

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 1900459-1900459B  
CL 3067A Gable New CP

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I42679026 thru I42679048

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

North Carolina COA: C-0844



September 3, 2020

Sevier, Scott

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

Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	I42679026
1900459-1900459B	M1	Monopitch	7	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:35 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-4ZQVXpSG\_fNuNcS2CGK8tCw\_HGFsYU7y1KSnmPyhfxM



Scale = 1:13.5

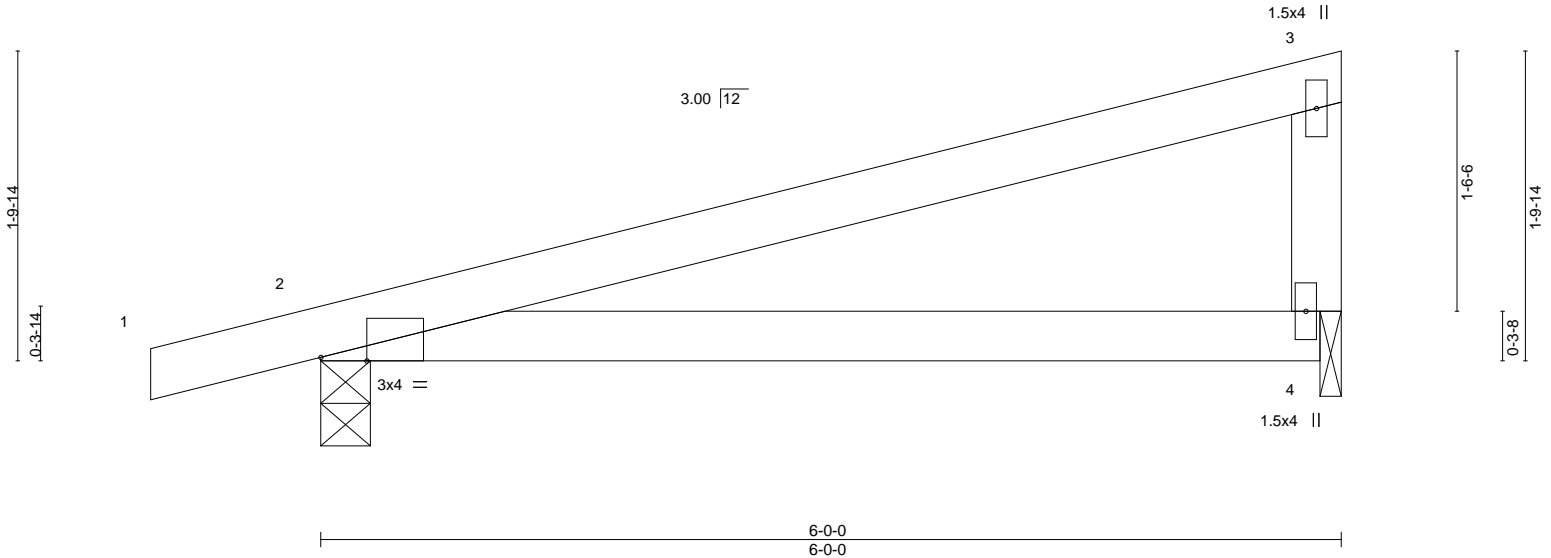


Plate Offsets (X,Y)--	[2:0-3-4,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.45	Vert(LL)	0.06	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.38	Vert(CT)	-0.12	4-7	>578	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						Weight: 21 lb	FT = 20%

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

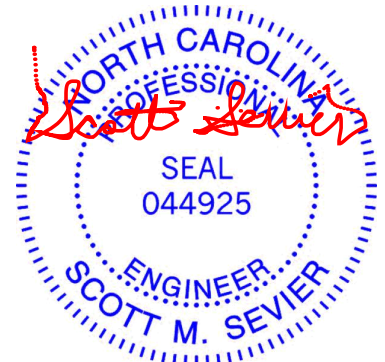
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=65(LC 11)  
 Max Uplift 2=-82(LC 8), 4=-45(LC 12)  
 Max Grav 2=299(LC 1), 4=229(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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) 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 82 lb uplift at joint 2 and 45 lb uplift at joint 4.



September 3, 2020

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



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 Edenton, NC 27932

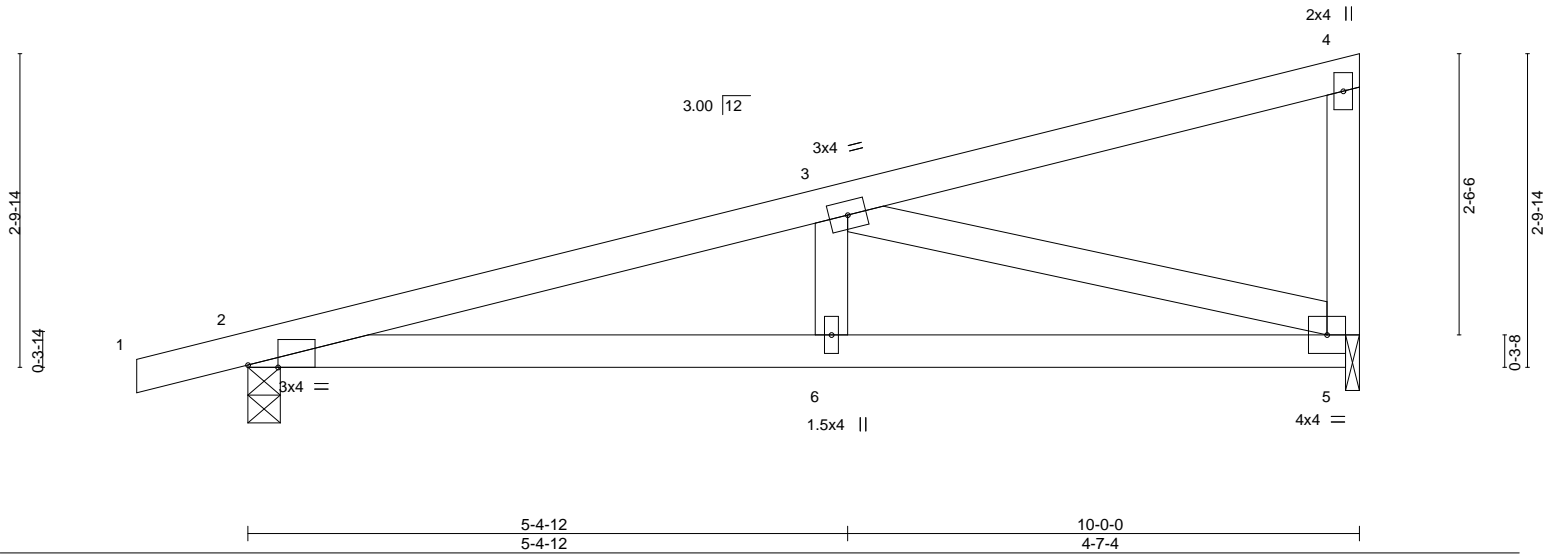
Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	I42679027
1900459-1900459B	M1A	Monopitch	3	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:35 2020 Page 1  
 ID:m28TrXaph866FSG2iwKmK8zdK0u-4ZQVXpSG\_fNuNcS2CGK8tCw1QGGAYPdy1KSnmPyhfxM



Scale = 1:20.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.25	Vert(LL)	-0.03	6-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.36	Vert(CT)	-0.07	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 43 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-11 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=0-1-8  
 Max Horz 2=106(LC 11)  
 Max Uplift 2=-108(LC 8), 5=-77(LC 12)  
 Max Grav 2=457(LC 1), 5=391(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-879/271  
 BOT CHORD 2-6=-333/838, 5-6=-333/838  
 WEBS 3-5=-848/308

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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) 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) 5 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) 5.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2 and 77 lb uplift at joint 5.



September 3, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss T1GE	Truss Type GABLE	Qty 1	Ply 1	CL 3067A Gable New CP	142679028
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:39 2020 Page 1

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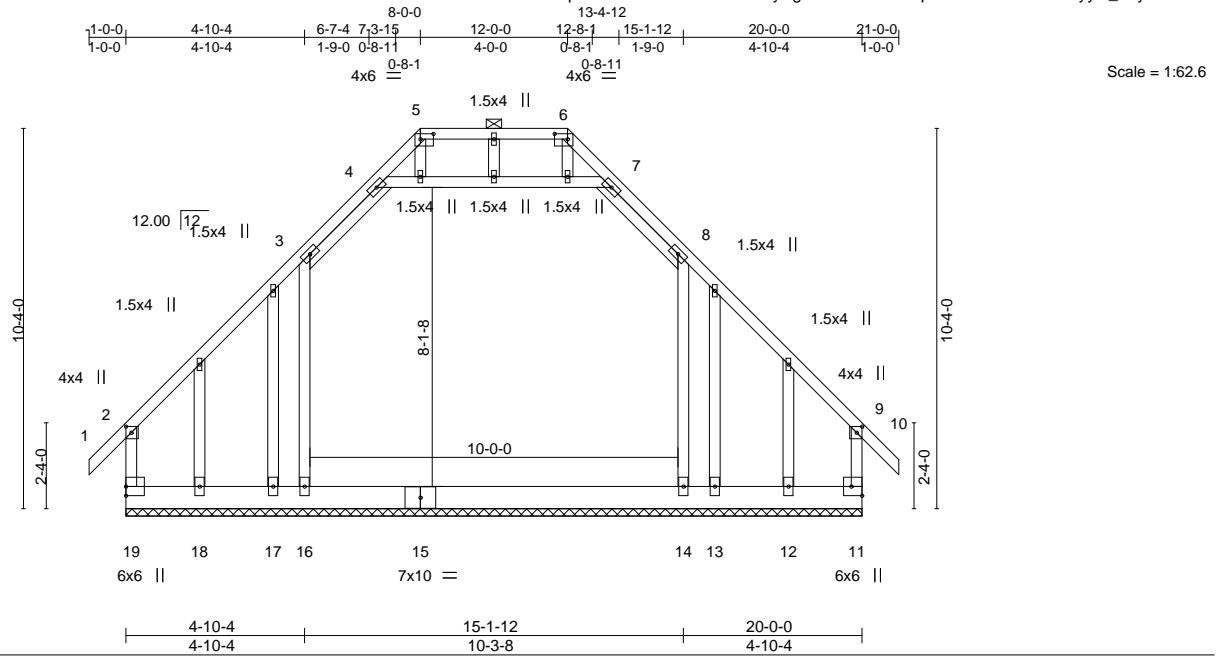


Plate Offsets (X,Y)--	[2:0-2-0,0-1-12], [5:0-4-4,0-1-12], [6:0-4-4,0-1-12], [9:0-2-0,0-1-12], [11:Edge,0-3-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.25	BC 0.28	Vert(LL) -0.00 9 n/r 120		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.37	Vert(CT) 0.00 9 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 11 n/a n/a		
	Code IRC2015/TPI2014			Weight: 180 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF 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.): 5-6.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
3-16,8-14: 2x4 SP No.2 or 2x4 SPF No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 20-0-0.  
 (lb) - Max Horz 19=-295(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) except 19=-172(LC 8), 11=-168(LC 9), 17=-615(LC 18), 18=-144(LC 12), 13=-615(LC 18), 12=-143(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 12 except 19=440(LC 21), 16=1352(LC 20), 14=1350(LC 21), 11=436(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-282/167, 3-4=-330/202, 4-5=-373/61, 5-6=-336/30, 6-7=-373/62, 7-8=-330/203, 8-9=-279/164, 2-19=-307/174, 9-11=-307/173  
 WEBS 3-16=-510/97, 8-14=-508/96, 4-7=-205/357

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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 3x6 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-16, 8-14
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 19, 168 lb uplift at joint 11, 615 lb uplift at joint 17, 144 lb uplift at joint 18, 615 lb uplift at joint 13 and 143 lb uplift at joint 12.
  - 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.



September 3, 2020

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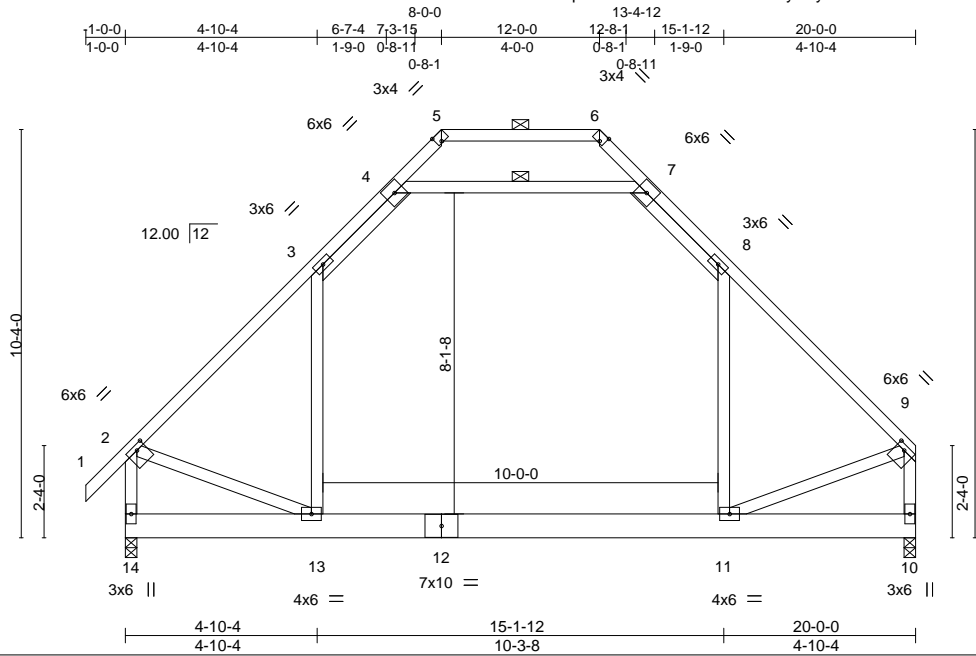
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss T1	Truss Type COMMON	Qty 5	Ply 1	CL 3067A Gable New CP	142679029
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:37 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-0yYfyVUXWHeccwbrJhMcyd?EP4qr0GpFVextqlyhfxK



Scale = 1:58.3

Plate Offsets (X,Y)--	[2:0-2-12,0-1-8], [5:0-1-8,Edge], [6:0-1-8,Edge], [9:0-2-12,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.73	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.86	Vert(LL) -0.24 11-13 >981 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56	Vert(CT) -0.37 11-13 >635 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Horz(CT) 0.01 10 n/a n/a		
			Attic -0.15 11-13 804 360	Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 1-5,6-9: 2x4 SP DSS	TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-13,8-11: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-7

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=286(LC 9)  
 Max Grav 14=1227(LC 2), 10=1167(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1220/24, 3-4=-735/154, 4-5=-75/303, 5-6=-7/482, 6-7=-72/301, 7-8=-737/155, 8-9=-1211/15, 2-14=-1296/48, 9-10=-1243/4  
 BOT CHORD 13-14=-286/323, 11-13=0/793  
 WEBS 3-13=-39/489, 8-11=-53/474, 2-13=-4/795, 9-11=-4/802, 4-7=-1158/191

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-13, 8-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
  - 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.



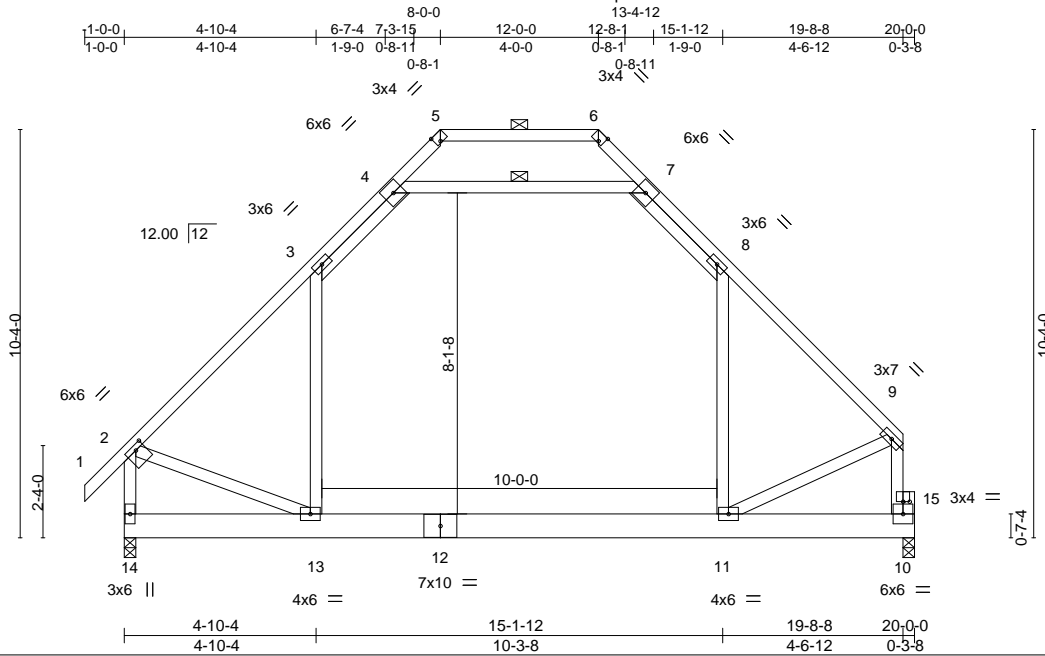
September 3, 2020

Job 1900459-1900459B	Truss T1A	Truss Type COMMON	Qty 5	Ply 1	CL 3067A Gable New CP	142679030
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:38 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-U86dArV9HamTE3AdtPtrVrXQWTAfJjDOjIhRNkyhfxJ



Scale = 1:58.3

Plate Offsets (X,Y)--	[2:0-2-12,0-1-8], [5:0-1-8,Edge], [6:0-1-8,Edge], [15:0-2-0,0-0-0]
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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	1.25	TC 0.70	Vert(LL)	-0.24	11-13	>998	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.85	Vert(CT)	-0.36	11-13	>649		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.01	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.15	11-13	816	Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 1-5,6-9: 2x4 SP DSS	TOP CHORD Structural wood sheathing directly applied or 5-8-7 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-13,8-11: 2x4 SP No.2 or 2x4 SPF No.2	WEBS 1 Row at midpt 4-7
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 14=0-3-8, 10=0-3-8  
 Max Horz 14=290(LC 9)  
 Max Grav 14=1219(LC 2), 10=1158(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1203/23, 3-4=-728/154, 4-5=-82/291, 5-6=-3/466, 6-7=-83/291, 7-8=-728/154,  
 8-9=-1194/20, 2-14=-1279/47, 9-10=-1273/6  
 BOT CHORD 13-14=-289/322, 11-13=0/782  
 WEBS 3-13=-46/478, 8-11=-51/475, 2-13=-5/781, 9-11=-20/770, 4-7=-1127/184

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s). 3-13, 8-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
  - 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.



September 3, 2020

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

818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss PB1	Truss Type PIGGYBACK	Qty 11	Ply 1	CL 3067A Gable New CP	I42679031
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84 Components (Dunn),

Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:36 2020 Page 1

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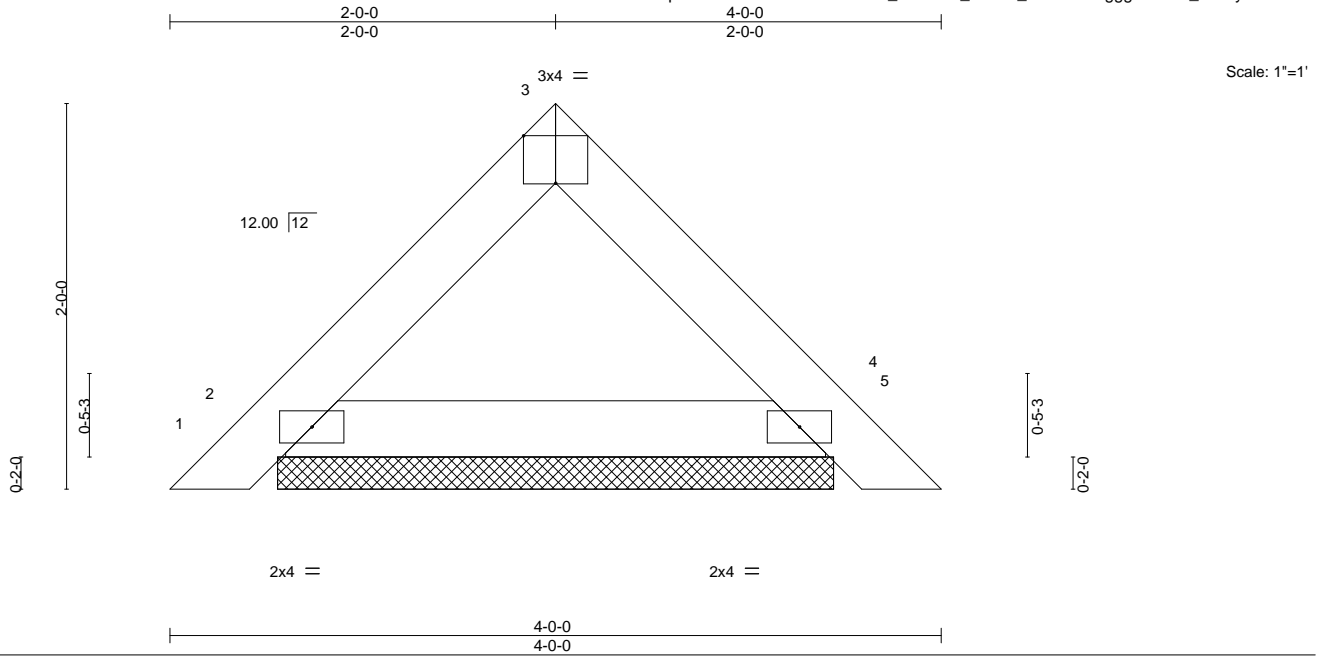


Plate Offsets (X,Y)--	[3:0-2-0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.04	Vert(LL)	0.00	4	n/r 120
TCDL 10.0	Lumber DOL	1.25	BC 0.09	Vert(CT)	0.00	4	n/r 90
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							197/144
							Weight: 13 lb
							FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2

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

**REACTIONS.** (size) 2=2-10-10, 4=2-10-10  
 Max Horz 2=-44(LC 10)  
 Max Uplift 2=-17(LC 12), 4=-17(LC 13)  
 Max Grav 2=136(LC 1), 4=136(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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 17 lb uplift at joint 2 and 17 lb uplift at joint 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 3, 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



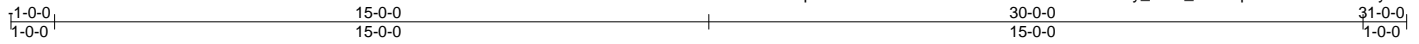
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	142679032
1900459-1900459B	T2GE	GABLE	1	1	Job Reference (optional)	

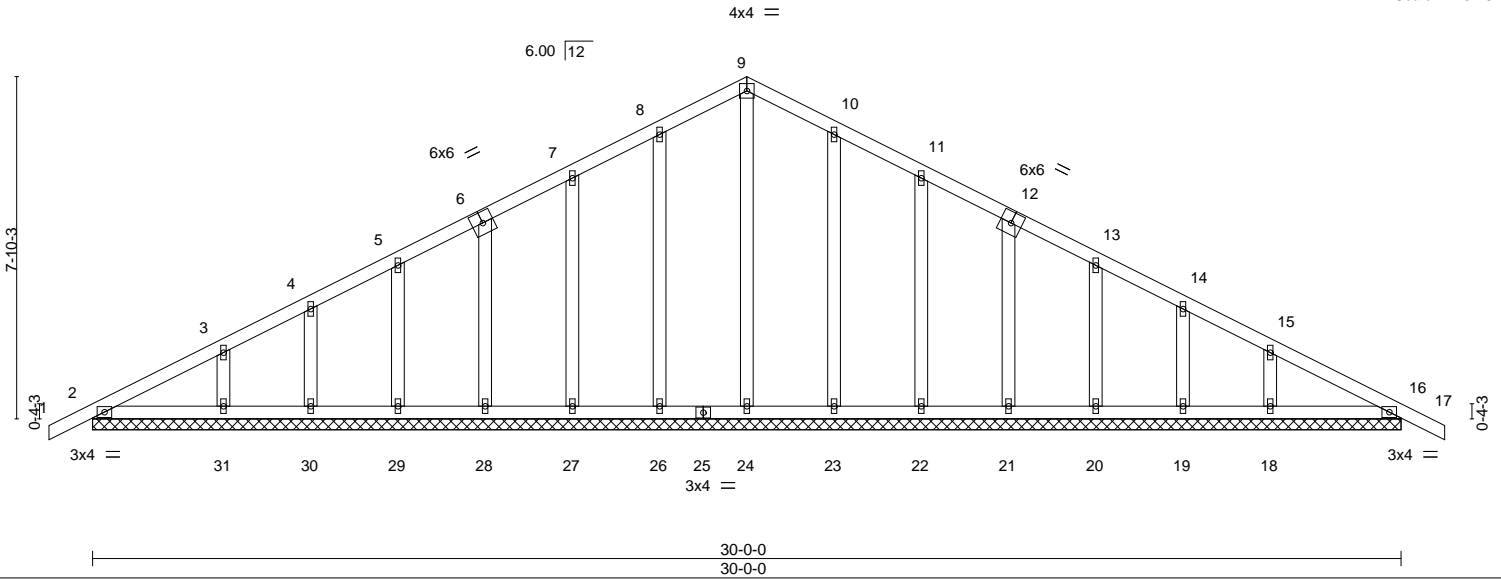
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:44 2020 Page 1

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Scale = 1:52.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.08	Vert(LL)	0.00	16	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	0.00	17	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 177 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 30-0-0.  
 (lb) - Max Horz 2=134(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18  
 Max Grav All reactions 250 lb or less at joint(s) 2, 16, 24, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18.



September 3, 2020

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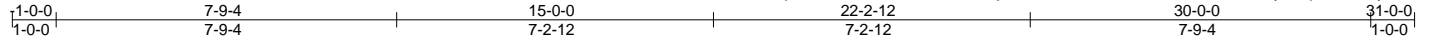


Job 1900459-1900459B	Truss T2	Truss Type COMMON	Qty 3	Ply 1	CL 3067A Gable New CP	I42679033
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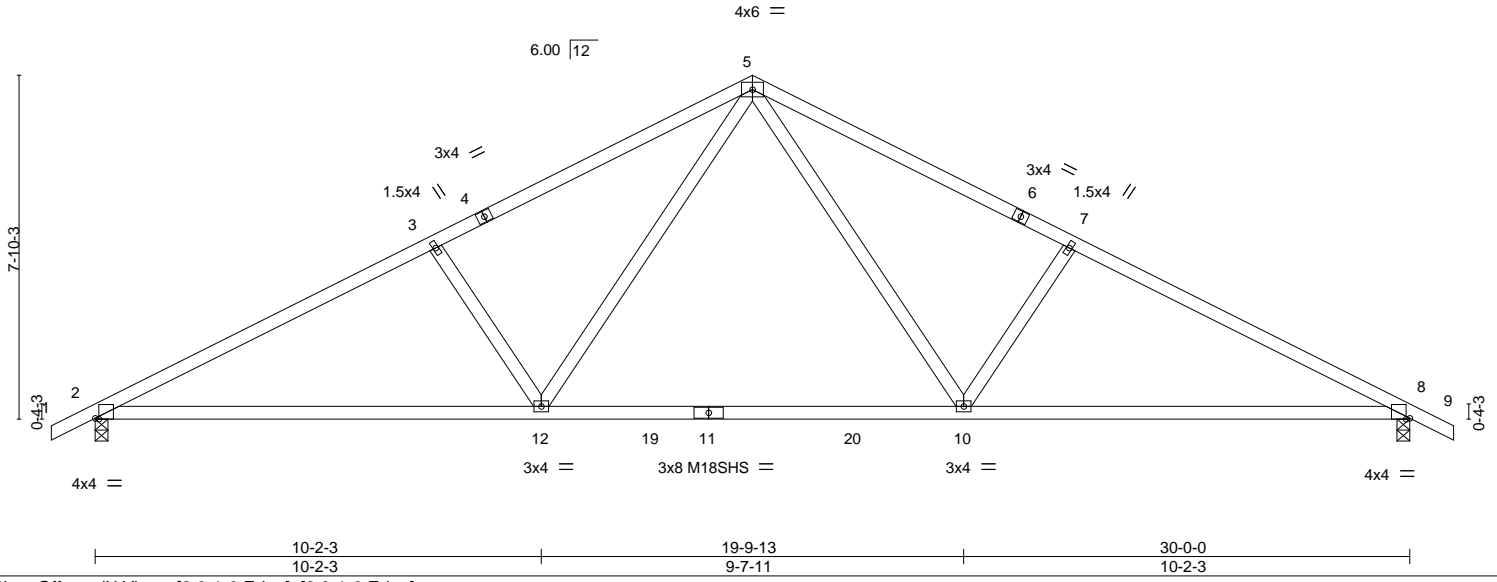
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:41 2020 Page 1

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Scale = 1:52.6



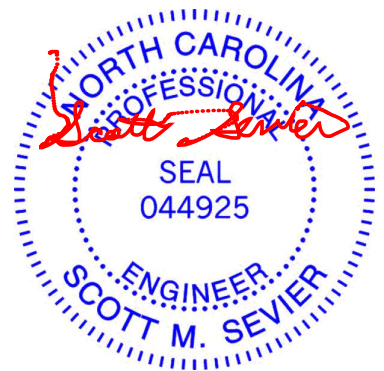
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.74	Vert(LL)	-0.35	10-12	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.75	Vert(CT)	-0.49	12-15	>733	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 137 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=134(LC 12)  
 Max Uplift 2=163(LC 12), 8=163(LC 13)  
 Max Grav 2=1260(LC 1), 8=1260(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2108/539, 3-5=-1887/547, 5-7=-1887/547, 7-8=-2108/539  
 BOT CHORD 2-12=-361/1836, 10-12=-117/1202, 8-10=-364/1836  
 WEBS 5-10=-163/742, 7-10=-470/295, 5-12=-163/742, 3-12=-470/295

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 163 lb uplift at joint 8.



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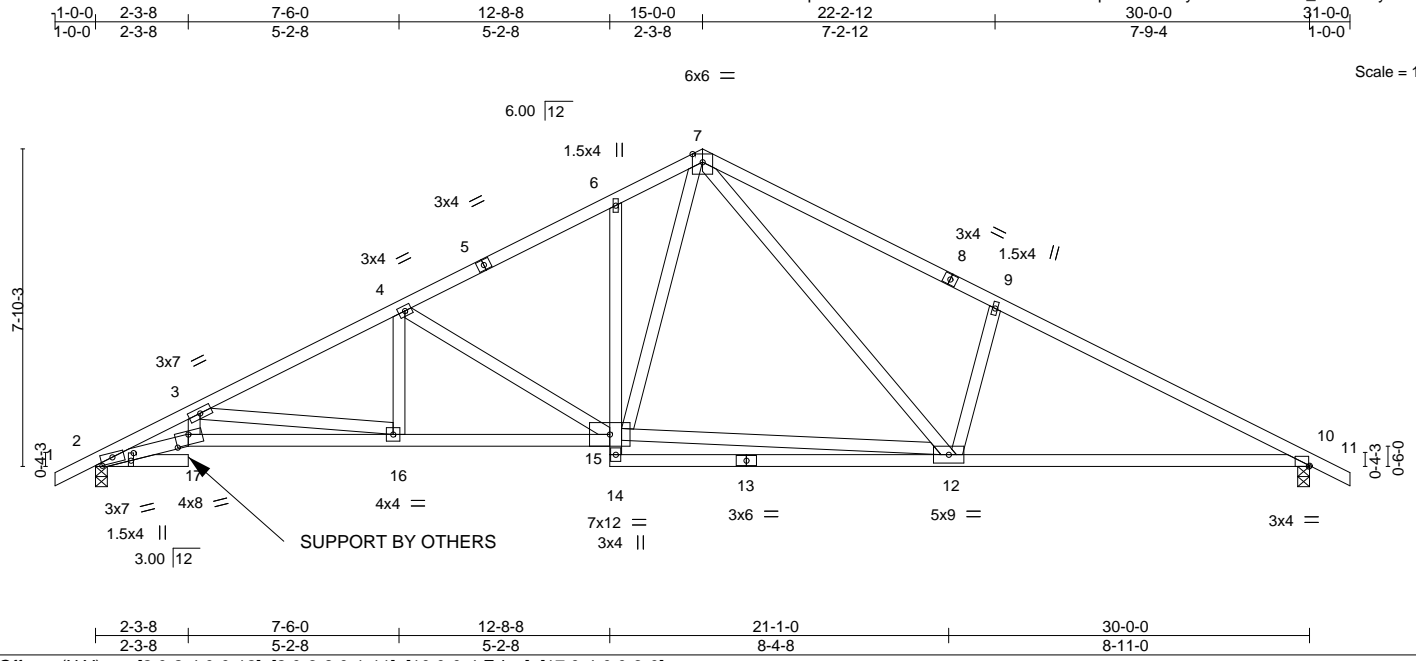
Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	I42679034
1900459-1900459B	T2A	COMMON	3	1		

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:42 2020 Page 1

ID:m28TrXaph866FSG2iwKmk8zdK0u-NvL8?CYfLpGvihUP6Eynfhi5A5W0hVZ\_ewfeWVyhfxF

Job Reference (optional)



Scale = 1:56.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.72	Vert(LL) -0.15 12-14 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.93	Vert(CT) -0.36 12-14 >993 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.66	Horz(CT) 0.15 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 174 lb	FT = 6%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 3-17,6-14: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-11-4 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.2 or 2x4 SPF No.2	

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
 Max Horz 2=134(LC 12)  
 Max Uplift 10=-162(LC 13), 2=-162(LC 12)  
 Max Grav 10=1260(LC 1), 2=1260(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3649/820, 3-4=-2405/573, 4-6=-1741/483, 6-7=-1655/546, 7-9=-2047/625,  
 9-10=-2135/529  
 BOT CHORD 3-17=-80/669, 16-17=-727/3390, 15-16=-381/2119, 12-14=0/285, 10-12=-356/1857,  
 2-17=-673/3270  
 WEBS 3-16=-1285/358, 4-16=0/395, 4-15=-744/237, 12-15=-120/963, 7-15=-191/772,  
 7-12=-244/790, 9-12=-464/306

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 3) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 162 lb uplift at joint 10 and 162 lb uplift at joint 2.



September 3,2020

Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	142679035
1900459-1900459B	T2B	COMMON	2	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:43 2020 Page 1

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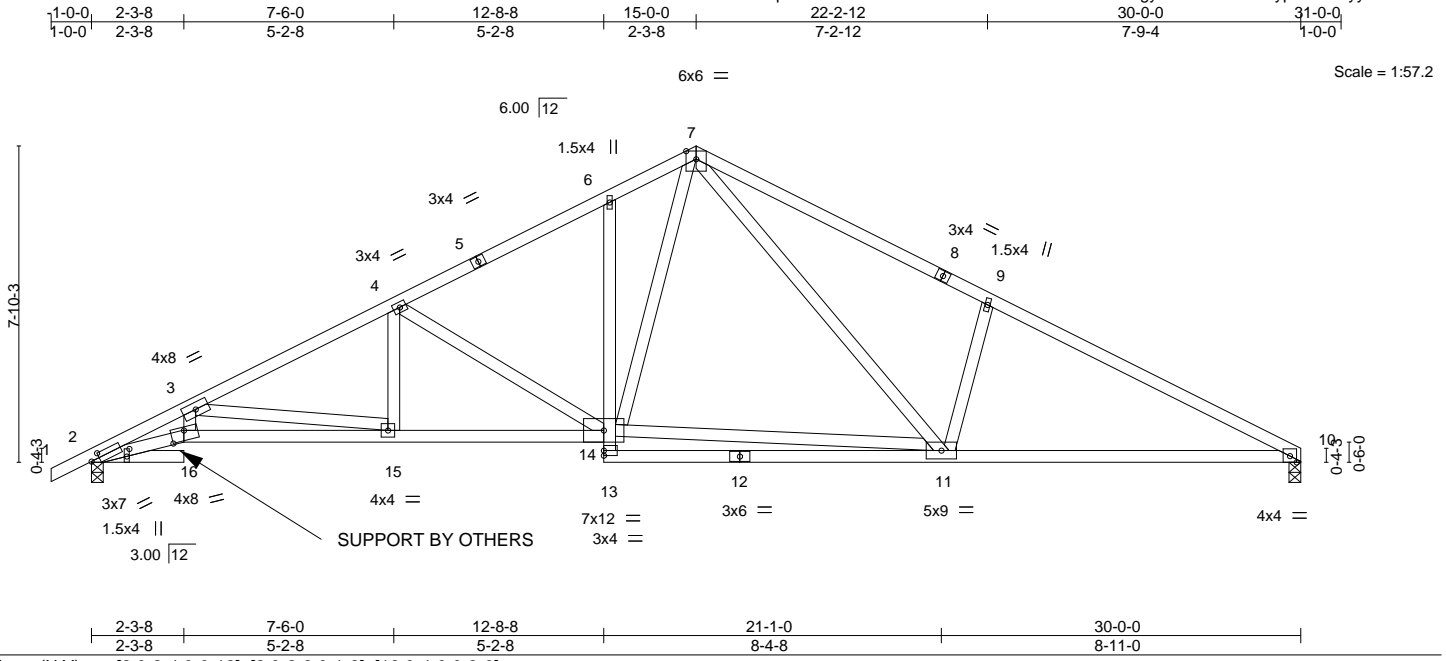


Plate Offsets (X,Y)--	[2:0-2-4,0-0-12], [2:0-2-9,0-1-8], [16:0-4-0,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.74	Vert(LL) 0.16 11-20 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.93	Vert(CT) -0.36 11-20 >988 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.66	Horz(CT) 0.15 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 172 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 3-16,6-13: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-8-8 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.2 or 2x4 SPF No.2	

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
 Max Horz 2=142(LC 12)  
 Max Uplift 10=-141(LC 13), 2=-162(LC 12)  
 Max Grav 10=1199(LC 1), 2=1261(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3652/848, 3-4=-2407/582, 4-6=-1743/488, 6-7=-1657/550, 7-9=-2054/631,  
 9-10=-2142/534  
 BOT CHORD 3-16=-93/670, 15-16=-779/3393, 14-15=-409/2122, 11-13=-1/284, 10-11=-380/1864,  
 2-16=-732/3273  
 WEBS 3-15=-1286/374, 4-15=0/395, 4-14=-744/241, 11-14=-139/966, 7-14=-194/772,  
 7-11=-247/797, 9-11=-467/308

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 10 and 162 lb uplift at joint 2.

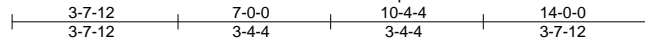


Job 1900459-1900459B	Truss T4GR	Truss Type COMMON GIRDER	Qty 1	Ply 3	CL 3067A Gable New CP	I42679036
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:53 2020 Page 1

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4x4 ||

Scale = 1:50.6

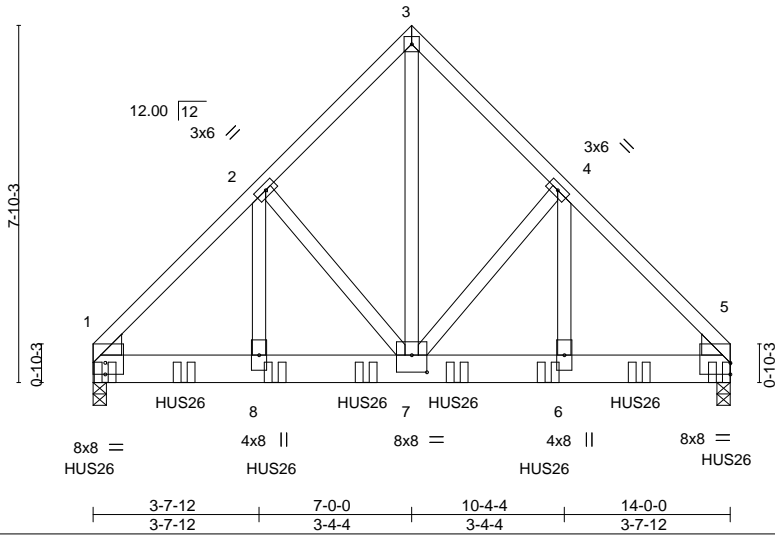


Plate Offsets (X,Y)--	[1:0-0-0,0-3-1], [5:0-0-0,0-3-1], [7:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.17	Vert(LL)	-0.03	7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.35	Vert(CT)	-0.07	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.70	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 332 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x6 SP No.2 , Right: 2x6 SP No.2	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=173(LC 5)  
 Max Uplift 1=-1013(LC 9), 5=-1013(LC 8)  
 Max Grav 1=6482(LC 16), 5=6482(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-6320/1026, 2-3=-4600/826, 3-4=-4600/826, 4-5=-6319/1025  
 BOT CHORD 1-8=-737/4482, 7-8=-737/4482, 6-7=-668/4405, 5-6=-668/4405  
 WEBS 3-7=-1066/6189, 4-7=-1862/432, 2-7=-1861/431, 4-6=-381/2481, 2-8=-378/2479

- NOTES-**
- 3-ply truss to be connected together with 10d (0.120"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; 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
  - 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) 1=1013, 5=1013.
  - Girder carries tie-in span(s): 40-0-0 from 0-0-0 to 14-0-0
  - Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-0-0 from the left end to 14-0-0 to connect truss(es) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25



Continued on page 2

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

Job 1900459-1900459B	Truss T4GR	Truss Type COMMON GIRDER	Qty 1	Ply <b>3</b>	CL 3067A Gable New CP Job Reference (optional)	I42679036
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:53 2020 Page 2  
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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 9-12=-774(F=-754)

**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 1900459-1900459B	Truss T3GE	Truss Type GABLE	Qty 1	Ply 1	CL 3067A Gable New CP	142679037
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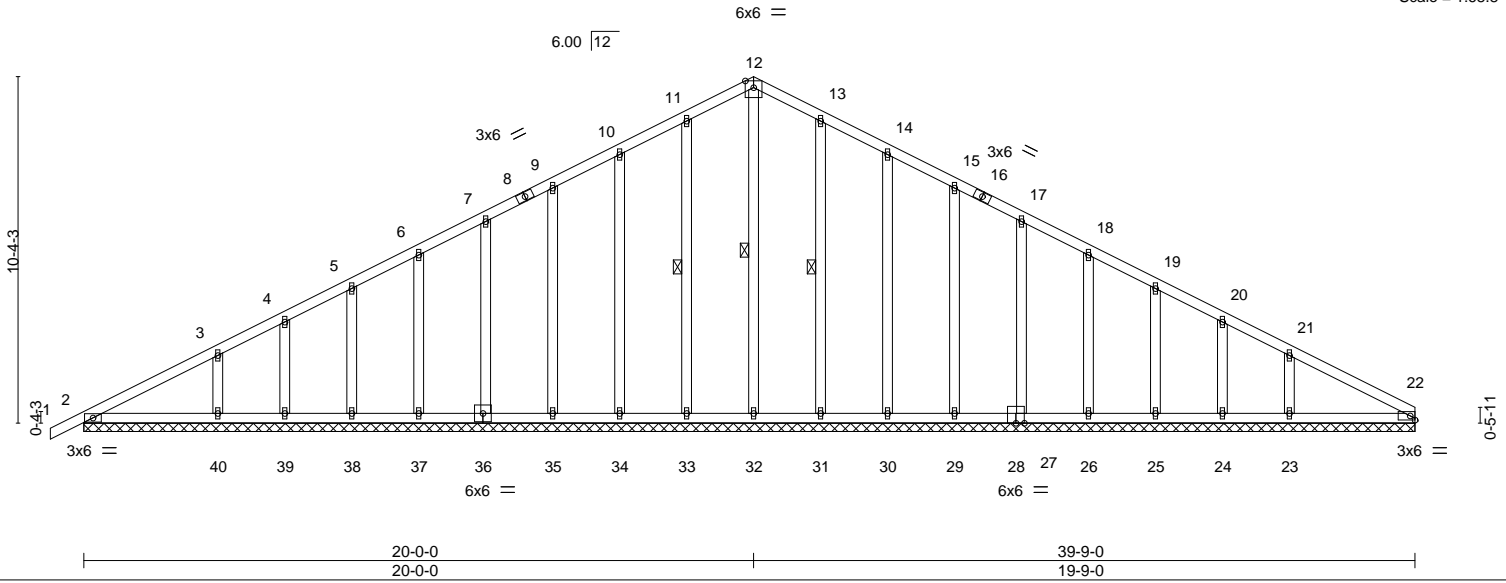
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:48 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-B3iPGFcQwf02QcxYTV3BvxyGgVm55L1s0s6zj9yhfx9



Scale = 1:68.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	-0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	0.01	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	22	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 268 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 12-32, 11-33, 13-31

**REACTIONS.** All bearings 39-9-0.  
 (lb) - Max Horz 2=183(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 27, 26, 25, 24 except 23=-101(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 32, 33, 34, 35, 36, 37, 38, 39, 31, 30, 29, 27, 26, 25, 24 except 40=310(LC 23), 23=305(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 10-11=-100/251, 11-12=-116/294, 12-13=-116/294, 13-14=-100/251

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 2, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 27, 26, 25, 24 except (jt=lb) 23=101.



September 3, 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



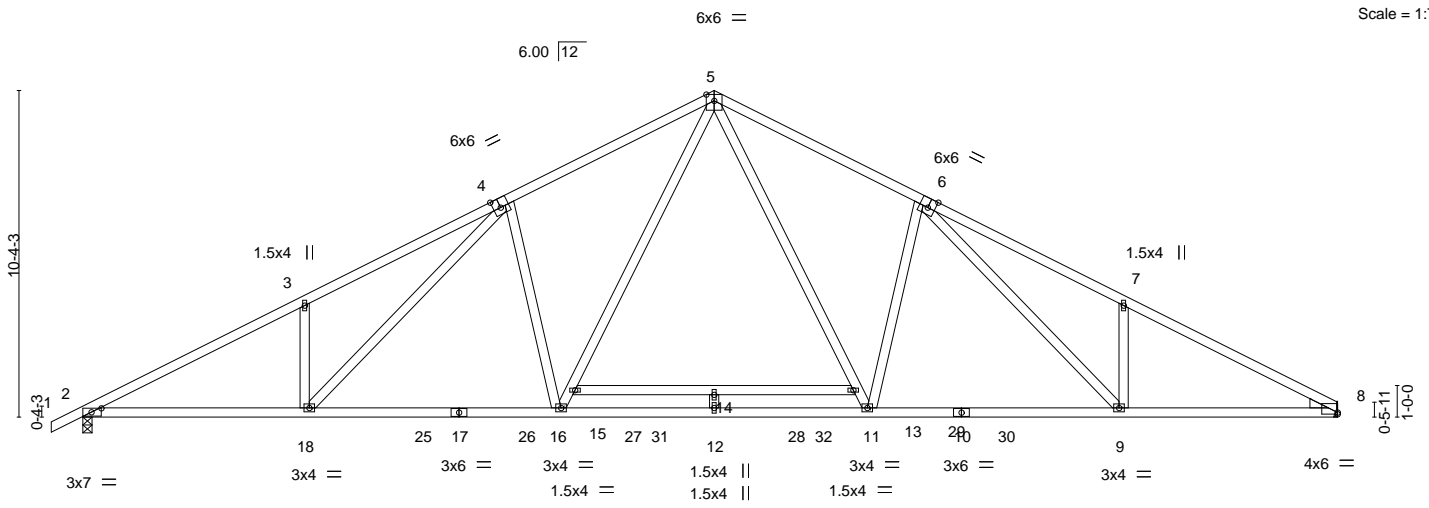
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	142679038
1900459-1900459B	T3A	ROOF TRUSS	6	1		

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:46 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-FhbfrabAO2mKBInAL40jpW1i1iuVdKNaZYdsfGyhfxB



Scale = 1:73.0

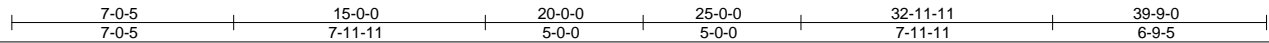


Plate Offsets (X,Y)-- [2:0-3-12,0-1-8], [4:0-2-12,Edge], [6:0-2-12,Edge], [8:0-0-0,0-0-10]

<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	1.25	TC 0.86	Vert(LL)	-0.46	14	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.89	Vert(CT)	-0.87	14	>548		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.14	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 231 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
10-17: 2x4 SP DSS  
WEBS 2x4 SP No.3  
WEDGE  
Right: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 8-5-15 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=Mechanical  
Max Horz 2=186(LC 12)  
Max Uplift 2=-155(LC 12), 8=-131(LC 13)  
Max Grav 2=1785(LC 2), 8=1738(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3423/606, 3-4=-3423/757, 4-5=-2779/605, 5-6=-2769/603, 6-7=-3301/739,  
7-8=-3322/591  
BOT CHORD 2-18=-454/3002, 16-18=-268/2560, 12-16=-58/1860, 11-12=-58/1860, 9-11=-265/2541,  
8-9=-438/2897  
WEBS 5-13=-182/1161, 11-13=-231/1077, 6-11=-620/349, 6-9=-254/641, 7-9=-352/257,  
15-16=-234/1097, 5-15=-186/1182, 4-16=-648/354, 4-18=-273/746, 3-18=-391/264

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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) 2=155, 8=131.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



September 3, 2020

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Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	142679039
1900459-1900459B	T3	COMMON	3	1		

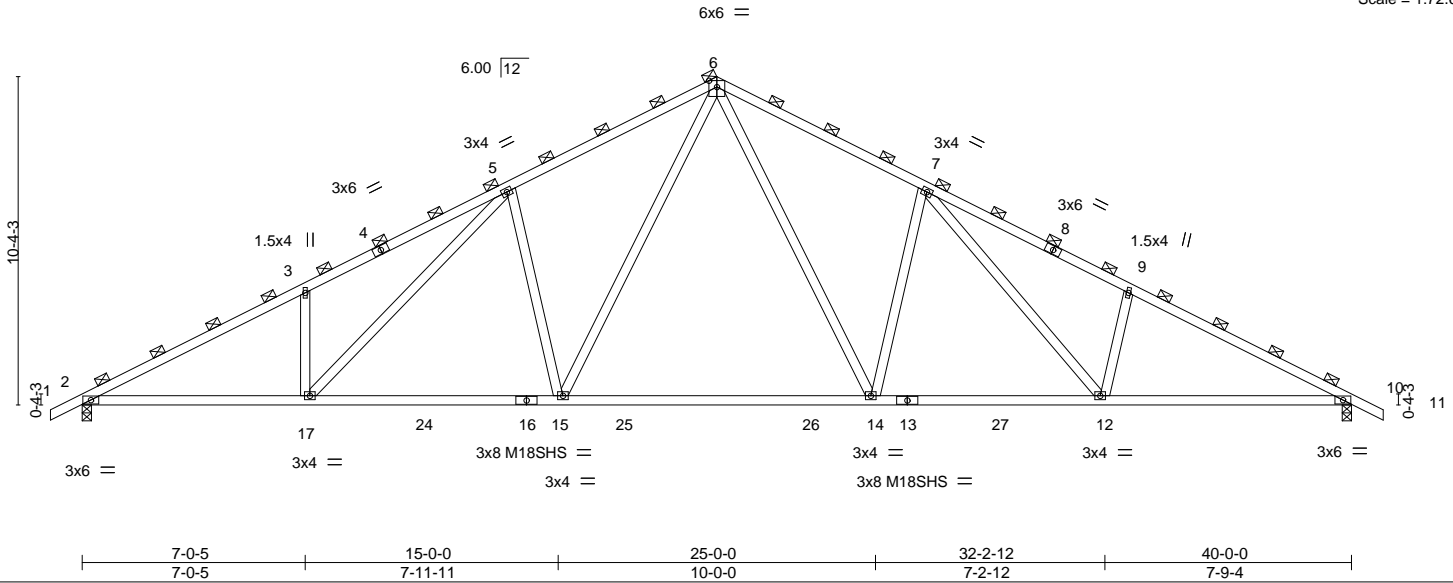
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:45 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-nU1HeEaYdkeUZ8CznNVUHJKcklYQustQKuul7qyhfxC

-1-0-0	7-0-5	13-6-3	20-0-0	26-5-13	32-11-11	40-0-0	41-0-0
1-0-0	7-0-5	6-5-13	6-5-13	6-5-13	6-5-13	7-0-5	1-0-0

Scale = 1:72.6



LOADING (psf)	SPACING-	2-2-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.77	Vert(LL)	-0.41 14-15	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.95	Vert(CT)	-0.75 14-15	>638	180	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.13 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						Weight: 218 lb FT = 20%

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

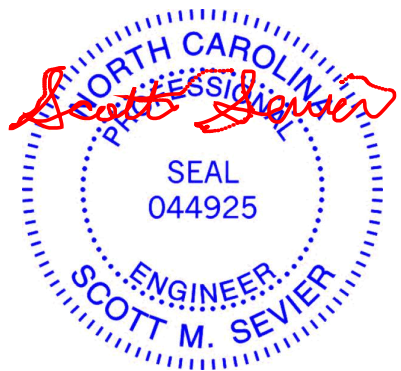
**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (2-9-7 max.)  
 (Switched from sheeted: Spacing > 2-0-0).  
 Rigid ceiling directly applied or 8-0-1 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=190(LC 12)  
 Max Uplift 2=-227(LC 12), 10=-227(LC 13)  
 Max Grav 2=1798(LC 1), 10=1798(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3355/790, 3-5=-3361/960, 5-6=-2633/804, 6-7=-2625/805, 7-9=-3248/902,  
 9-10=-3324/800  
 BOT CHORD 2-17=-580/2937, 15-17=-375/2414, 14-15=-165/1793, 12-14=-376/2408, 10-12=-595/2912  
 WEBS 3-17=-440/298, 5-17=-304/854, 5-15=-713/387, 6-15=-281/1103, 6-14=-284/1086,  
 7-14=-722/382, 7-12=-245/753, 9-12=-413/273

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=227, 10=227.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



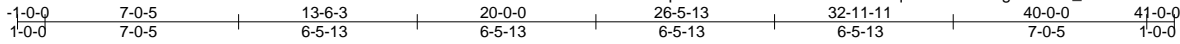


Job	Truss	Truss Type	Qty	Ply	CL 3067A Gable New CP	I42679040
1900459-1900459B	T3SGE	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:50 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-8SqAhxehSGGmgv5xaw5f\_M1TOJGeZ8w9UAb3o2yhfX7



2x4 =  
6x6 =

Scale = 1:83.6

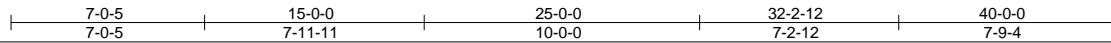
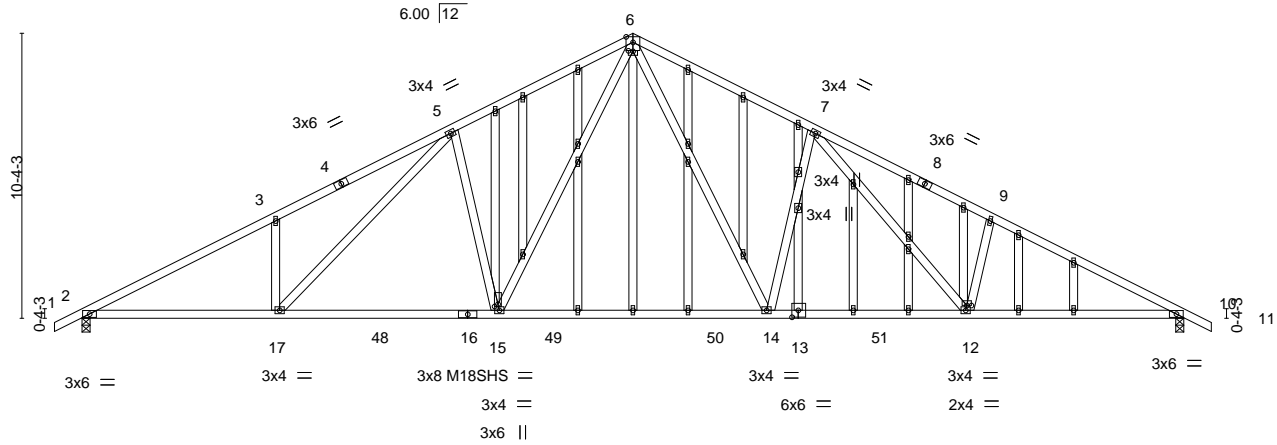


Plate Offsets (X, Y)--	[6:0-2-0,0-0-4], [12:0-2-0,0-0-0], [13:0-2-12,0-3-0], [15:0-1-0,0-1-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.71	Vert(LL)	-0.40 14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.88	Vert(CT)	-0.74 14-15	>652	180	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.14 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 323 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 13-16: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 7-9-2 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=175(LC 12)  
 Max Uplift 2=-210(LC 12), 10=-210(LC 13)  
 Max Grav 2=1660(LC 1), 10=1660(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3097/729, 3-5=-3103/887, 5-6=-2431/742, 6-7=-2423/743, 7-9=-2999/832,  
 9-10=-3068/738  
 BOT CHORD 2-17=-536/2711, 15-17=-346/2229, 14-15=-152/1655, 12-14=-348/2223, 10-12=-549/2688  
 WEBS 3-17=-406/275, 5-17=-281/789, 5-15=-658/357, 6-15=-260/1019, 6-14=-263/1002,  
 7-14=-667/353, 7-12=-226/696, 9-12=-381/252

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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 MT20 plates unless otherwise indicated.
  - All plates are 1.5x4 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=210, 10=210.



September 3, 2020

Job 1900459-1900459B	Truss T4GE	Truss Type GABLE	Qty 1	Ply 1	CL 3067A Gable New CP	142679041
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:51 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-ceOYuHfJDaOdH3g78dcuWaanIjollGHJqLdKUYhfx6



4x4 =

Scale = 1:49.9

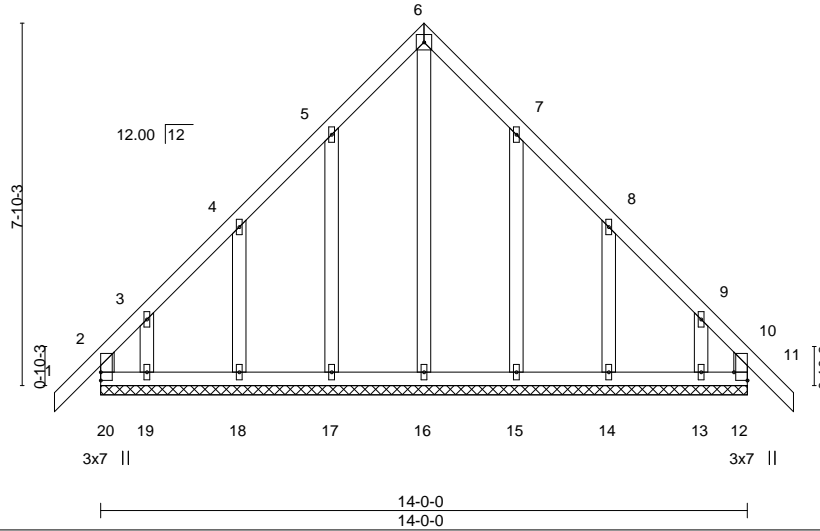


Plate Offsets (X,Y)--	[12:Edge,0-3-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.16	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.08	Vert(CT)	-0.01	11	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						Weight: 97 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-0-0.  
 (lb) - Max Horz 20=-221(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 12 except 20=-136(LC 8), 17=-107(LC 12), 18=-105(LC 12), 19=-184(LC 12), 15=-106(LC 13), 14=-106(LC 13), 13=-173(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

**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=130mph Vasd=103mph; TCdL=6.0psf; BCdL=6.0psf; h=30ft; 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
  - 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 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 12 except (jt=lb) 20=136, 17=107, 18=105, 19=184, 15=106, 14=106, 13=173.

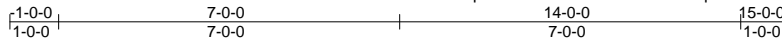


Job 1900459-1900459B	Truss T4	Truss Type Common	Qty 1	Ply 1	CL 3067A Gable New CP	I42679042
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:50 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-8SqAhxehSGmgv5xaw5f\_M1VZJMozFV9UAb3o2yhf7



4x6 ||

Scale = 1:47.3

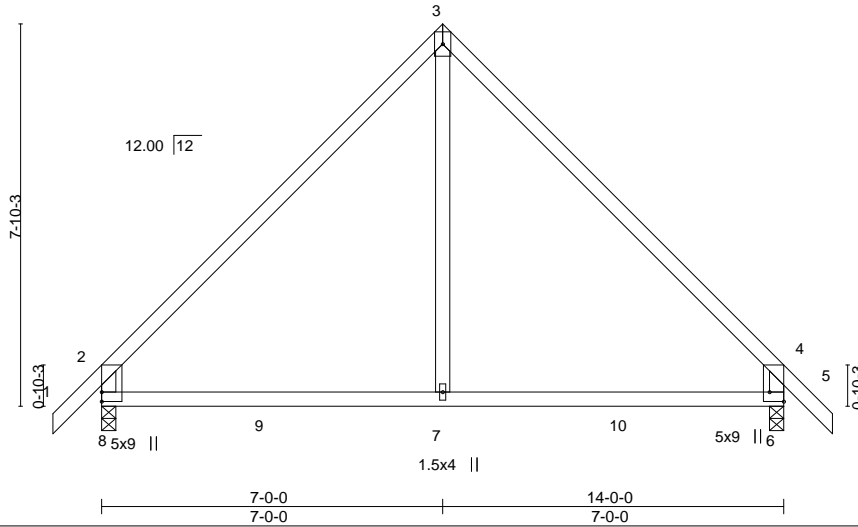


Plate Offsets (X,Y)-- [6:Edge,0-3-8]

<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	1.25	TC 0.63	Vert(LL)	-0.06	6-7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.49	Vert(CT)	-0.10	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MR					Weight: 67 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-6-12 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=221(LC 11)  
Max Uplift 8=63(LC 12), 6=63(LC 13)  
Max Grav 8=656(LC 19), 6=656(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-647/135, 3-4=-647/135, 2-8=-591/210, 4-6=-591/210  
BOT CHORD 7-8=-6/414, 6-7=-6/414  
WEBS 3-7=0/392

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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) 8, 6.



September 3, 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



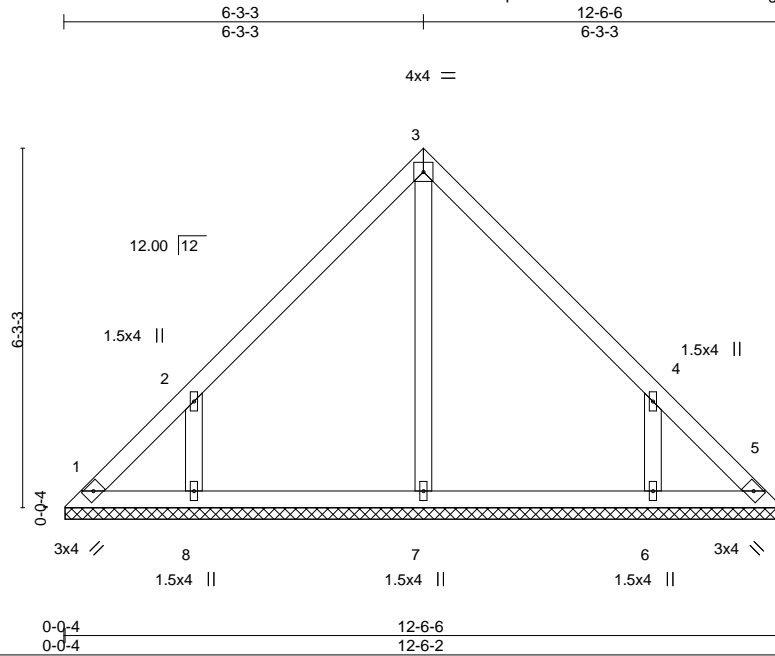
818 Soundside Road  
Edenton, NC 27932

Job 1900459-1900459B	Truss V1	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP	142679043
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:53 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-Y1WlJzgZlBfLXNqWF2eMc?f4NWTAmc4cA8qkPMyhfx4



Scale = 1:40.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 57 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.3  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 12-5-14.  
 (lb) - Max Horz 1=146(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=207(LC 12), 6=207(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=337(LC 19), 6=337(LC 20)

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

WEBS 2-8=-306/250, 4-6=-306/250

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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, 5 except (jt=lb) 8=207, 6=207.



September 3, 2020

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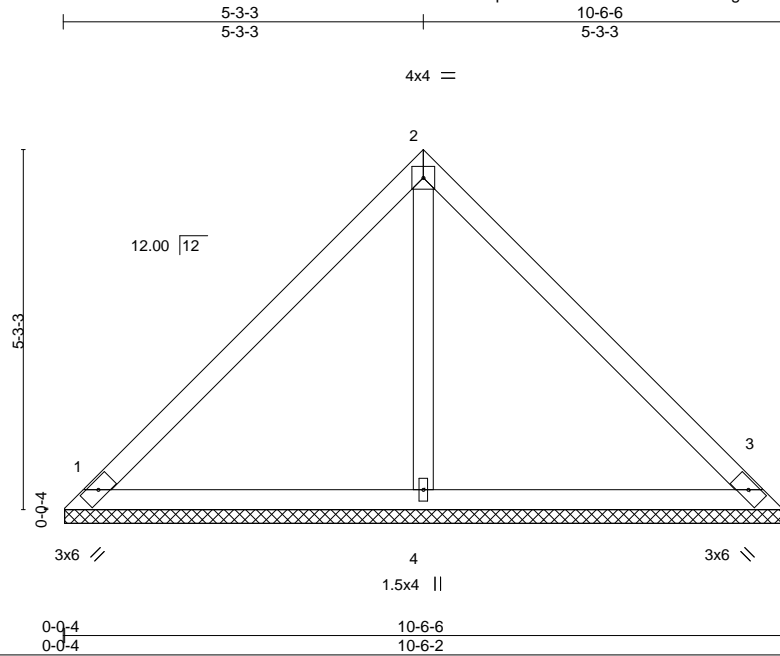
818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss V1B	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP Job Reference (optional)	I42679044
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:54 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-0D4gXJhBWWnC8XOipm9b8CCBwwkrV3LIPoZHxpyhfx3



Scale = 1:33.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.55	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.41	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 43 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.** (size) 1=10-5-14, 3=10-5-14, 4=10-5-14  
 Max Horz 1=122(LC 9)  
 Max Uplift 1=42(LC 13), 3=42(LC 13), 4=5(LC 12)  
 Max Grav 1=218(LC 1), 3=218(LC 1), 4=350(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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) 1, 3, 4.



September 3, 2020

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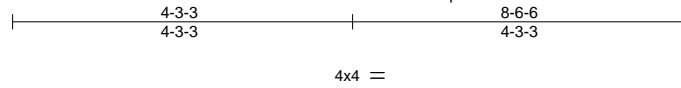
818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss V1C	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP Job Reference (optional)	I42679045
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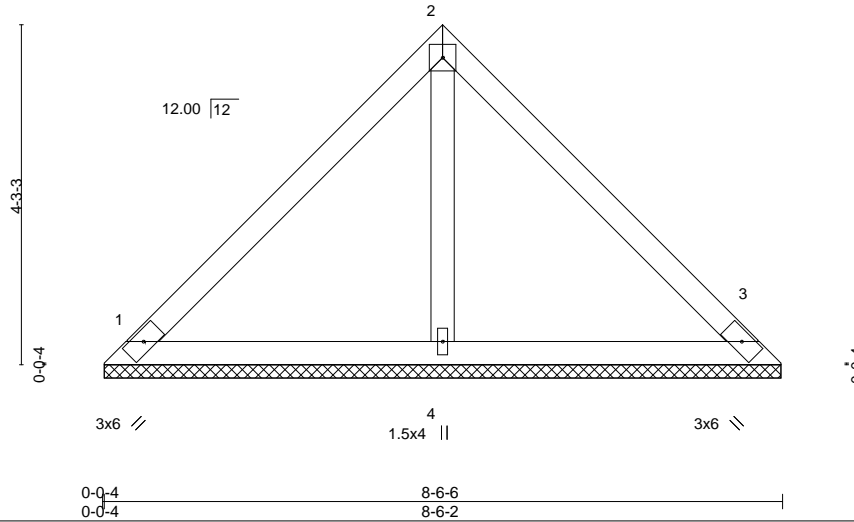
84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:55 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-UPe3kfpHpv3mhzuNThqhQIM5K6REXludSJqTFyfhx2



Scale = 1:28.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.52	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.26	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 35 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.** (size) 1=8-5-14, 3=8-5-14, 4=8-5-14  
Max Horz 1=-97(LC 8)  
Max Uplift 1=-46(LC 13), 3=-46(LC 13)  
Max Grav 1=187(LC 1), 3=187(LC 1), 4=252(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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) 1, 3.



September 3, 2020

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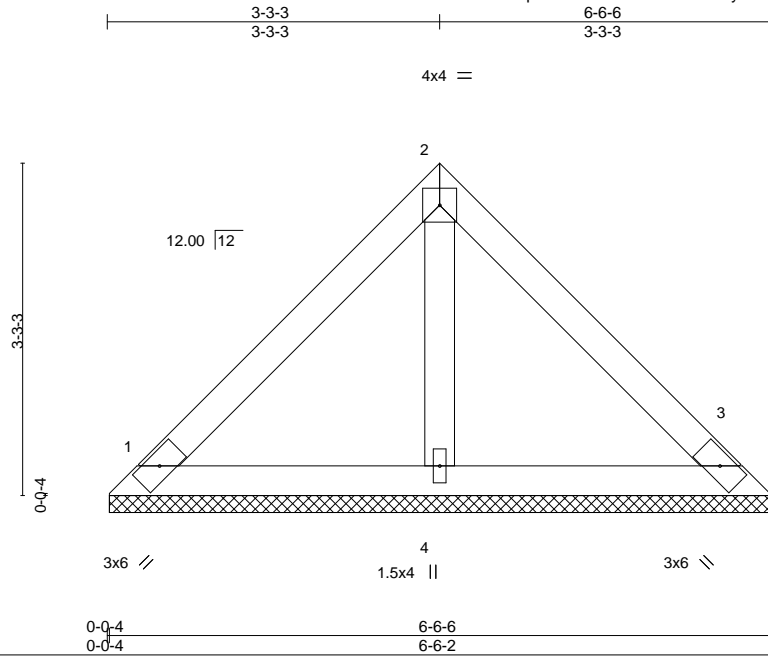
818 Soundside Road  
Edenton, NC 27932

Job 1900459-1900459B	Truss V1D	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP Job Reference (optional)	I42679046
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:56 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-ycBRx\_jS261wOqY5xBC3DdHbckUUz\_v2s62O?hyhfx1



Scale = 1:22.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 26 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.** (size) 1=6-5-14, 3=6-5-14, 4=6-5-14  
 Max Horz 1=-72(LC 8)  
 Max Uplift 1=-34(LC 13), 3=-34(LC 13)  
 Max Grav 1=139(LC 1), 3=139(LC 1), 4=188(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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) 1, 3.



September 3, 2020

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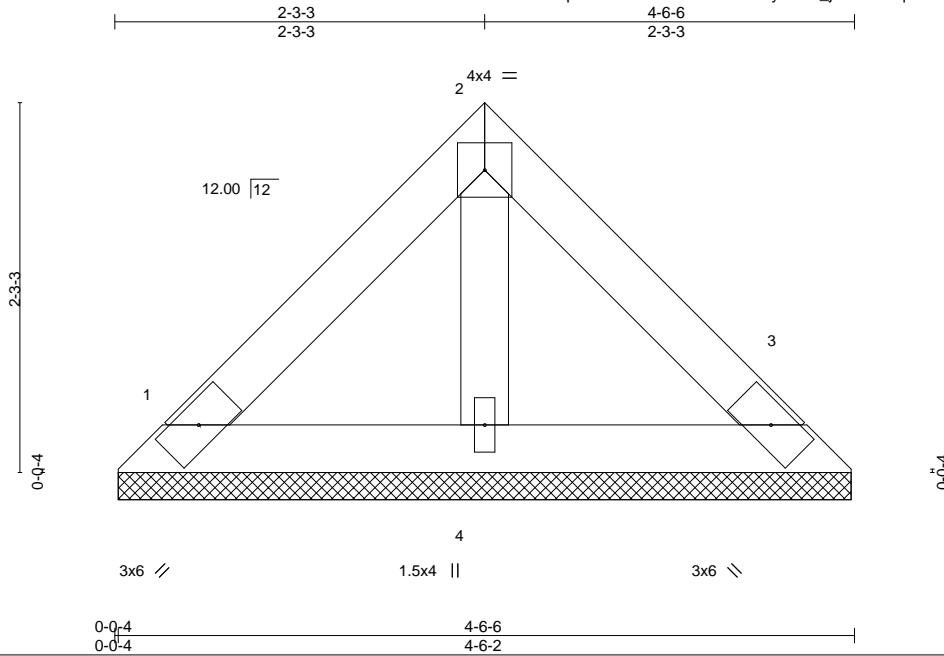
818 Soundside Road  
 Edenton, NC 27932

Job 1900459-1900459B	Truss V1E	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP Job Reference (optional)	I42679047
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:56 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-ycBRx\_jS261wOqY5xBC3DdHeBkVmz\_52s62O?hyhfx1



Scale = 1:14.1

<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	1.25	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 17 lb	FT = 20%

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

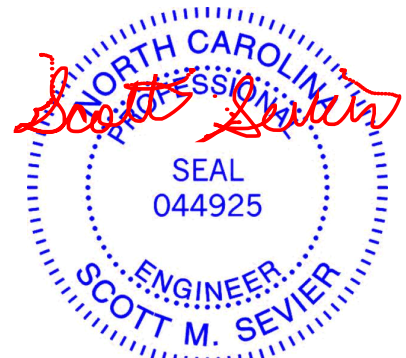
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-6-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-5-14, 3=4-5-14, 4=4-5-14  
Max Horz 1=-47(LC 8)  
Max Uplift 1=-23(LC 13), 3=-23(LC 13)  
Max Grav 1=91(LC 1), 3=91(LC 1), 4=123(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 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) 1, 3.



September 3, 2020

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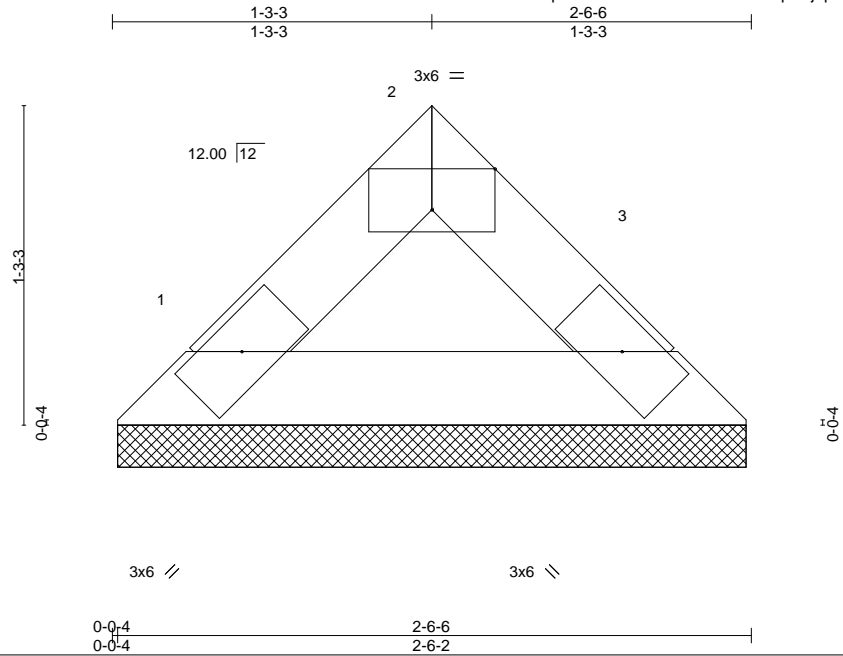


Job 1900459-1900459B	Truss V1F	Truss Type Valley	Qty 1	Ply 1	CL 3067A Gable New CP Job Reference (optional)	142679048
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84 Components (Dunn), Dunn, NC - 28334,

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Sep 2 12:51:57 2020 Page 1

ID:m28TrXaph866FSG2iwKmK8zdK0u-Rolp9Kj4pQ9n?\_7HUujlMrqqK8s1iRZB5loxY8yhfx0



Scale = 1:9.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
				Weight: 8 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 2-6-6 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-5-14, 3=2-5-14  
 Max Horz 1=-23(LC 8)  
 Max Uplift 1=-6(LC 13), 3=-6(LC 13)  
 Max Grav 1=73(LC 1), 3=73(LC 1)

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

**NOTES-**

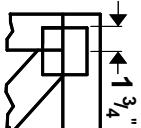
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 1, 3.



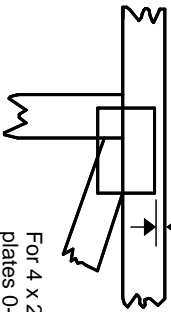
September 3,2020

# 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



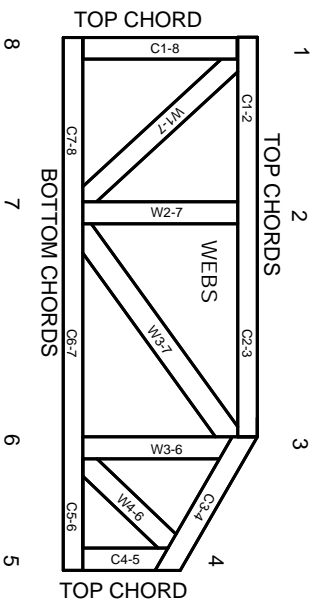
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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