12 to 9-5-6, Corner(3) 9-5-6 to 12-5-6, Exterior(2) 12-5-6 to 18-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 390 lb uplift at joint 1, 309 lb uplift at joint 7, 179 lb uplift at joint 2, 136 lb uplift at joint 10, 135 lb uplift at joint 8 and 126 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 29,2020

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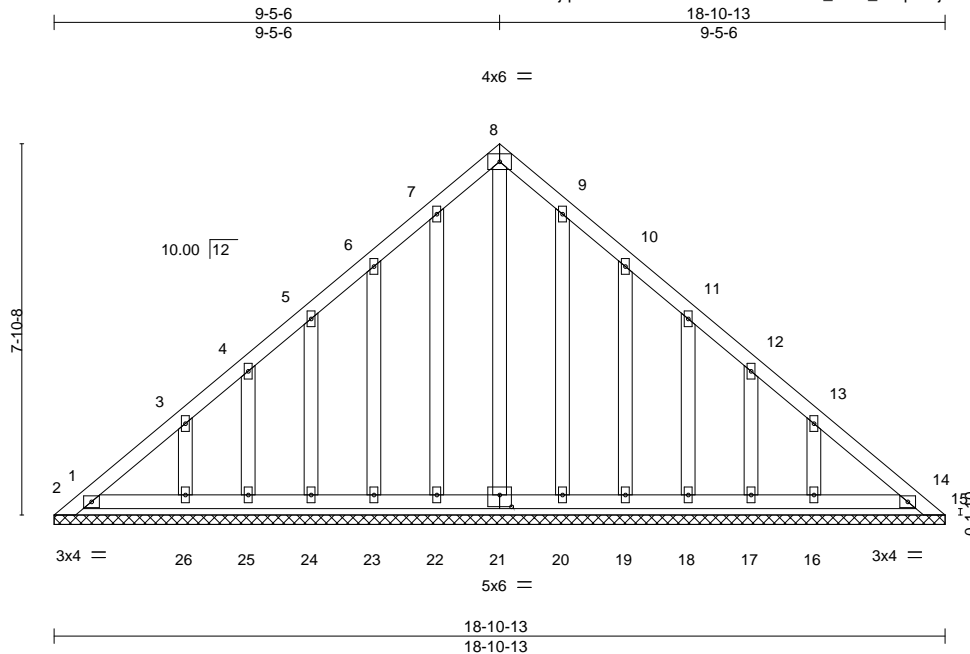


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss PB02G	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415919
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:19 2020 Page 1  
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Scale = 1:48.9

Plate Offsets (X,Y)-- [21:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 131 lb	FT = 20%

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

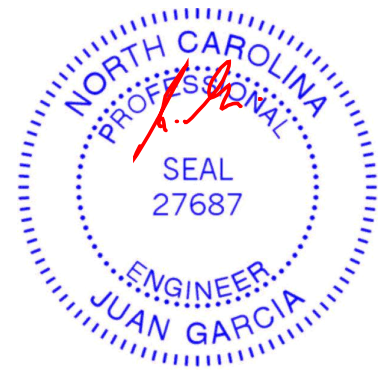
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 18-10-13.  
(lb) - Max Horz 1=-152(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 15, 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16 except 1=-139(LC 10)  
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 2, 21, 22, 14, 23, 24, 25, 26, 20, 19, 18, 17, 16

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-2-12 to 3-2-12, Exterior(2) 3-2-12 to 9-5-6, Corner(3) 9-5-6 to 12-5-6, Exterior(2) 12-5-6 to 18-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16 except (jt=lb) 1=139.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 29,2020

**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



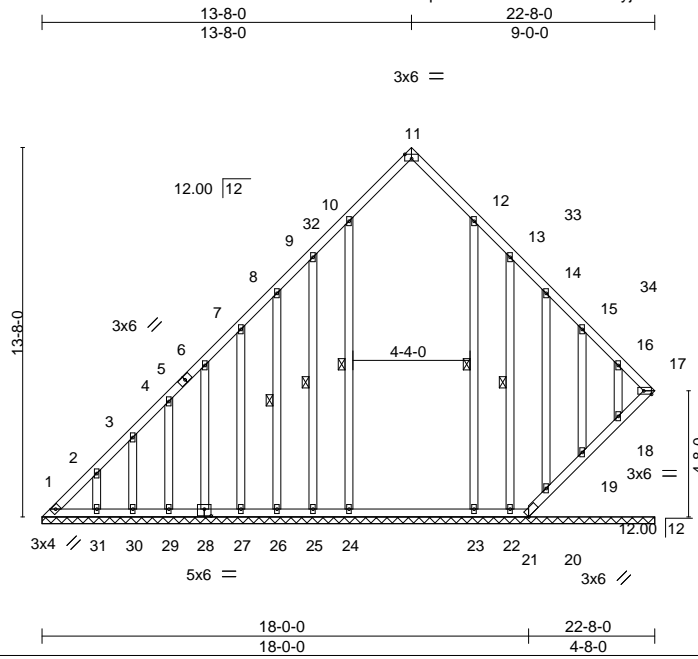
818 Soundside Road  
Edenton, NC 27932



Job COASTROOF	Truss V01	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415921
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:22 2020 Page 1  
ID:hwqUHzvaaVU85LTwHdxeyfjRC1-fclczOtUsDMSrSZcvJBfazBPjnIDDZtbcuPpNyOYs3



Scale = 1:85.2

Plate Offsets (X,Y)-- [11:0-3-0,Edge], [17:0-3-7,Edge], [28:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT)	0.01	17	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S						
							Weight: 208 lb	FT = 20%

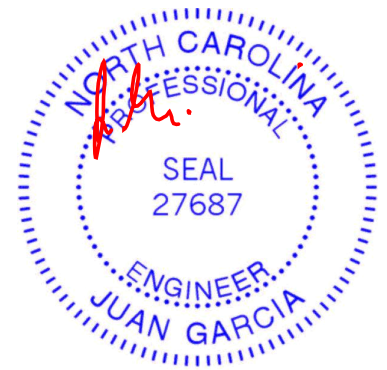
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 10-24, 9-25, 8-26, 12-23, 13-22

**REACTIONS.** All bearings 22-8-0.  
(lb) - Max Horz 1=256(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 24, 25, 26, 27, 28, 29, 30, 31, 23, 22, 20, 19, 18 except  
17=-116(LC 11), 21=-213(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 21, 25, 26, 27, 28, 29, 30, 31, 22, 20, 19, 18 except  
17=419(LC 13), 1=333(LC 12), 24=340(LC 19), 23=343(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-480/320, 2-3=-409/258, 3-4=-354/217, 4-6=-295/171, 16-17=-291/171  
BOT CHORD 20-21=-186/321, 19-20=-187/314, 18-19=-186/313, 17-18=-189/313

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 13-8-0, Exterior(2) 13-8-0 to 16-8-0, Interior(1) 16-8-0 to 22-5-8 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
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 24, 25, 26, 27, 28, 29, 30, 31, 23, 22, 20, 19, 18 except (jt=lb) 17=116, 21=213.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 17, 20, 19, 18.



October 29, 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



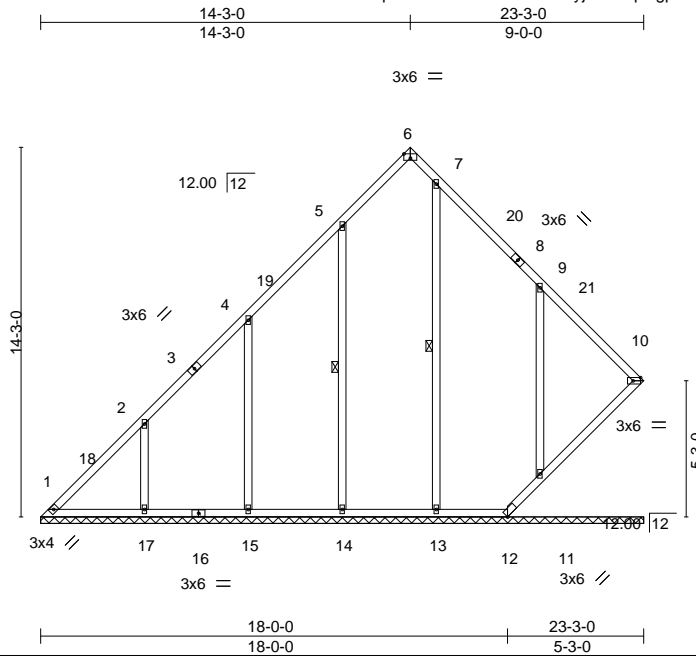
818 Soundside Road  
Edenton, NC 27932



Job COASTROOF	Truss V02	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	143415922
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:23 2020 Page 1  
ID:hwqUHZvaaVU85LTwHdxeYfyjRC1-7pDgpJOVF9LD4?1mAcqQBnWIT75Lyc71pGdylpyOYs2



Scale = 1:88.8

Plate Offsets (X,Y)-- [6:0-3-0,Edge], [10:0-3-7,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S						
							Weight: 149 lb	FT = 20%

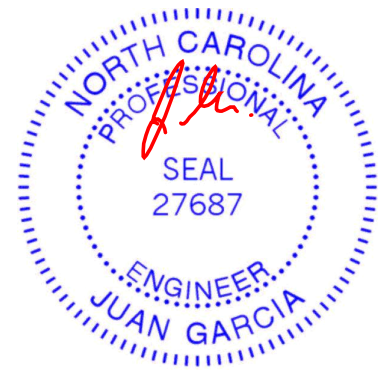
**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
OTHERS 2x4 SP No.3 \*Except\*  
7-13: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 10-11.  
WEBS 1 Row at midpt 5-14, 7-13

**REACTIONS.** All bearings 23-3-0.  
(lb) - Max Horz 1=274(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 13 except 12=230(LC 13), 10=103(LC 11), 14=105(LC 12), 11=181(LC 13), 17=161(LC 12), 15=149(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 12 except 1=323(LC 12), 10=415(LC 13), 14=406(LC 19), 11=387(LC 20), 13=329(LC 20), 17=435(LC 19), 15=451(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-478/372, 2-4=-303/227, 9-10=-276/200  
BOT CHORD 11-12=-212/348, 10-11=-255/348  
WEBS 9-11=-311/226, 2-17=-286/205, 4-15=-268/196

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 14-3-0, Exterior(2) 14-3-0 to 17-3-0, Interior(1) 17-3-0 to 23-0-8 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
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13 except (jt=lb) 12=230, 10=103, 14=105, 11=181, 17=161, 15=149.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 11.



October 29, 2020

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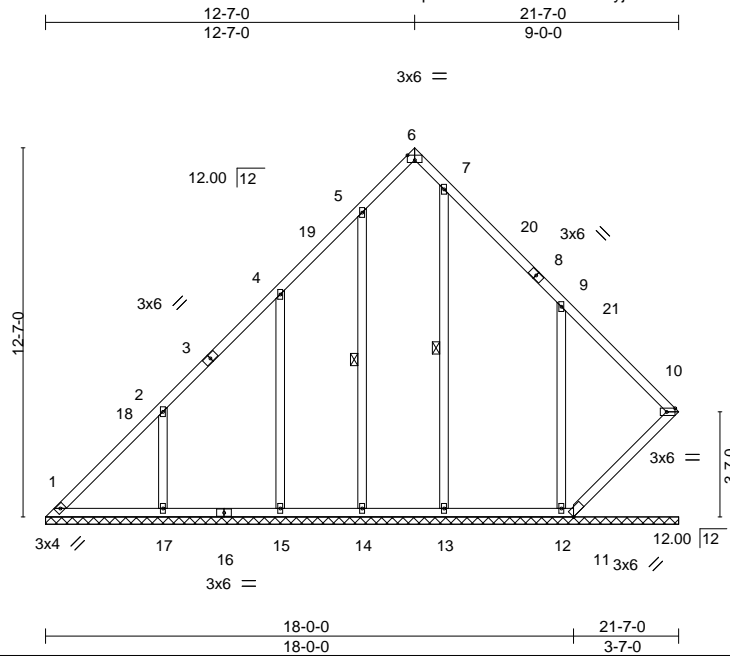


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V03	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415923
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:24 2020 Page 1  
ID:hwqUHZvaaVU85LTwHdxeyfjRC1-b?n20eP70TT4i8cykJLfk?3TDXQch4pA2wNWtFyOys1



Scale = 1:78.5

Plate Offsets (X,Y)-- [6:0-3-0,Edge], [10:0-3-7,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S					Weight: 137 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-11.  
WEBS 1 Row at midpt 5-14, 7-13

**REACTIONS.**

All bearings 21-7-0.  
(lb) - Max Horz 1=234(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 13 except 11=244(LC 13), 10=103(LC 11), 12=171(LC 13), 17=164(LC 12), 15=138(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 11 except 1=277(LC 12), 10=414(LC 13), 14=264(LC 19), 12=516(LC 20), 13=381(LC 20), 17=442(LC 19), 15=417(LC 19)

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

TOP CHORD 1-2=-413/326, 9-10=-273/209  
BOT CHORD 10-11=-262/348  
WEBS 9-12=-310/224, 2-17=-291/208

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 12-7-0, Exterior(2) 12-7-0 to 15-7-0, Interior(1) 15-7-0 to 21-4-8 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 13 except (jt=lb) 11=244, 10=103, 12=171, 17=164, 15=138.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10.



October 29, 2020

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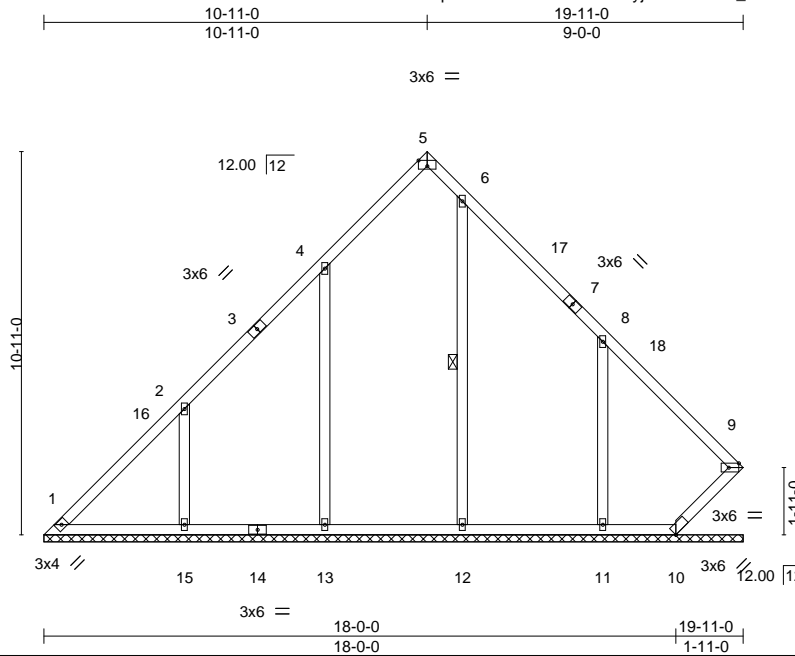


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V04	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415924
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:25 2020 Page 1  
ID:hwqUHZvaaVU85LTwHdxeyfjRC1-3BLRE\_QlnnbxJIB8H1tuHCbe8wmYQXYJHa63QiyOYs0



Scale = 1:65.6

Plate Offsets (X,Y)-- [5:0-3-0,Edge], [9:0-3-7,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.27	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S						
							Weight: 110 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.  
WEBS 1 Row at midpt 6-12

**REACTIONS.** All bearings 19-11-0.  
(lb) - Max Horz 1=204(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 12 except 10=-247(LC 13), 9=-129(LC 11), 11=-181(LC 13), 15=-167(LC 12), 13=-126(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 10 except 9=438(LC 13), 11=428(LC 20), 12=407(LC 20), 15=436(LC 19), 13=447(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-343/268, 8-9=-288/205  
BOT CHORD 9-10=-257/365  
WEBS 8-11=-304/223, 2-15=-293/211

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 10-11-0, Exterior(2) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12 except (jt=lb) 10=247, 9=129, 11=181, 15=167, 13=126.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9.



October 29, 2020

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818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V05	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415925
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:26 2020 Page 1  
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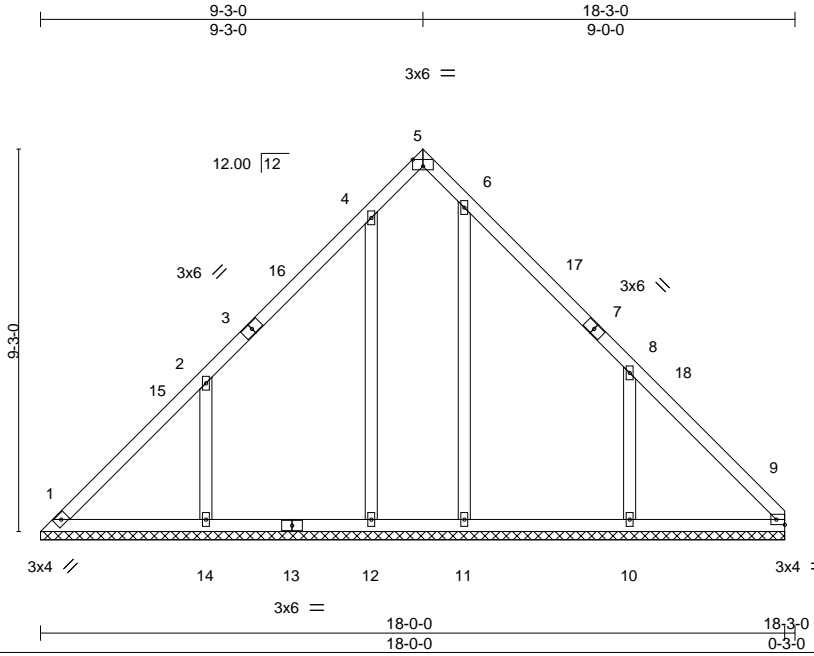


Plate Offsets (X,Y)-- [5:0-3-0,Edge], [9:Edge,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S					Weight: 97 lb	FT = 20%

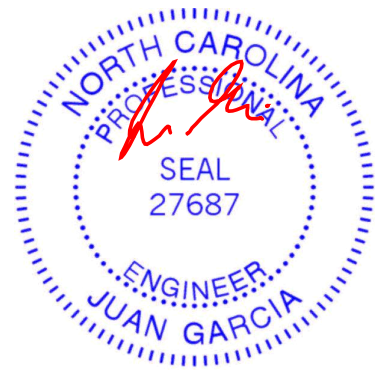
**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 18-0-0.  
(lb) - Max Horz 1=-175(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 12, 9 except 10=-193(LC 13), 14=-170(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 10=457(LC 20), 11=323(LC 20), 14=451(LC 19), 12=331(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-301/255, 8-9=-300/261  
WEBS 8-10=-316/238, 2-14=-300/216

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 9-3-0, Exterior(2) 9-3-0 to 12-3-0, Interior(1) 12-3-0 to 17-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 11, 12, 9 except (jt=lb) 10=193, 14=170.



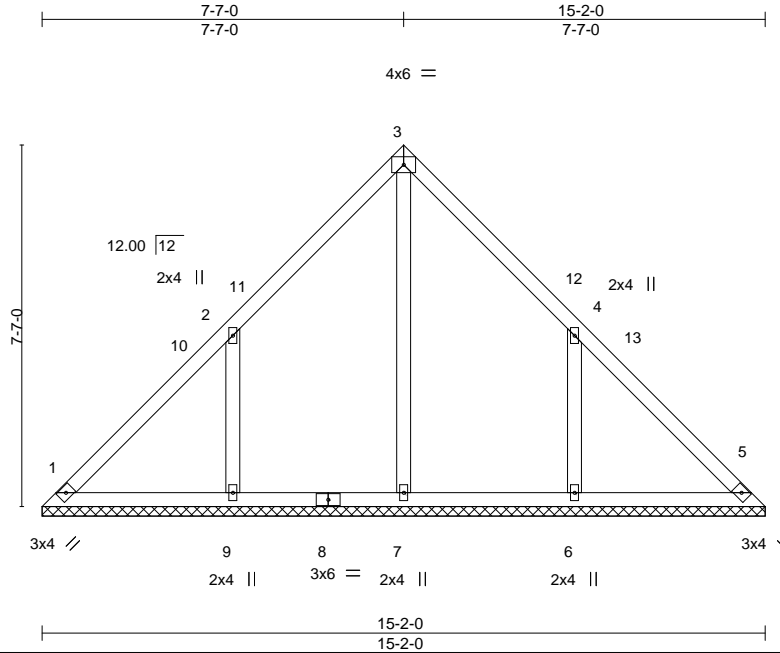
October 29, 2020

Job COASTROOF	Truss V06	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415926
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:27 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjyRC1-0aTBfgR0JOrfZcLXPSvMMdh\_5kTZuTFckubAUayOYs\_



Scale: 1/4"=1'

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 74 lb	FT = 20%

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

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

**REACTIONS.** All bearings 15-2-0.  
 (lb) - Max Horz 1=143(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 6=166(LC 13), 9=166(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=322(LC 22), 6=423(LC 20), 9=423(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-6=-288/207, 2-9=-288/207

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 7-7-0, Exterior(2) 7-7-0 to 10-7-0, Interior(1) 10-7-0 to 14-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (it=lb) 6=166, 9=166.



October 29, 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



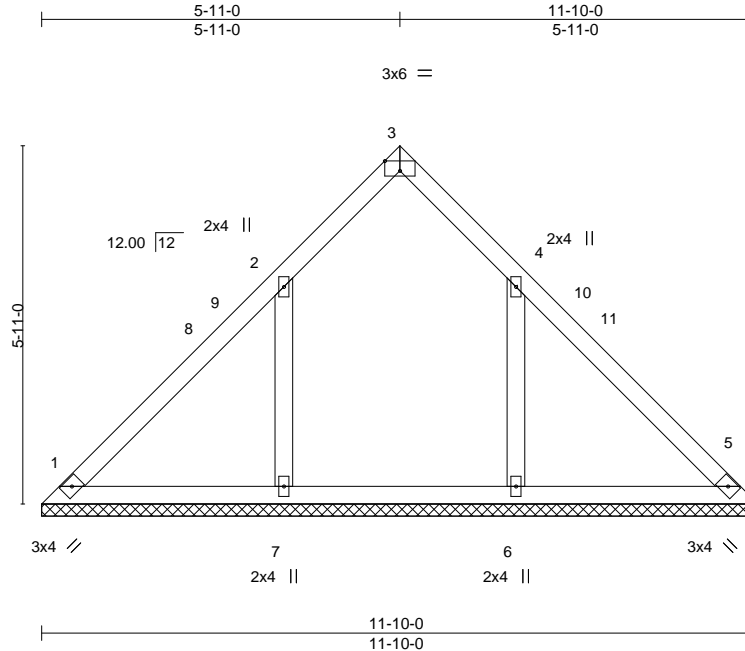
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V07	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415927
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:28 2020 Page 1

ID:hwqUHzvaaVU85LTwHdxeyfjRC1-Um1Zs0Se4izWAmvjz9QburDAb8pOdxXmzYl?1yOYrz



Scale = 1:38.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 51 lb	FT = 20%

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

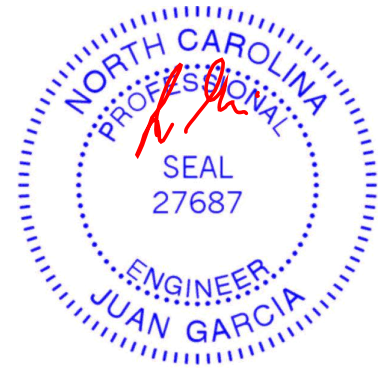
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-10-0.  
 (lb) - Max Horz 1=-110(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) except 6=-128(LC 13), 7=-129(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=393(LC 20), 7=395(LC 19)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 5-11-0, Exterior(2) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 11-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 6 and 129 lb uplift at joint 7.



October 29, 2020

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

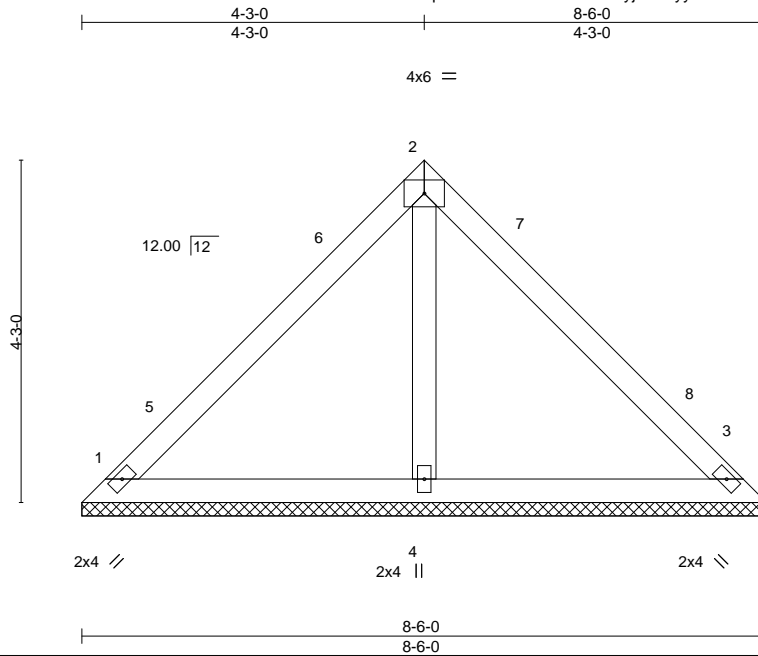
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 COASTROOF	Truss V08	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415928
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:29 2020 Page 1  
 ID:hwqUHZvaaVU85LTwHdxeYfyjRC1-yyax4MTGr?5NowUwWtxqR2mKBY8pMP?vCC4GYTyOYry



Scale = 1:28.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 35 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

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

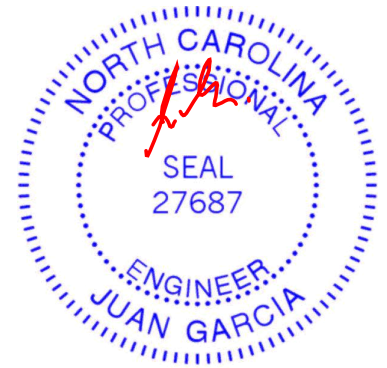
**REACTIONS.**

(size) 1=8-6-0, 3=8-6-0, 4=8-6-0  
 Max Horz 1=77(LC 11)  
 Max Uplift 1=-17(LC 13), 3=-17(LC 13)  
 Max Grav 1=173(LC 1), 3=173(LC 1), 4=278(LC 1)

**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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 4-3-0, Exterior(2) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 8-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 3.



October 29,2020

**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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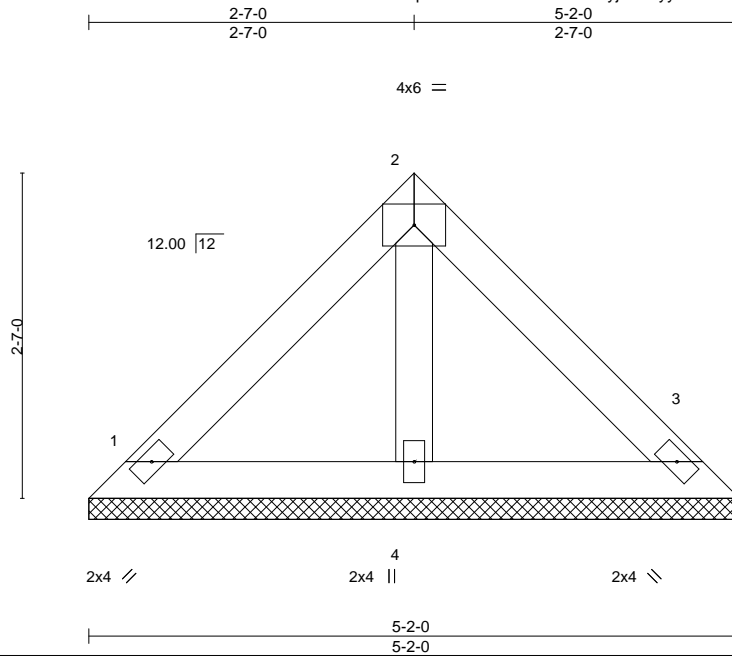


818 Soundside Road  
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Job COASTROOF	Truss V09	Truss Type VALLEY	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415929
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:29 2020 Page 1  
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Scale = 1:18.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

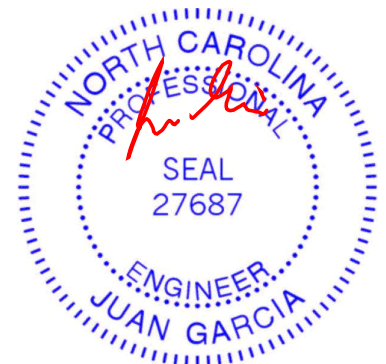
**REACTIONS.**

(size) 1=5-2-0, 3=5-2-0, 4=5-2-0  
Max Horz 1=44(LC 10)  
Max Uplift 1=15(LC 13), 3=15(LC 13)  
Max Grav 1=107(LC 1), 3=107(LC 1), 4=144(LC 1)

**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=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1 and 15 lb uplift at joint 3.



October 29, 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 COASTROOF	Truss V10	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415930
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:30 2020 Page 1

ID:hwqUHvzvaaVU85LTwHdxeyfjRC1-Q98JHiUucJDEQ3364aS3zGJOLxST5qz2Qsq4vyOYrx

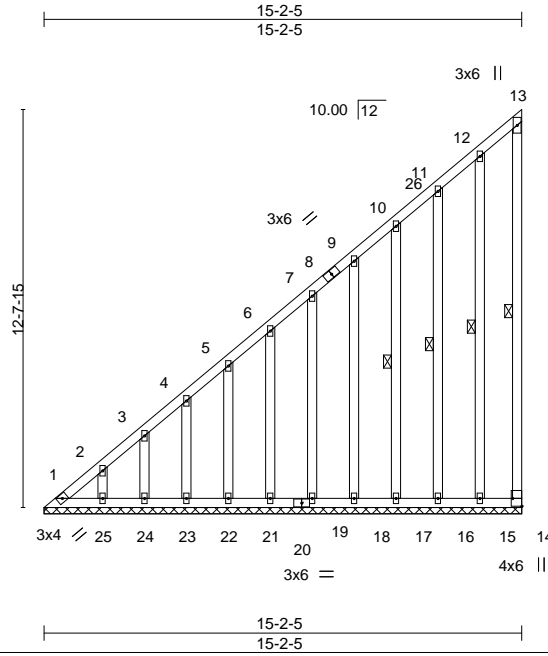


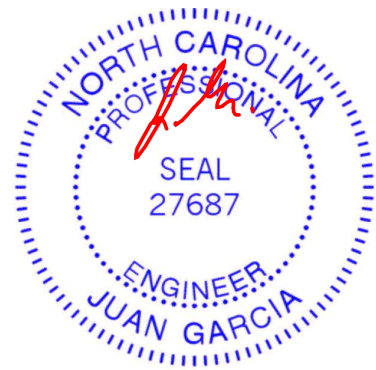
Plate Offsets (X,Y)-- [14:Edge,0-3-8]						PLATES	GRIP
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	n/a	-	n/a
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	n/a	-	n/a
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	-0.00	14	n/a
BCDL 10.0	Code	IRC2015/TP12014	Matrix-S				
							Weight: 158 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 13-14, 12-15, 11-16, 10-17
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 15-2-5.  
 (lb) - Max Horz 1=367(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 17, 18, 19, 21, 22, 23, 24, 25 except 14=128(LC 11), 1=116(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 1

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-524/529, 2-3=-485/487, 3-4=-450/454, 4-5=-414/418, 5-6=-378/383, 6-7=-343/347, 7-9=-307/312, 9-10=-271/276

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-2-5, Interior(1) 3-2-5 to 15-0-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) All plates are 2x4 MT20 unless otherwise indicated.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 17, 18, 19, 21, 22, 23, 24, 25 except (jt=lb) 14=128, 1=116.



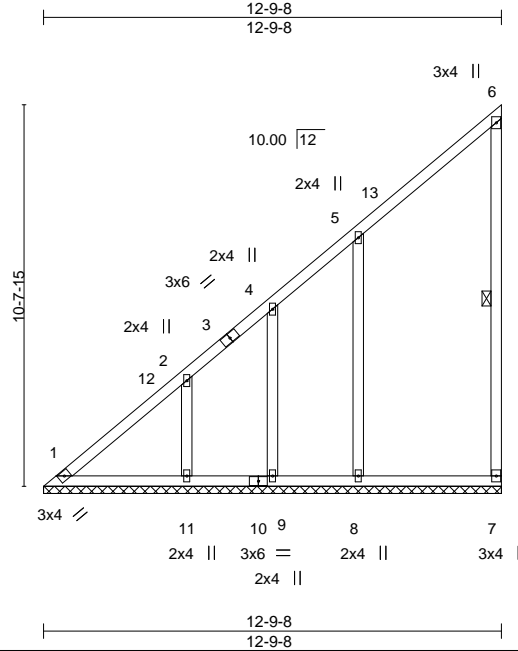
October 29, 2020

Job COASTROOF	Truss V11	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415931
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:31 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjyRC1-uLiiU2VWnDL51DelelzIWTrWbLmGqFECfWZnCLyOYrw



Scale: 3/16"=1'

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 1.00	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 79 lb	FT = 20%

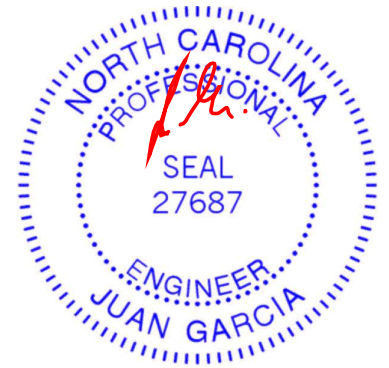
**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 12-9-8.  
(lb) - Max Horz 1=307(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 9 except 8=111(LC 12), 11=107(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9 except 8=443(LC 19), 11=319(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-432/439, 2-4=-332/320, 4-5=-293/304  
WEBS 5-8=-281/172

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 12-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 9 except (jt=lb) 8=111, 11=107.



October 29, 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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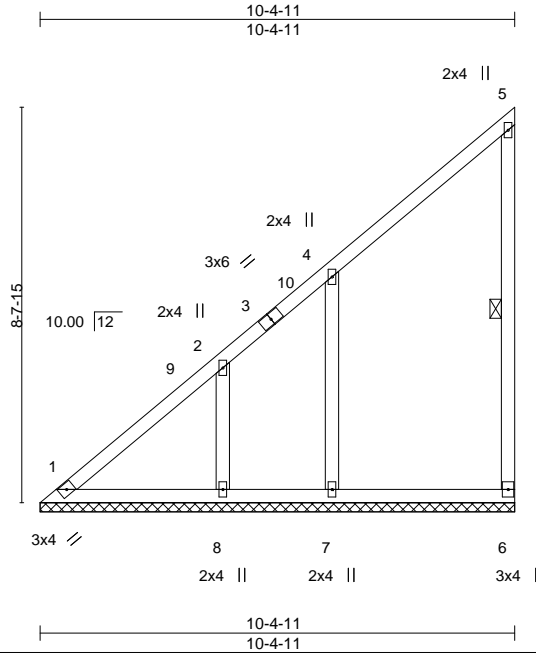
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V12	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415932
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:32 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjyRC1-MXG4iOV88wTxfNDUC?VX3hOmyI9\_ZImLuAJx8oyOYrv



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 58 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-6

**REACTIONS.**

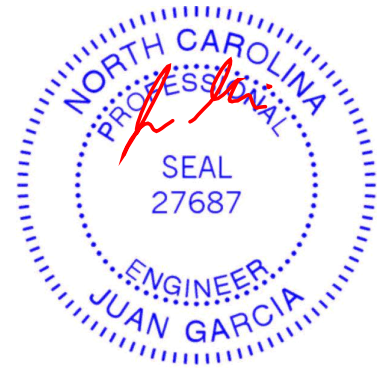
All bearings 10-4-11.  
 (lb) - Max Horz 1=247(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 7 except 8=100(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=362(LC 19), 8=260(LC 1)

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

TOP CHORD 1-2=-360/352, 2-4=-278/265

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 10-2-15 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 7 except (jt=lb) 8=100.



October 29, 2020

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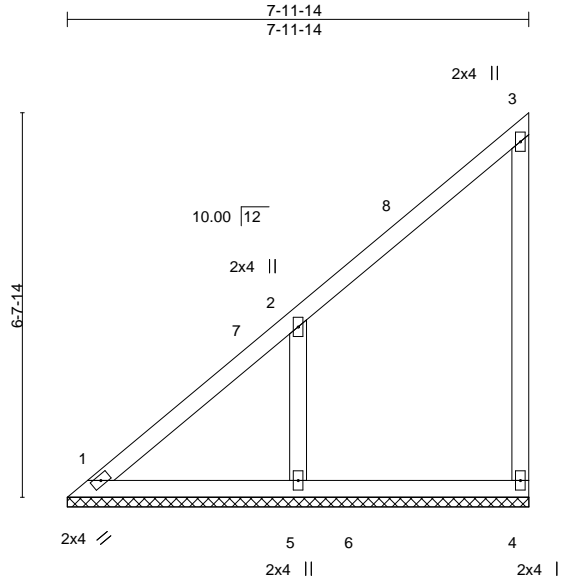
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V13	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415933
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:33 2020 Page 1

ID:hwqUHzvaaVU85LTwHdxeyfjyRC1-qkqSvjWmvEboHXohli0mbuw0z9VolCmV6p2UhEyOYru



Scale = 1:39.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.37	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 40 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

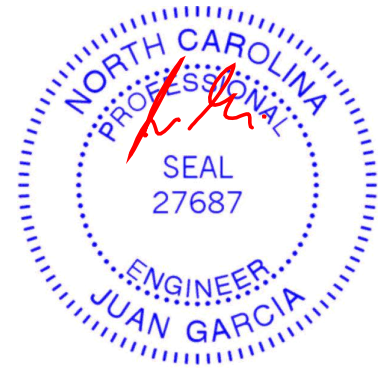
(size) 1=7-11-14, 4=7-11-14, 5=7-11-14  
 Max Horz 1=186(LC 9)  
 Max Uplift 1=-15(LC 8), 4=-42(LC 9), 5=-119(LC 12)  
 Max Grav 1=151(LC 20), 4=193(LC 19), 5=420(LC 19)

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

TOP CHORD 1-2=-289/278  
 WEBS 2-5=-295/187

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 7-10-2 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=119.



October 29, 2020

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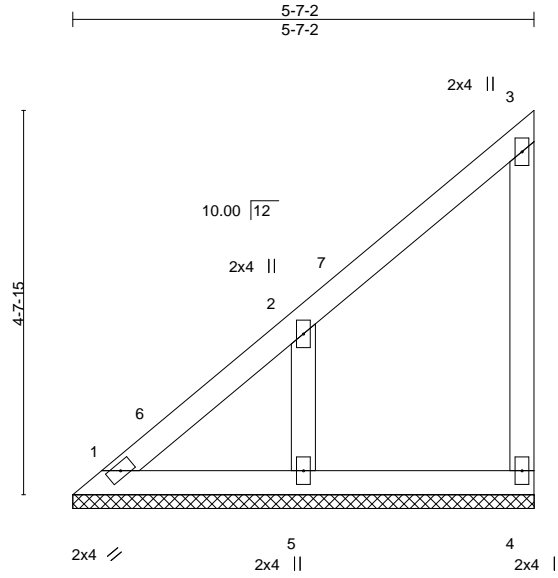
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V14	Truss Type GABLE	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415934
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:33 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjRC1-qkqSvjWmvEboHXohli0mbuw2\_9Y9ID9V6p2UHEyOYru



Scale = 1:27.9

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 27 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

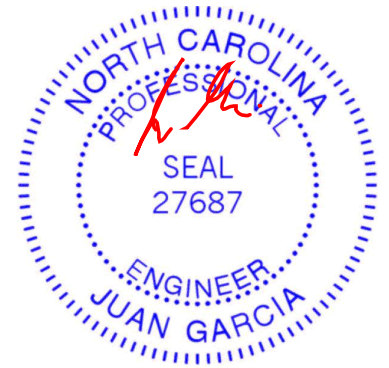
**REACTIONS.**

(size) 1=5-7-2, 4=5-7-2, 5=5-7-2  
 Max Horz 1=126(LC 11)  
 Max Uplift 1=-12(LC 8), 4=-28(LC 9), 5=-88(LC 12)  
 Max Grav 1=102(LC 20), 4=96(LC 19), 5=265(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.



October 29, 2020

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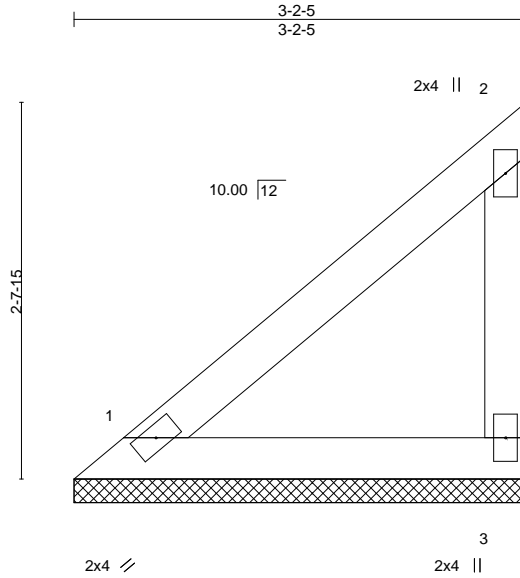


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V15	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415935
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:34 2020 Page 1  
ID:hwqUHZvaaVU85LTwHdxeYfyjRC1-lwOq73XPgYfuhNtJQX?86TDAZt01g2eLTo1DgyOYrt



Scale = 1:16.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

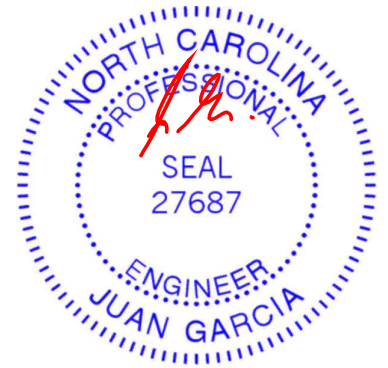
**REACTIONS.**

(size) 1=3-2-5, 3=3-2-5  
Max Horz 1=66(LC 9)  
Max Uplift 3=-23(LC 12)  
Max Grav 1=106(LC 1), 3=116(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



October 29, 2020

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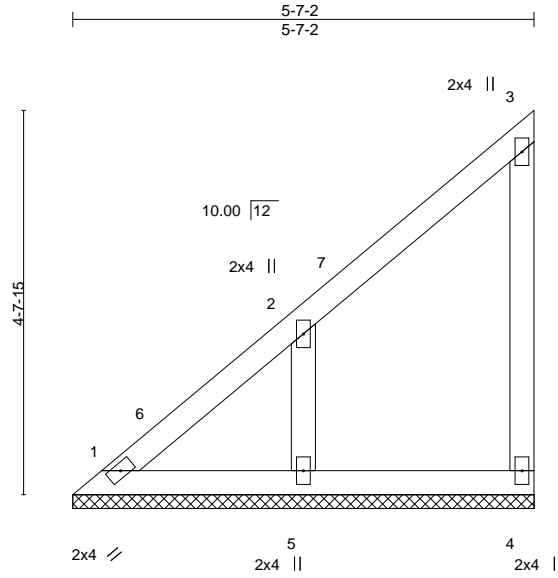
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V16	Truss Type GABLE	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen I43415936
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:34 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjRC1-lwOq73XPgYjfuhNlJQX?86TDkZuO1gPeLTo1DgyOYrt



Scale = 1:27.9

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 27 lb	FT = 20%
	Code IRC2015/TPI2014							

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

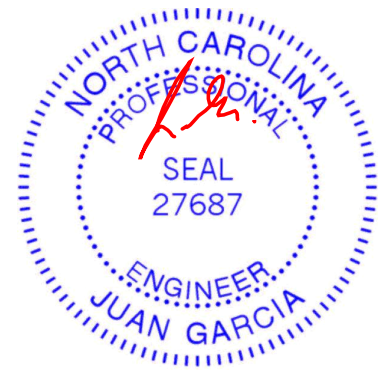
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-7-2, 4=5-7-2, 5=5-7-2  
Max Horz 1=126(LC 11)  
Max Uplift 1=-12(LC 8), 4=-28(LC 9), 5=-88(LC 12)  
Max Grav 1=102(LC 20), 4=96(LC 19), 5=265(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.



October 29, 2020

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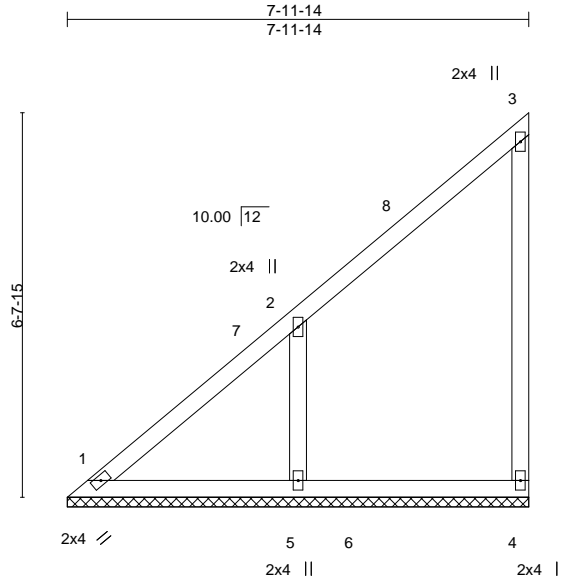
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V17	Truss Type GABLE	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen I43415937
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:35 2020 Page 1

ID:hwqUHzwaaVU85LTwHdxeyfjyRC1-n6yCKPY1RrrWWry3t72EgJ0MSyBGm6Goa7Xbl7yOYrs



Scale = 1:39.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 40 lb	FT = 20%

**LUMBER-**

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

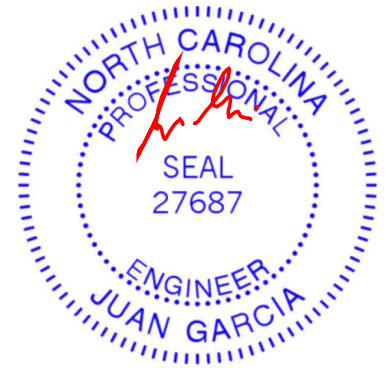
(size) 1=7-11-14, 4=7-11-14, 5=7-11-14  
 Max Horz 1=186(LC 9)  
 Max Uplift 1=-15(LC 8), 4=-42(LC 9), 5=-119(LC 12)  
 Max Grav 1=151(LC 20), 4=193(LC 19), 5=420(LC 19)

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

TOP CHORD 1-2=-289/278  
 WEBS 2-5=-295/187

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 7-10-2 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=119.



October 29, 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

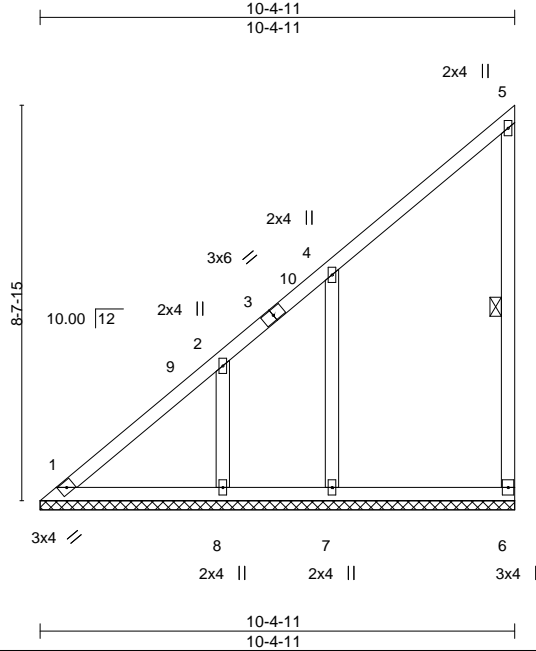


Job COASTROOF	Truss V18	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415938
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:36 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjRC1-FJWbYIYfB9zN8\_XGRrZTDXRYrMXwVZmXpnH8HZyOYrr



Scale = 1:50.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 58 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-6

**REACTIONS.**

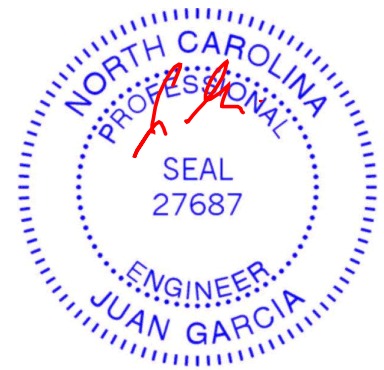
All bearings 10-4-11.  
 (lb) - Max Horz 1=247(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 7 except 8=100(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=362(LC 19), 8=260(LC 1)

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

TOP CHORD 1-2=-360/352, 2-4=-278/265

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 10-2-15 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 7 except (jt=lb) 8=100.



October 29, 2020

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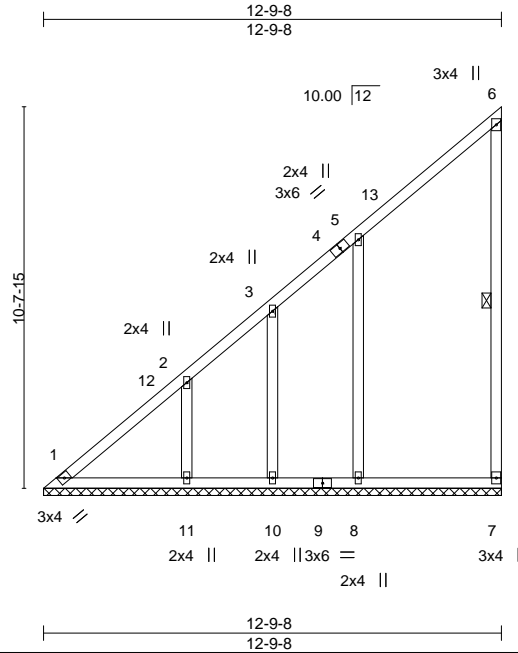
818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V19	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415939
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:37 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeyfjRC1-jV3zl5ZHyt5EI85S\_Y4imk5X5mpgEzk41R0iq?yOYrq



Scale: 3/16"=1'

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 1.00	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 7 n/a n/a	Weight: 79 lb	FT = 20%
	Code IRC2015/TPI2014				

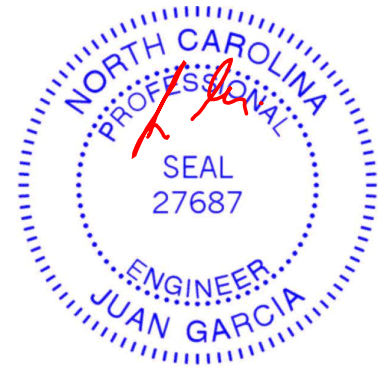
**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 12-9-8.  
(lb) - Max Horz 1=307(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 10, 1 except 8=111(LC 12), 11=107(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 7, 10, 1 except 8=443(LC 19), 11=319(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-432/439, 2-3=-332/320, 3-5=-293/304  
WEBS 5-8=-281/172

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 12-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10, 1 except (jt=lb) 8=111, 11=107.



October 29, 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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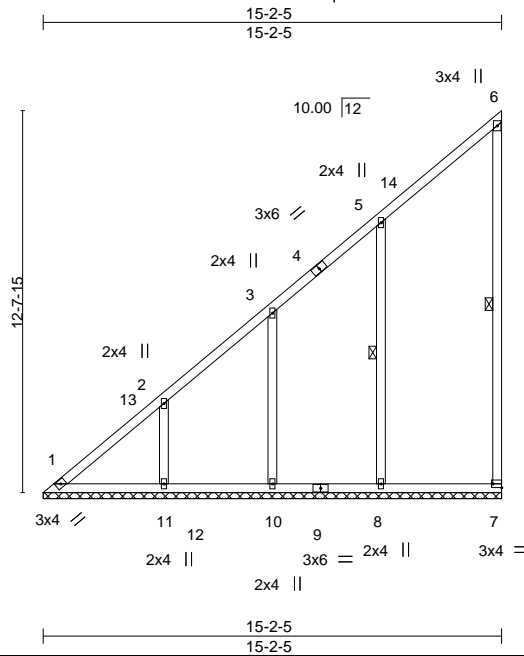
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V20	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415940
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:37 2020 Page 1

ID:hwqUHZvaaVU85LTwHdxeYfyjRC1-jV3zI5ZHyT5E185S\_Y4imk5cOmn4E?Q41R0iq?yOYrq



Scale = 1:76.4

Plate Offsets (X,Y)-- [7:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) -0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S					Weight: 95 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-7, 5-8

**REACTIONS.** All bearings 15-2-5.  
 (lb) - Max Horz 1=367(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 7, 10, 1 except 8=121(LC 12), 11=116(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 10=386(LC 19), 8=473(LC 19), 11=371(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-507/521, 2-3=-402/408, 3-5=-319/331  
 WEBS 5-8=-303/179, 2-11=-256/155

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 15-0-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Gable requires continuous bottom chord bearing.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10, 1 except (jt=lb) 8=121, 11=116.



October 29, 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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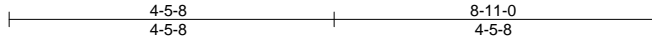


818 Soundside Road  
 Edenton, NC 27932

Job COASTROOF	Truss V21	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen I43415941
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:38 2020 Page 1  
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3x6 =

Scale = 1:31.6

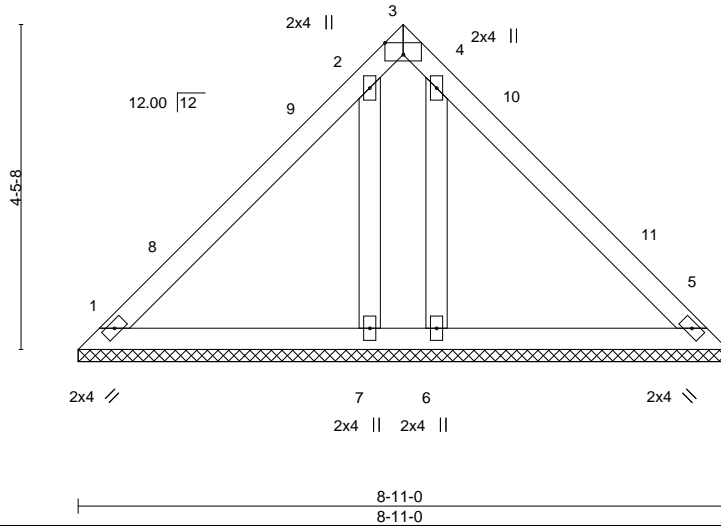


Plate Offsets (X,Y)-- [3:0-3:0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 41 lb	FT = 20%
	Code IRC2015/TP12014							

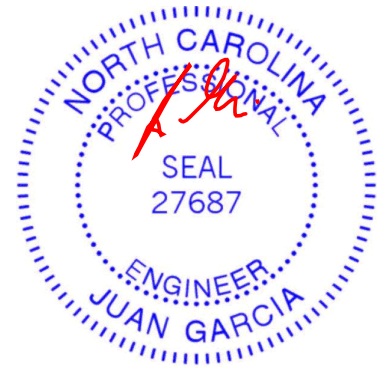
**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 8-11-0.  
(lb) - Max Horz 1=-81(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) except 6=-117(LC 13), 7=-125(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=298(LC 20), 7=307(LC 19)

**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=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 4-5-8, Exterior(2) 4-5-8 to 7-5-8, Interior(1) 7-5-8 to 8-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 6 and 125 lb uplift at joint 7.



October 29, 2020

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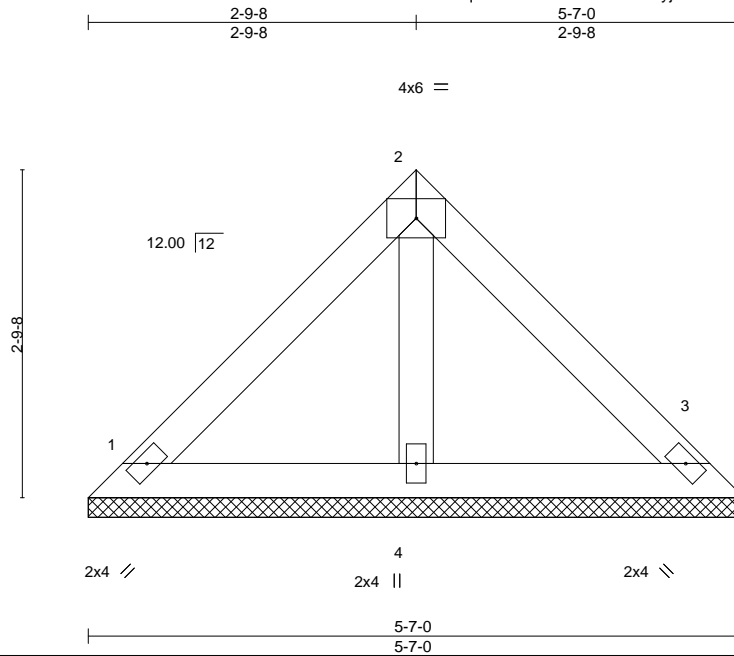


818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V22	Truss Type GABLE	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415942
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:39 2020 Page 1  
ID:hwqUHZvaaVU85LTwHdxeyfjRC1-fuBjAnbXU4My?SFr6z7Ar9A4OabdwyNVIVouuyOYro



Scale = 1:19.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 22 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

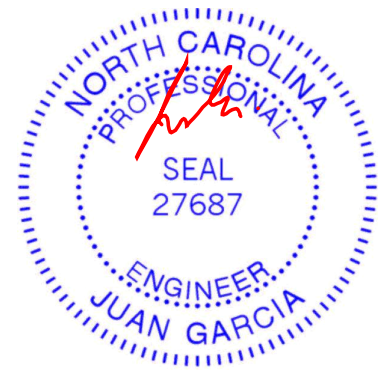
**REACTIONS.**

(size) 1=5-7-0, 3=5-7-0, 4=5-7-0  
Max Horz 1=48(LC 9)  
Max Uplift 1=-17(LC 13), 3=-17(LC 13)  
Max Grav 1=117(LC 1), 3=117(LC 1), 4=157(LC 1)

**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=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 3.



October 29, 2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

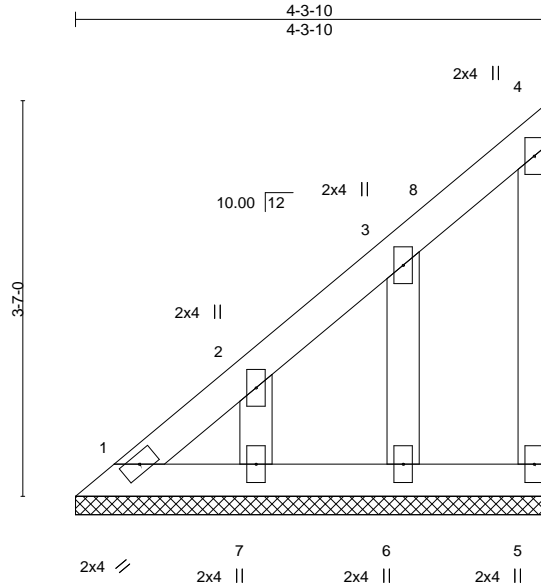
818 Soundside Road  
Edenton, NC 27932

Job COASTROOF	Truss V23	Truss Type GABLE	Qty 99	Ply 1	McKee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415943
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:39 2020 Page 1

ID:hwqUHvzvaaVU85LTwHdxeyfjRC1-fuBjAnbXU4My?SF6rZ7Ar9A54ac1iw\_NVIVouuyOYro



Scale = 1:20.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 22 lb	FT = 20%
	Code IRC2015/TPI2014							

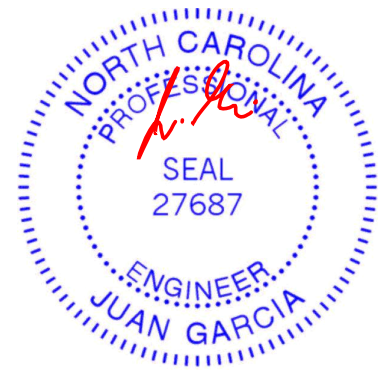
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 4-3-10.  
(lb) - Max Horz 1=94(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 7  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-1-14 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) Gable requires continuous bottom chord bearing.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 7.



October 29, 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



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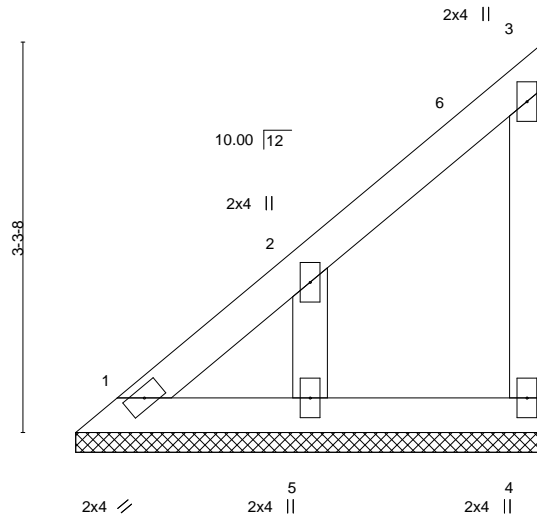
Job COASTROOF	Truss V24	Truss Type VALLEY	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen Job Reference (optional)	I43415944
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

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ID:hwqUHzvaaVU85LTwHdxeyfjyRC1-74I5N7c9FOUppcq1ghePNNjGQzyiRN5XjPFMQKyOYrn

3-11-6  
3-11-6



Scale = 1:19.4

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 18 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-11-6, 4=3-11-6, 5=3-11-6  
Max Horz 1=85(LC 9)  
Max Uplift 1=-9(LC 8), 4=-19(LC 9), 5=-59(LC 12)  
Max Grav 1=67(LC 20), 4=67(LC 19), 5=179(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 3-9-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.



October 29, 2020

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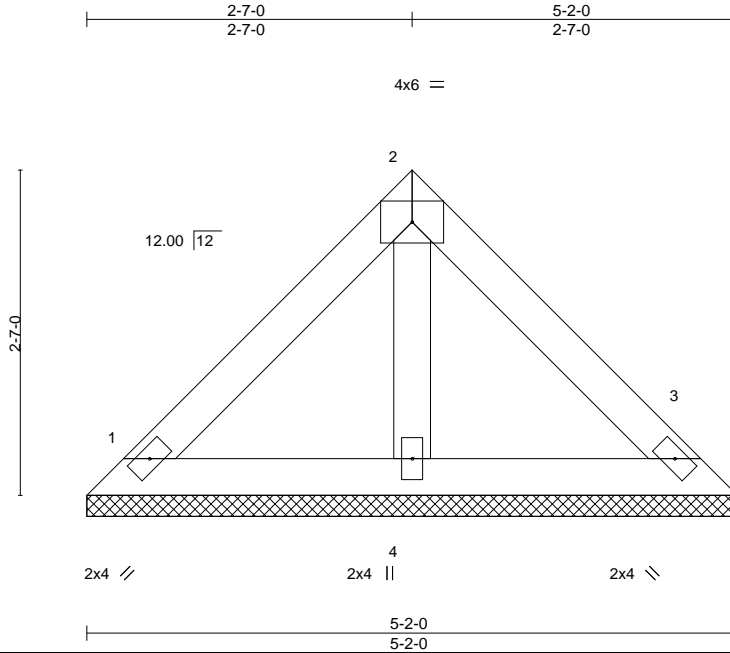


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Job COASTROOF	Truss V25	Truss Type VALLEY	Qty 99	Ply 1	Mckee - Winston - Lot 993 Academy Glen I43415945
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 29 12:27:41 2020 Page 1  
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Scale = 1:18.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

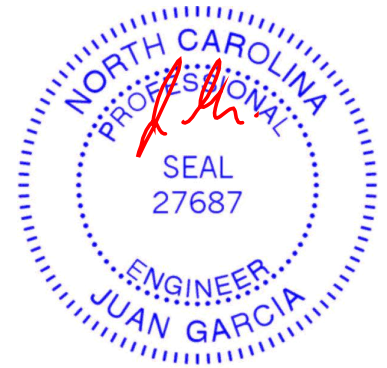
**REACTIONS.**

(size) 1=5-2-0, 3=5-2-0, 4=5-2-0  
Max Horz 1=44(LC 10)  
Max Uplift 1=15(LC 13), 3=15(LC 13)  
Max Grav 1=107(LC 1), 3=107(LC 1), 4=144(LC 1)

**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=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 29, 2020

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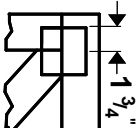


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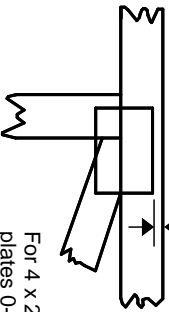


# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

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

## LATERAL BRACING LOCATION



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

## BEARING



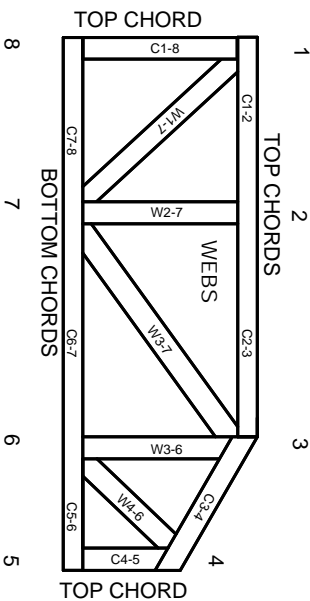
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.