

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20063300
NOF-15

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

Pages or sheets covered by this seal: I41520163 thru I41520183

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

North Carolina COA: C-0844



June 4, 2020

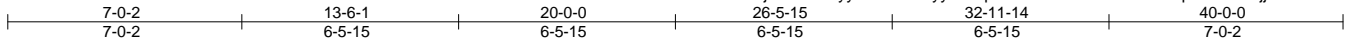
Sevier, Scott

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 20063300	Truss A	Truss Type COMMON TRUSS	Qty 2	Ply 1	NOF-15	I41520163
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The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:57:46 2020 Page 1
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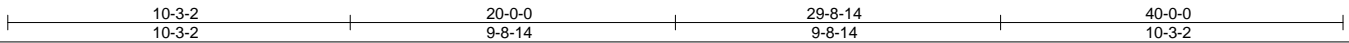
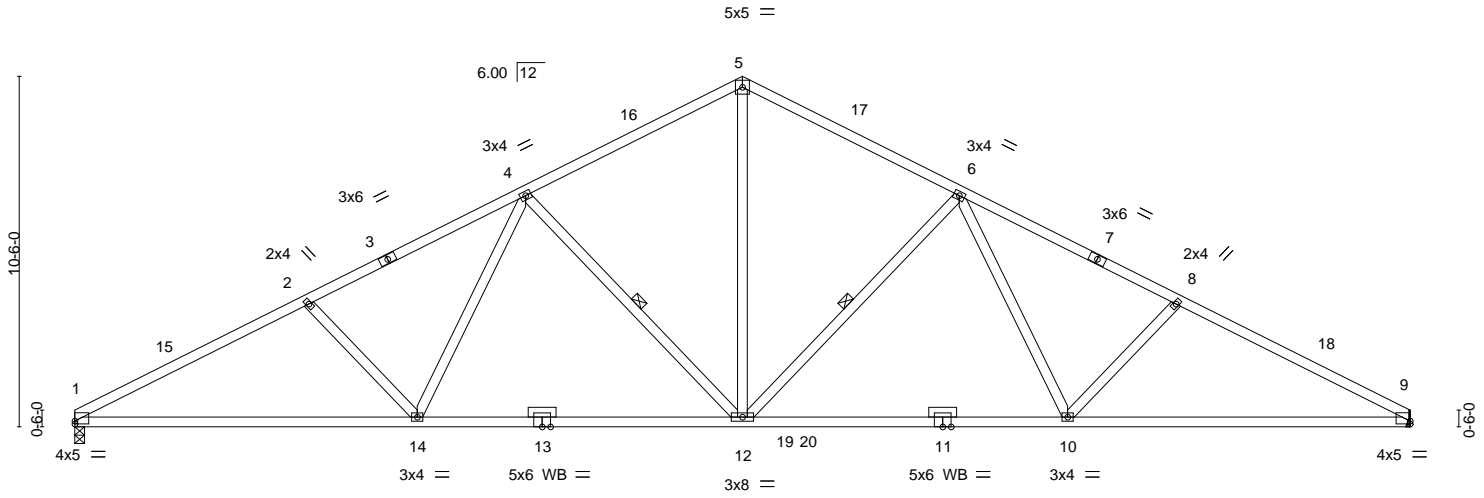


Plate Offsets (X, Y)-- [1:0-0-0,0-1-1], [9:0-0-0,0-1-1]

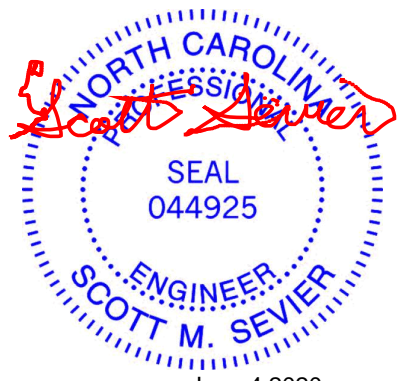
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.38	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.60	9-10	>792		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.14	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 207 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 1-3,7-9: 2x4 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins.
BOT CHORD 2x4 SP No.1 *Except* 11-13: 2x4 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-12, 4-12
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=0-3-8, 9=Mechanical, 9=Mechanical
 Max Horz 1=139(LC 14)
 Max Uplift 1=145(LC 10), 9=145(LC 11)
 Max Grav 1=1675(LC 2), 9=1674(LC 2), 9=1592(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3135/298, 2-4=-2927/292, 4-5=-2117/285, 5-6=-2117/285, 6-8=-2943/293, 8-9=-3157/300
 BOT CHORD 1-14=-321/2716, 12-14=-178/2299, 10-12=-102/2306, 9-10=-196/2742
 WEBS 5-12=-106/1522, 6-12=-728/214, 6-10=-38/615, 8-10=-353/190, 4-12=-719/213, 4-14=-36/600, 2-14=-337/188

- 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=5.0psf; BCDL=5.0psf; h=35ft; 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 17-0-0, Exterior(2) 17-0-0 to 23-0-0, Interior(1) 23-0-0 to 36-11-4, Exterior(2) 36-11-4 to 39-11-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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) except (jt=lb) 1=145, 9=145.



June 4, 2020

Job 20063300	Truss A1	Truss Type COMMON TRUSS	Qty 13	Ply 1	NOF-15	I41520164
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The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:57:46 2020 Page 1

ID:PVc7jxLhOWfMyvzbNFxcRyyo1P-pMsPY8VnBa4NuR0a4fk5pCYt5FiNjj2lb8h74wzA_TZ



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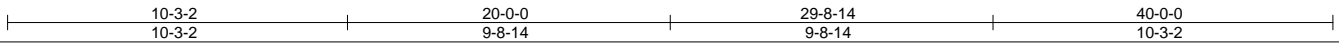
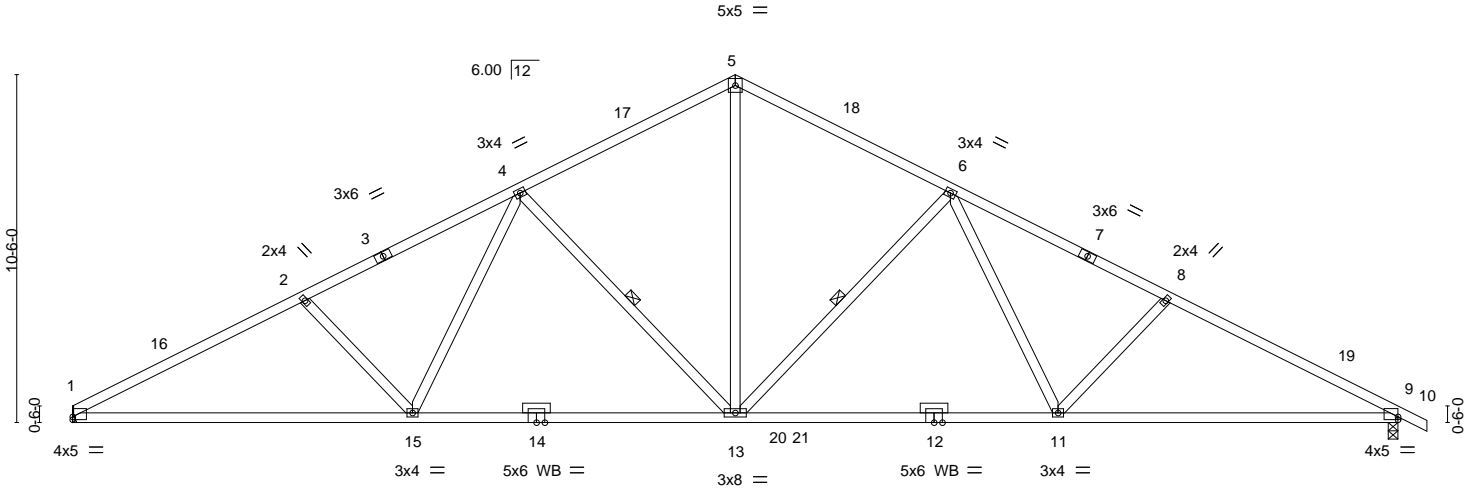


Plate Offsets (X,Y)-- [1:0-0-0,0-1-1], [9:0-0-0,0-1-1]

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 0.88	Vert(LL)	-0.39	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.60	1-15	>790		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.14	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 208 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 1-3: 2x4 SP DSS, 7-10: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins.
BOT CHORD 2x4 SP No.1 *Except* 12-14: 2x4 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-13, 4-13
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=Mechanical, 9=0-3-8
 Max Horz 1=-146(LC 15)
 Max Uplift 1=-145(LC 10), 9=-163(LC 11)
 Max Grav 1=1673(LC 2), 9=1727(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3155/297, 2-4=-2941/290, 4-5=-2116/282, 5-6=-2116/282, 6-8=-2922/280,
 8-9=-3129/284
 BOT CHORD 1-15=-321/2741, 13-15=-176/2305, 11-13=-88/2297, 9-11=-171/2708
 WEBS 5-13=-104/1521, 6-13=-718/213, 6-11=-35/596, 8-11=-331/183, 4-13=-727/214,
 4-15=-38/615, 2-15=-353/190

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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-12 to 3-0-12, Interior(1) 3-0-12 to 17-0-0, Exterior(2) 17-0-0 to 23-0-0, Interior(1) 23-0-0 to 37-10-8, Exterior(2) 37-10-8 to 40-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) except (jt=lb) 1=145, 9=163.

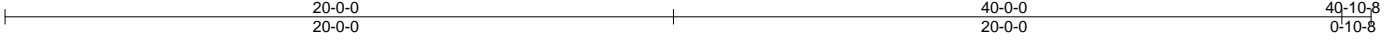


Job	Truss	Truss Type	Qty	Ply	NOF-15	141520165
20063300	A1GE	GABLE	2	1		

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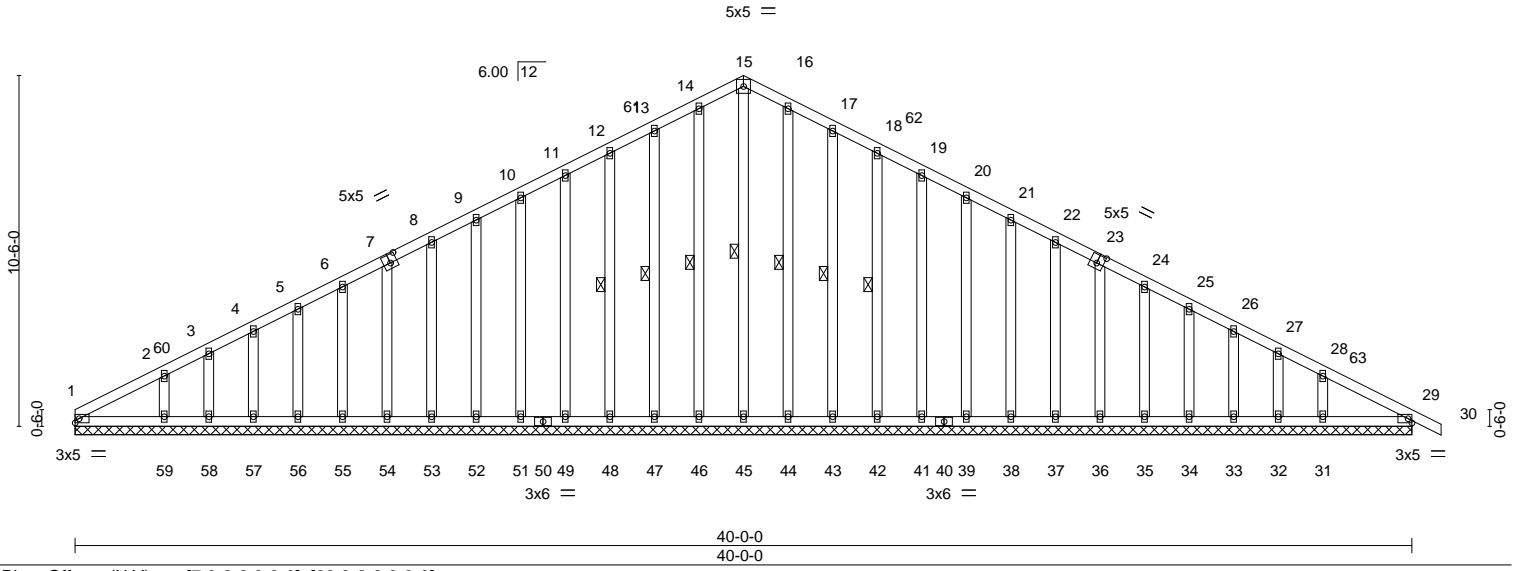


Plate Offsets (X,Y)--	[7:0-2-8,0-3-0], [23:0-2-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	0.00	29	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	30	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.01	29	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 347 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 15-45, 14-46, 13-47, 12-48, 16-44, 17-43, 18-42

REACTIONS. All bearings 40-0-0.
 (lb) - Max Horz 1=-146(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31
 Max Grav All reactions 250 lb or less at joint(s) 1, 45, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31, 29

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 13-14=-88/258, 14-15=-93/286, 15-16=-93/286, 16-17=-88/258

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 17-0-0, Corner(3) 17-0-0 to 23-0-0, Exterior(2) 23-0-0 to 37-10-8, Corner(3) 37-10-8 to 40-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31.

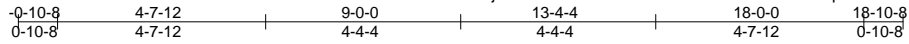


Job 20063300	Truss B	Truss Type COMMON TRUSS	Qty 1	Ply 1	NOF-15	I41520166
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4x4 =

Scale = 1:51.4

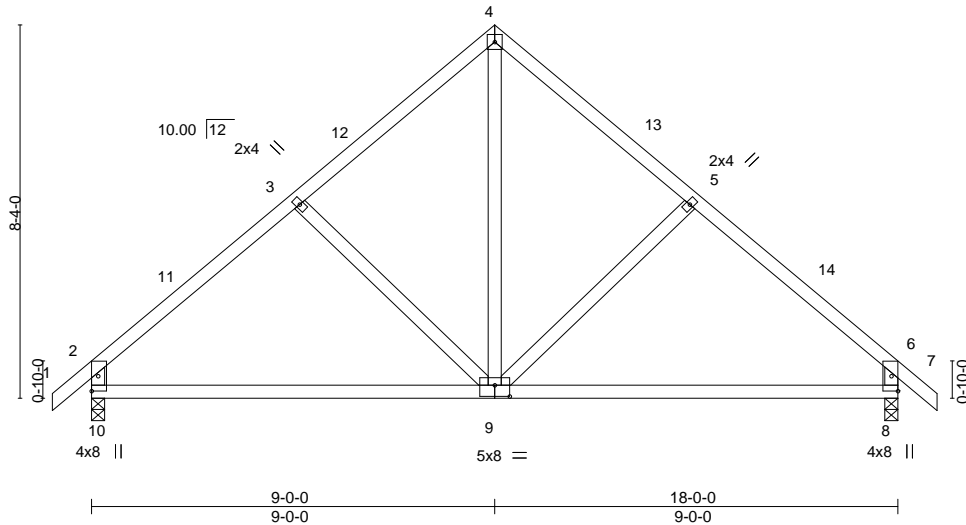


Plate Offsets (X,Y)-- [9:0-4-0,0-3-0]

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 0.41	Vert(LL)	-0.11	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.21	8-9	>993		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 96 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-10,6-8: 2x4 SP No.2

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

REACTIONS. (size) 10=0-3-8, 8=0-3-8
Max Horz 10=-185(LC 8)
Max Uplift 10=-66(LC 10), 8=-66(LC 11)
Max Grav 10=770(LC 1), 8=770(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-807/118, 3-4=-619/133, 4-5=-619/133, 5-6=-807/118, 2-10=-678/143,
6-8=-678/143
BOT CHORD 9-10=-81/581, 8-9=-9/536
WEBS 4-9=-69/463

- 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=5.0psf; BCDL=5.0psf; h=35ft; 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 6-0-0, Exterior(2) 6-0-0 to 12-0-0, Interior(1) 12-0-0 to 15-10-8, Exterior(2) 15-10-8 to 18-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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) 10, 8.
 - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



June 4, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



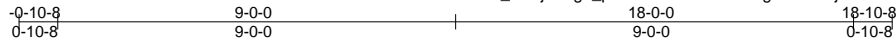
818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss BGE	Truss Type GABLE	Qty 1	Ply 1	NOF-15	I41520167
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4x4 =

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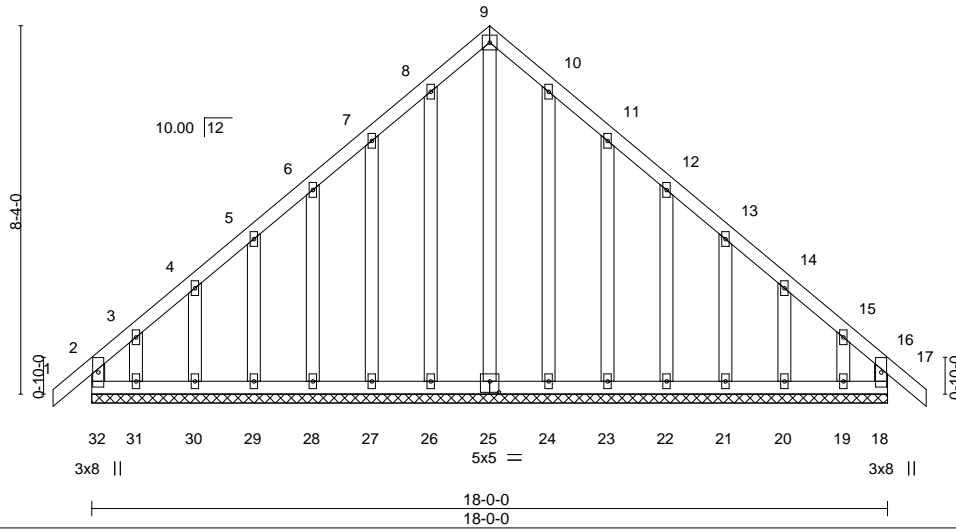


Plate Offsets (X,Y)--	[25:0-2-8,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) -0.00 17 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.00 17 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.23	Horz(CT) 0.00 18 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 148 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 6-0-0 oc bracing.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 18-0-0.
 (lb) - Max Horz 32=-185(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 18, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20 except 32=-112(LC 6), 31=-136(LC 10), 19=-123(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 32, 18, 25, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19

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=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-4-0, Exterior(2) 2-4-0 to 6-0-0, Corner(3) 6-0-0 to 12-0-0, Exterior(2) 12-0-0 to 15-8-0, Corner(3) 15-8-0 to 18-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20 except (jt=be) 32=112, 31=136, 19=123.



June 4, 2020

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 20063300	Truss BGR	Truss Type COMMON GIRDER	Qty 1	Ply 3	NOF-15	I41520168
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4x5 ||

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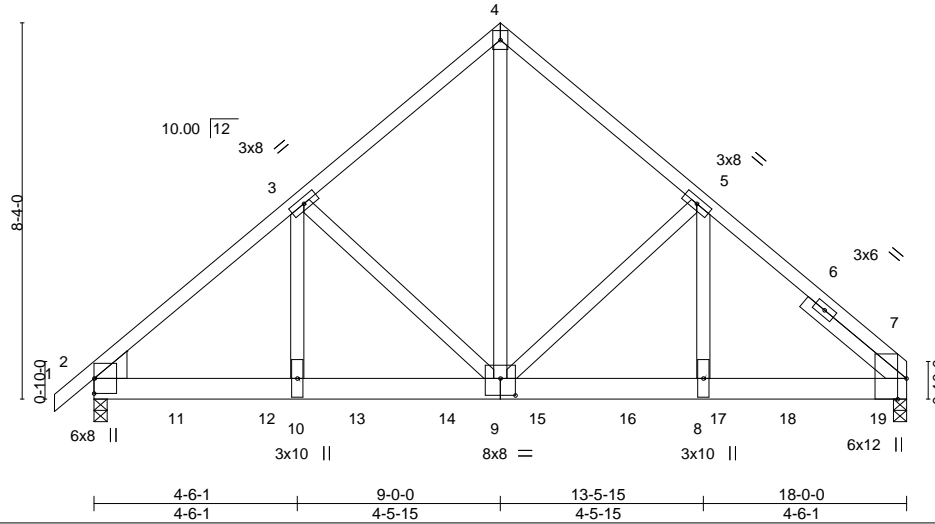


Plate Offsets (X,Y)-- [7:0-5-8,Edge], [9:0-4-0,0-4-8]

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 0.92	Vert(LL)	-0.07	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.14	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.04	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH						
								Weight: 376 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-9: 2x4 SP No.2	
WEDGE Left: 2x8 SP No.2	
SLIDER Right 2x4 SP No.3 - 2-10-0	

REACTIONS. (size) 7=0-3-8, 2=0-3-8
 Max Horz 2=164(LC 5)
 Max Uplift 7=-841(LC 9), 2=-772(LC 8)
 Max Grav 7=8892(LC 2), 2=7695(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-9455/955, 3-4=-6375/715, 4-5=-6317/710, 5-7=-9218/920
 BOT CHORD 2-10=-716/6812, 9-10=-716/6812, 8-9=-634/6828, 7-8=-634/6828
 WEBS 4-9=-813/7759, 5-9=-2710/381, 5-8=-333/3805, 3-9=-2687/391, 3-10=-368/4040

- NOTES-**
- 3-ply truss to be connected together with 10d (0.148"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 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=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BC DL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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) 7=841, 2=772.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1707 lb down and 183 lb up at 1-10-4, 1707 lb down and 183 lb up at 3-10-4, 1707 lb down and 183 lb up at 5-10-4, 1707 lb down and 183 lb up at 7-10-4, 1707 lb down and 183 lb up at 9-10-4, 1707 lb down and 183 lb up at 11-10-4, 1707 lb down and 183 lb up at 13-10-5, and 1674 lb down and 145 lb up at 15-4-12, and 1674 lb down and 145 lb up at 17-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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LOAD CASE(S) Standard
 Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 20063300	Truss BGR	Truss Type COMMON GIRDER	Qty 1	Ply 3	NOF-15 Job Reference (optional)	I41520168
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The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:57:52 2020 Page 2
ID:Rfnz1Eil1EkM7Qn?mVbvzyyEhil-eWDgoCZYnQrWcMTkQwrV2Tnu?glY7RSez48JHZA_TT

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 2-7=-20

Concentrated Loads (lb)

Vert: 11=-1634(B) 12=-1634(B) 13=-1634(B) 14=-1634(B) 15=-1634(B) 16=-1634(B) 17=-1634(B) 18=-1592(B) 19=-1592(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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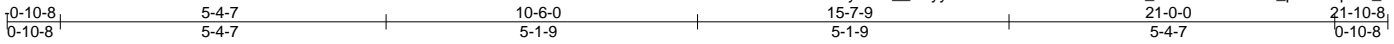
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-15	141520169
20063300	F	COMMON	5	1		

The Building Center, Gastonia, NC - 28052,

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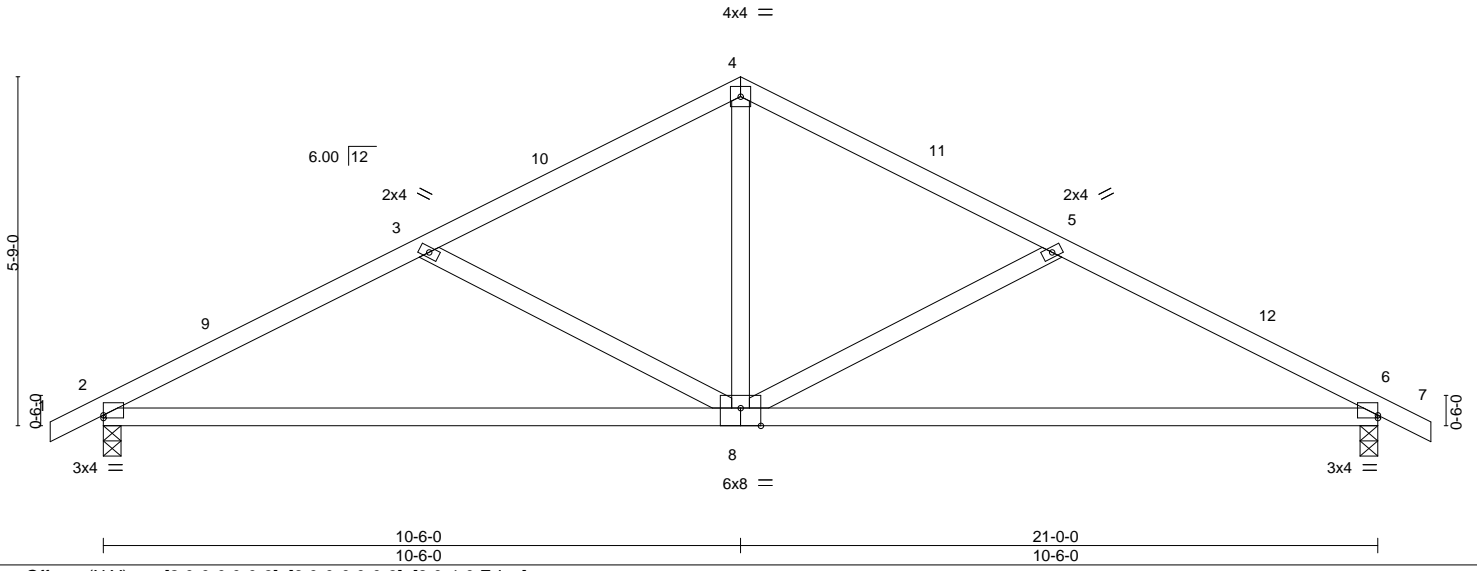


Plate Offsets (X,Y)--	[2:0-0-0,0-0-9], [6:0-0-0,0-0-9], [8:0-4-0,Edge]
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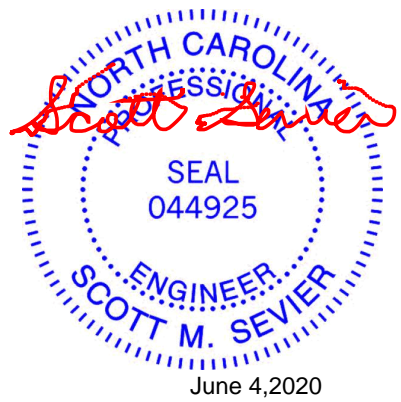
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.21	6-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.45	6-8	>555		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.03	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 94 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-10 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, 6=0-3-8
 Max Horz 2=-78(LC 15)
 Max Uplift 2=-93(LC 10), 6=-93(LC 11)
 Max Grav 2=890(LC 1), 6=890(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1340/199, 3-4=-1018/148, 4-5=-1018/148, 5-6=-1340/199
 BOT CHORD 2-8=-154/1136, 6-8=-106/1136
 WEBS 4-8=-6/596, 5-8=-356/179, 3-8=-356/178

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; 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 7-6-0, Exterior(2) 7-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-10-8, Exterior(2) 18-10-8 to 21-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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, 6.



Job 20063300	Truss FGE	Truss Type GABLE	Qty 1	Ply 1	NOF-15	141520170
					Job Reference (optional)	

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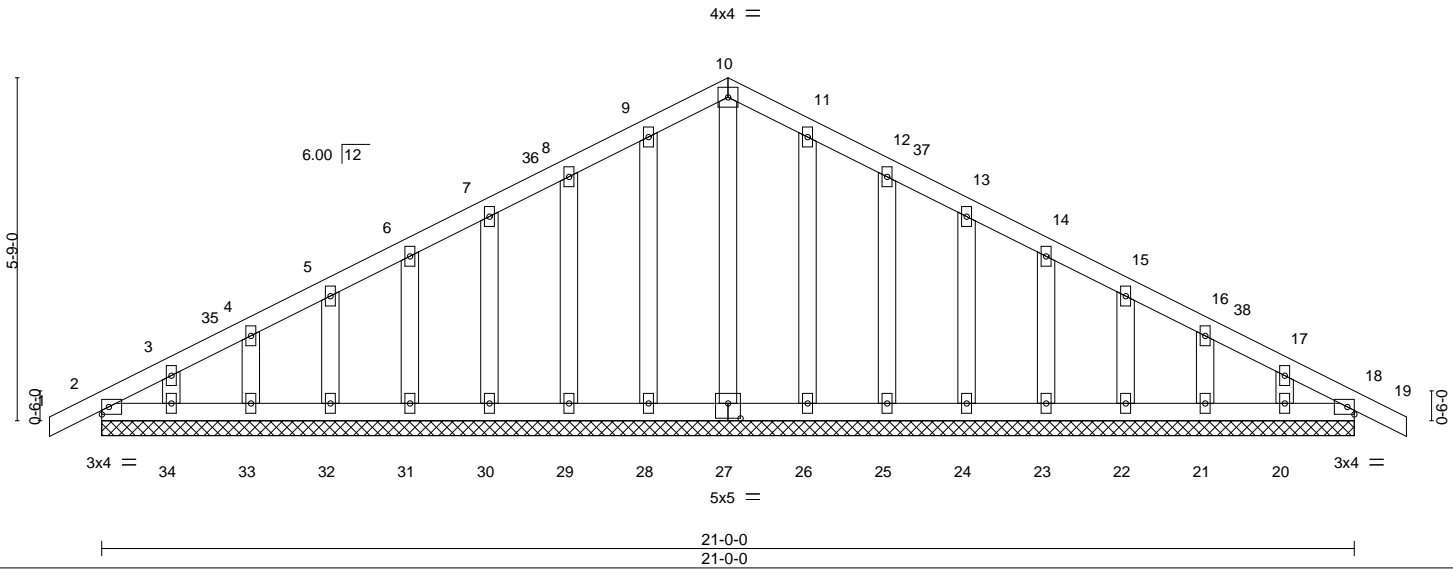


Plate Offsets (X,Y)-- [27:0-2-8,0-3-0]

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 0.05	Vert(LL)	-0.00	18	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	19	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	18	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 130 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 21-0-0.
(lb) - Max Horz 2=-78(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20

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=5.0psf; BCDL=5.0psf; h=35ft; 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 7-6-0, Corner(3) 7-6-0 to 13-6-0, Exterior(2) 13-6-0 to 18-10-8, Corner(3) 18-10-8 to 21-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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, 18, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20.



June 4, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss H	Truss Type MONOPITCH	Qty 8	Ply 1	NOF-15	I41520171
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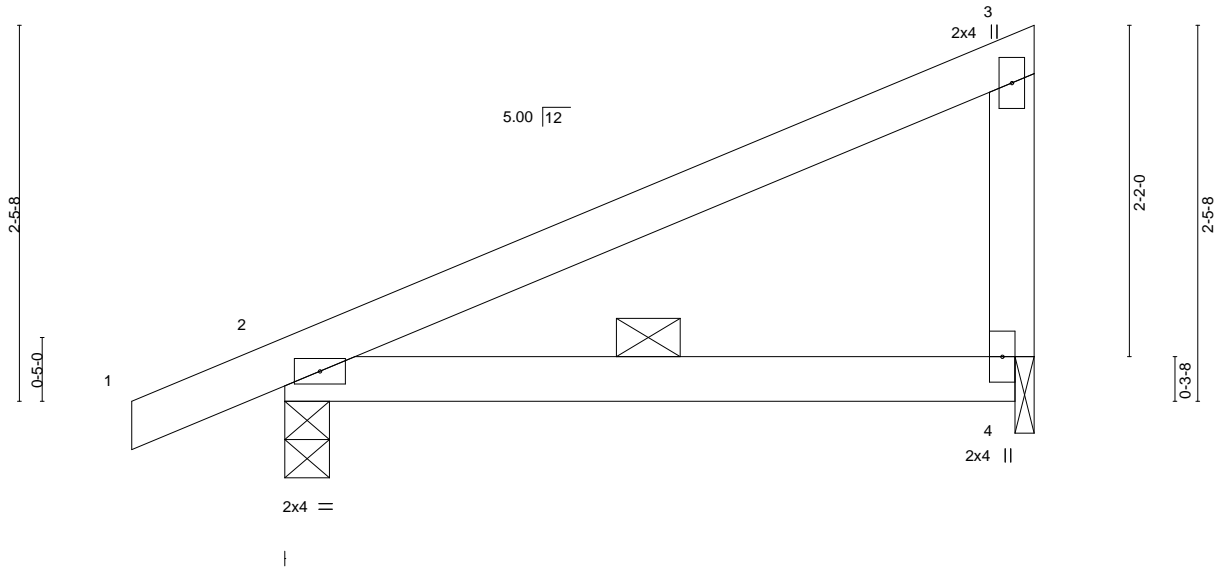
The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:57:55 2020 Page 1

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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 0.30	Vert(LL)	-0.02	4-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.05	4-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 20 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD 3-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 2=74(LC 10)
 Max Uplift 2=-32(LC 10), 4=-40(LC 10)
 Max Grav 2=256(LC 1), 4=184(LC 1)

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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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) 2, 4.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.



June 4, 2020

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818 Soundside Road
 Edenton, NC 27932

Job 20063300	Truss HGE	Truss Type GABLE	Qty 2	Ply 1	NOF-15	I41520172
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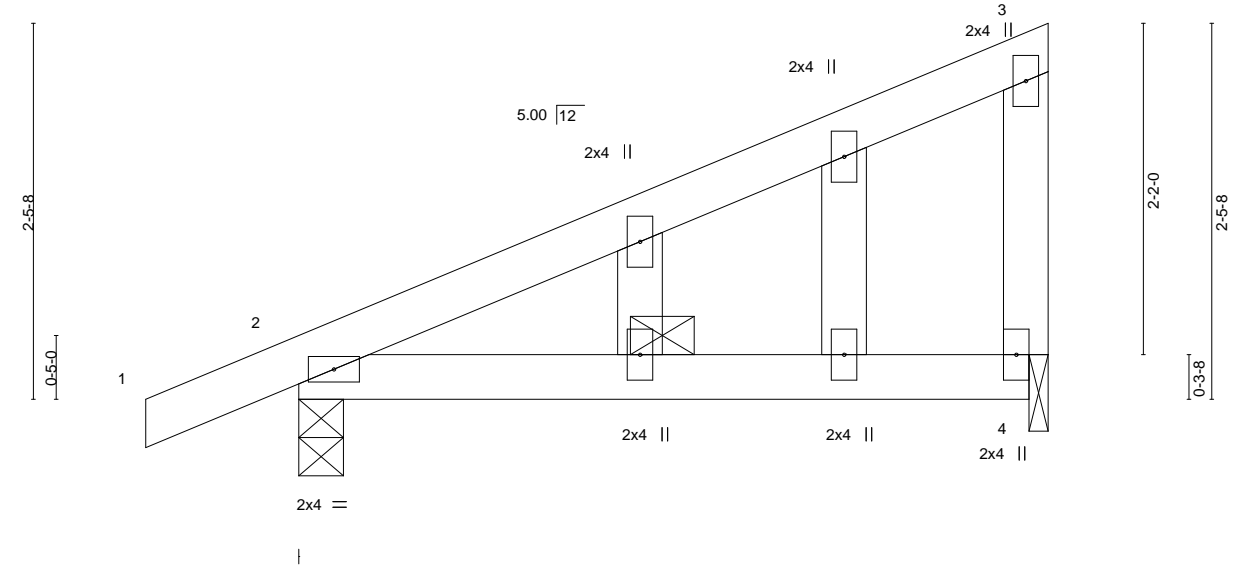
The Building Center, Gastonia, NC - 28052,

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Scale = 1:15.1



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 0.30	Vert(LL)	-0.02 4-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.05 4-11	>999	240		
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-AS					Weight: 23 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD 3-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 2=74(LC 10)
 Max Uplift 2=-32(LC 10), 4=-40(LC 10)
 Max Grav 2=256(LC 1), 4=184(LC 1)

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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 studs spaced at 1-4-0 oc.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

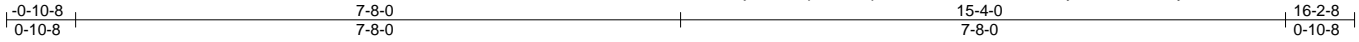


June 4, 2020

Job 20063300	Truss J	Truss Type COMMON TRUSS	Qty 2	Ply 1	NOF-15	I41520173
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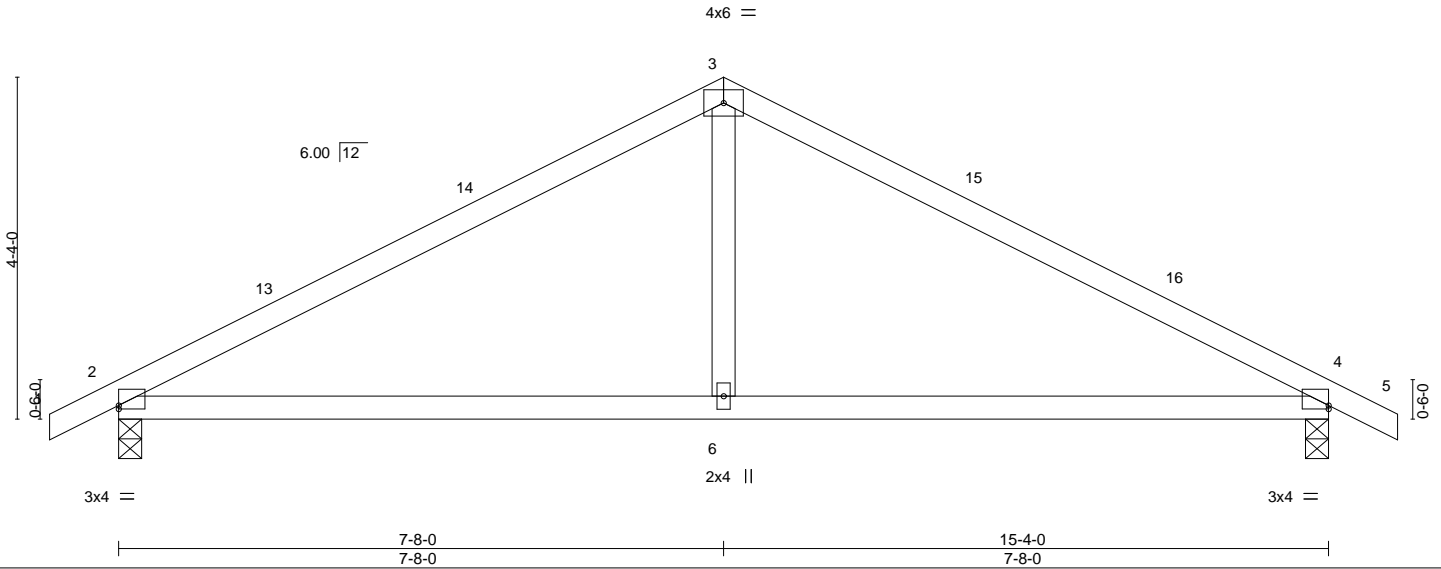


Plate Offsets (X,Y)--	[2:0-0-0,0-0-9], [4:Edge,0-0-9]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.64	Vert(LL) -0.08 6-9 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.15 6-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.02 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS		Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=-58(LC 15)
 Max Uplift 2=-71(LC 10), 4=-71(LC 11)
 Max Grav 2=666(LC 1), 4=666(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-853/145, 3-4=-853/145
 BOT CHORD 2-6=-27/678, 4-6=-27/678
 WEBS 3-6=0/341

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; 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 4-8-0, Exterior(2) 4-8-0 to 10-8-0, Interior(1) 10-8-0 to 13-2-8, Exterior(2) 13-2-8 to 16-2-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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, 4.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Job 20063300	Truss JGR	Truss Type COMMON GIRDER	Qty 1	Ply 2	NOF-15	I41520175
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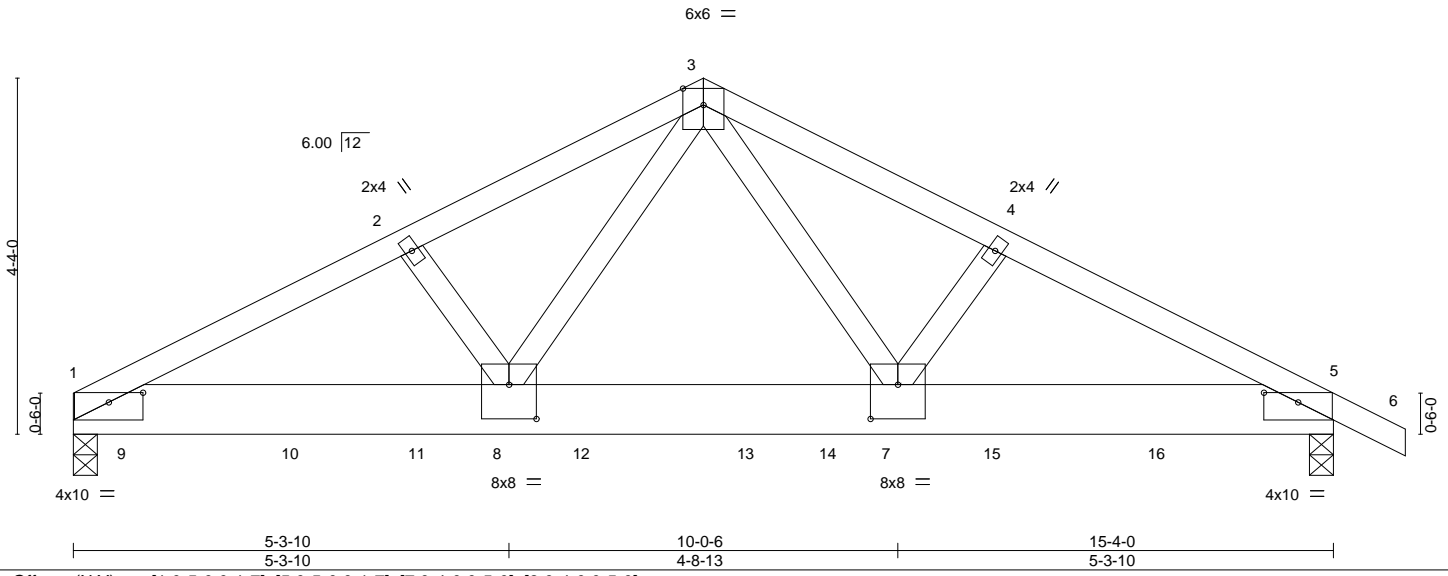
The Building Center, Gastonia, NC - 28052,

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ID:isXmBKR48gXNI1yKVLtaOwyoy1l-xs8KGbfx7ajXyRW4LuT8qya6UUE1Ga6fagKB1fzA_TM



Scale = 1:28.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.77	in (loc) l/defl L/d	MT20	137/130
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) -0.14 7-8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.70	Vert(CT) -0.26 7-8 >695 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.04 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 203 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 1-1/2x7-1/4 LP-LSL TC 1.75E
WEBS 2x4 SP No.2 *Except*
4-7,2-8: 2x4 SP No.3

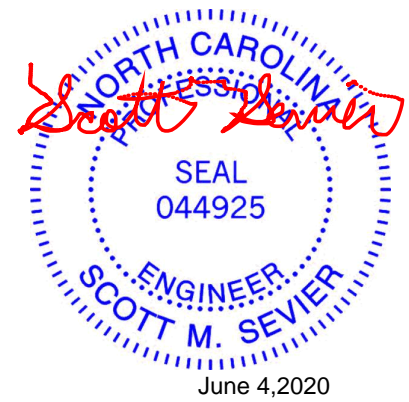
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-64(LC 28)
Max Uplift 1=-727(LC 8), 5=-640(LC 9)
Max Grav 1=7722(LC 2), 5=6616(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11271/1073, 2-3=-11189/1083, 3-4=-11150/1077, 4-5=-11230/1068
BOT CHORD 1-8=-957/9942, 7-8=-622/7003, 5-7=-893/9899
WEBS 3-7=-552/5670, 3-8=-559/5732

- NOTES-**
- 2-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 1-1/2x7-1/4 - 2 rows staggered at 0-2-0 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=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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=727, 5=640.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1659 lb down and 161 lb up at 0-8-12, 1655 lb down and 165 lb up at 2-8-12, 1653 lb down and 165 lb up at 4-3-4, 1653 lb down and 165 lb up at 6-3-4, 1653 lb down and 165 lb up at 8-3-4, 1653 lb down and 165 lb up at 9-3-4, and 1653 lb down and 165 lb up at 11-3-4, and 1653 lb down and 165 lb up at 13-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-6=-60, 1-5=-20



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss JGR	Truss Type COMMON GIRDER	Qty 1	Ply 2	NOF-15 Job Reference (optional)	I41520175
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The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:58:00 2020 Page 2
ID:isXmBKR48gXNI1yKVLtaOwyyo1I-P2iiUxgZutrOab5Huc_NN97HEuaG?1MppK4kZ6zA_TL

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1576(F) 10=-1572(F) 11=-1571(F) 12=-1571(F) 13=-1571(F) 14=-1571(F) 15=-1571(F) 16=-1571(F)

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818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss V1	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	I41520176
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ID:X0u1ROVrkWHW0yPTrc_eByyo1C-P2iiUxgZutrOab5Huc_NN97Qhuha?AqppK4kZ6zA_TL



4x4 =

Scale = 1:43.5

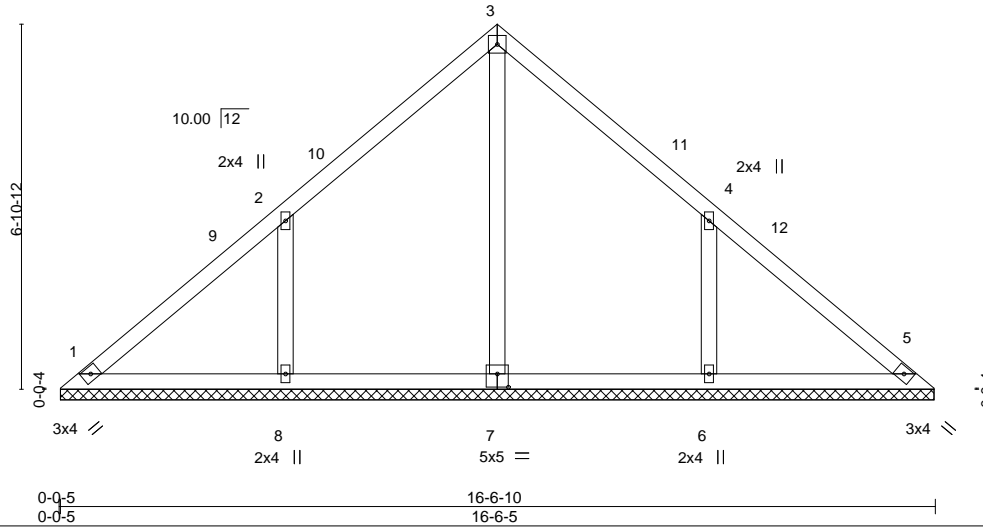


Plate Offsets (X,Y)--	[7:0-2-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 73 lb	FT = 20%

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

REACTIONS. All bearings 16-6-0.
 (lb) - Max Horz 1=-133(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-161(LC 10), 6=-161(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=358(LC 20), 8=450(LC 17), 6=450(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-297/198, 4-6=-296/198

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; 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 5-3-5, Exterior(2) 5-3-5 to 11-3-5, Interior(1) 11-3-5 to 13-1-12, Exterior(2) 13-1-12 to 16-1-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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 (jt=lb) 8=161, 6=161.

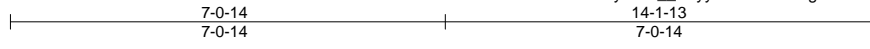


Job 20063300	Truss V2	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	I41520177
					Job Reference (optional)	

The Building Center, Gastonia, NC - 28052,

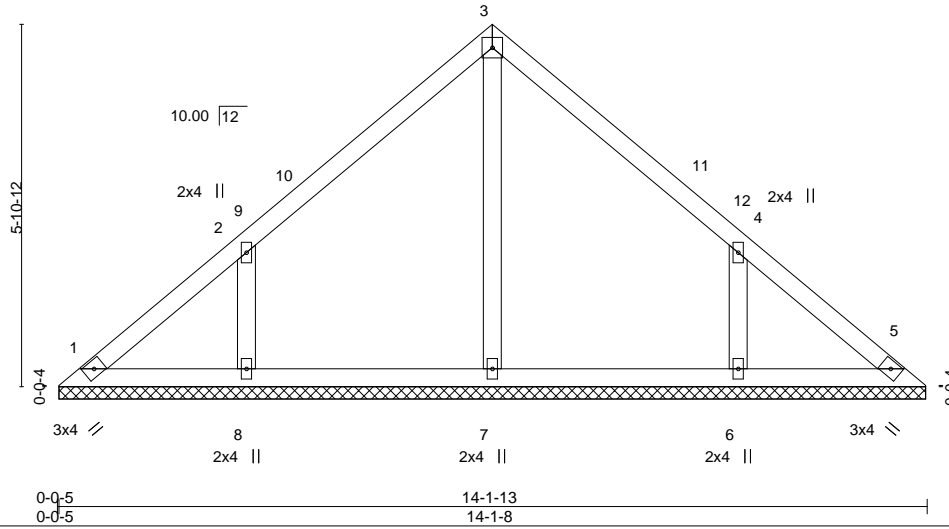
8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:58:01 2020 Page 1

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4x4 =

Scale = 1:37.5



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	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	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: 61 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 14-1-3.
(lb) - Max Horz 1=-112(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-139(LC 10), 6=-139(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=334(LC 17), 6=334(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-258/174, 4-6=-258/174

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; 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 4-0-14, Exterior(2) 4-0-14 to 10-0-14, Interior(1) 10-0-14 to 10-8-15, Exterior(2) 10-8-15 to 13-8-15 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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 except (jt=lb) 8=139, 6=139.



June 4, 2020

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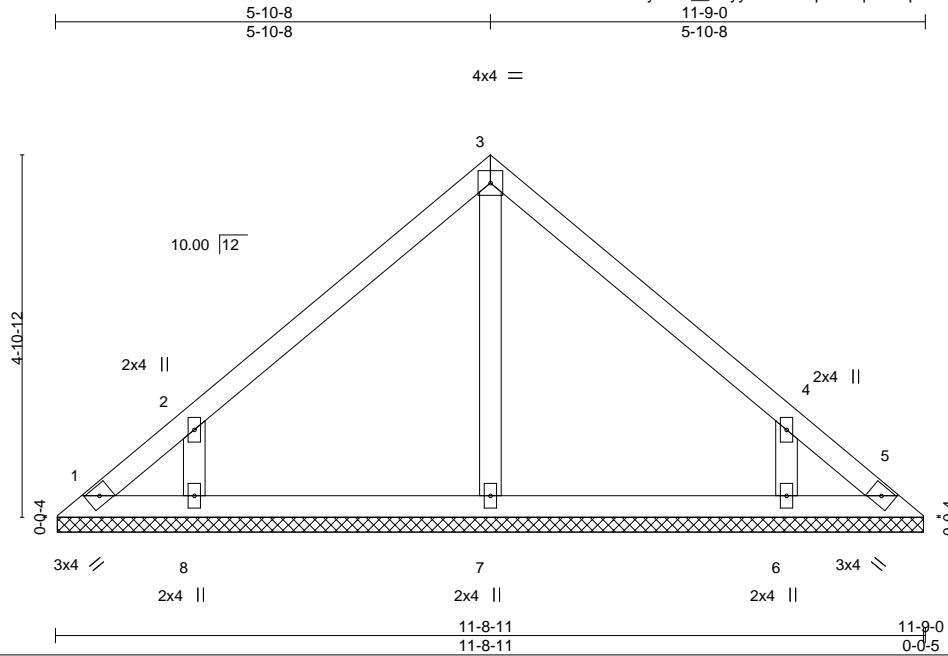
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss V3	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	I41520178
					Job Reference (optional)	

The Building Center, Gastonia, NC - 28052,

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ID:X0u1ROVrkWHW0yPTrc_eByyo1C-MRqSvdhqQV55pvEfo11rSaCnviNcT4o6GeZre_zA_TJ



Scale = 1:31.1

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 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 48 lb	FT = 20%

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

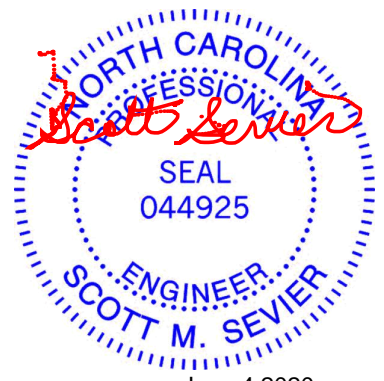
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-8-6.
 (lb) - Max Horz 1=92(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=133(LC 10), 6=132(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=309(LC 17), 6=309(LC 18)

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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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=133, 6=132.



June 4, 2020

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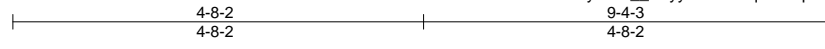
818 Soundside Road
 Edenton, NC 27932

Job 20063300	Truss V4	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	I41520179
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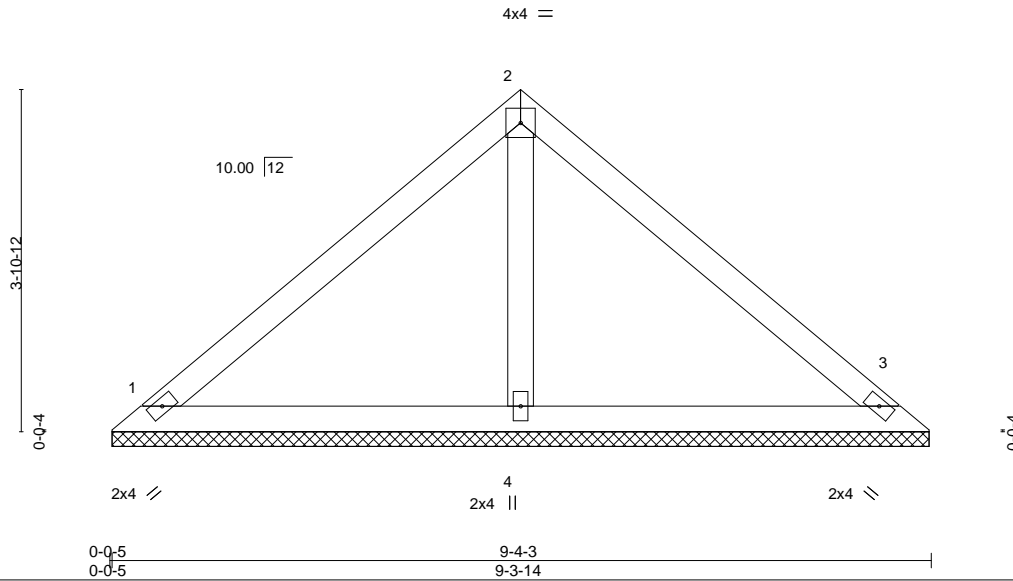
The Building Center, Gastonia, NC - 28052,

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Scale = 1:26.2



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 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 35 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. (size) 1=9-3-10, 3=9-3-10, 4=9-3-10
Max Horz 1=72(LC 7)
Max Uplift 1=-23(LC 11), 3=-32(LC 11), 4=-3(LC 10)
Max Grav 1=181(LC 1), 3=181(LC 1), 4=322(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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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, 4.



June 4, 2020

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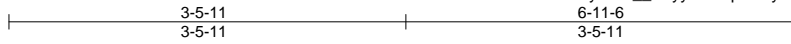


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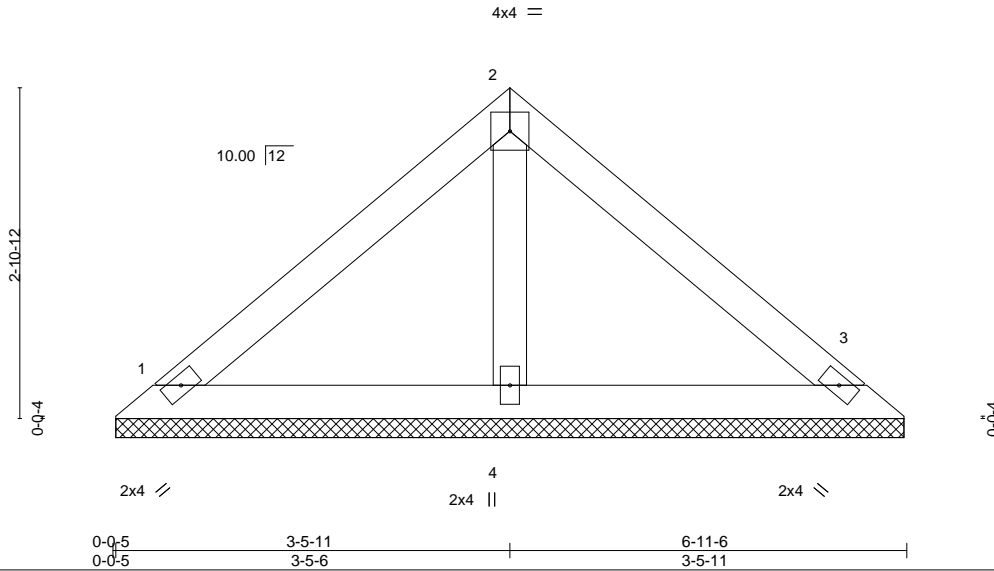
Job 20063300	Truss V5	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	I41520180
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8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:58:03 2020 Page 1
ID:X0u1ROVrkWHW0yPTrc__eByyo1C-qdOr6yiSBoEyR3prakY4?olyo5jFCYdFVIIPARZA_TI



Scale = 1:20.2



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	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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.2
BOT CHORD 2x4 SP No.2
WEBS 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=6-10-13, 3=6-10-13, 4=6-10-13
Max Horz 1=52(LC 7)
Max Uplift 1=-24(LC 11), 3=-30(LC 11)
Max Grav 1=141(LC 1), 3=141(LC 1), 4=210(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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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.



June 4, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

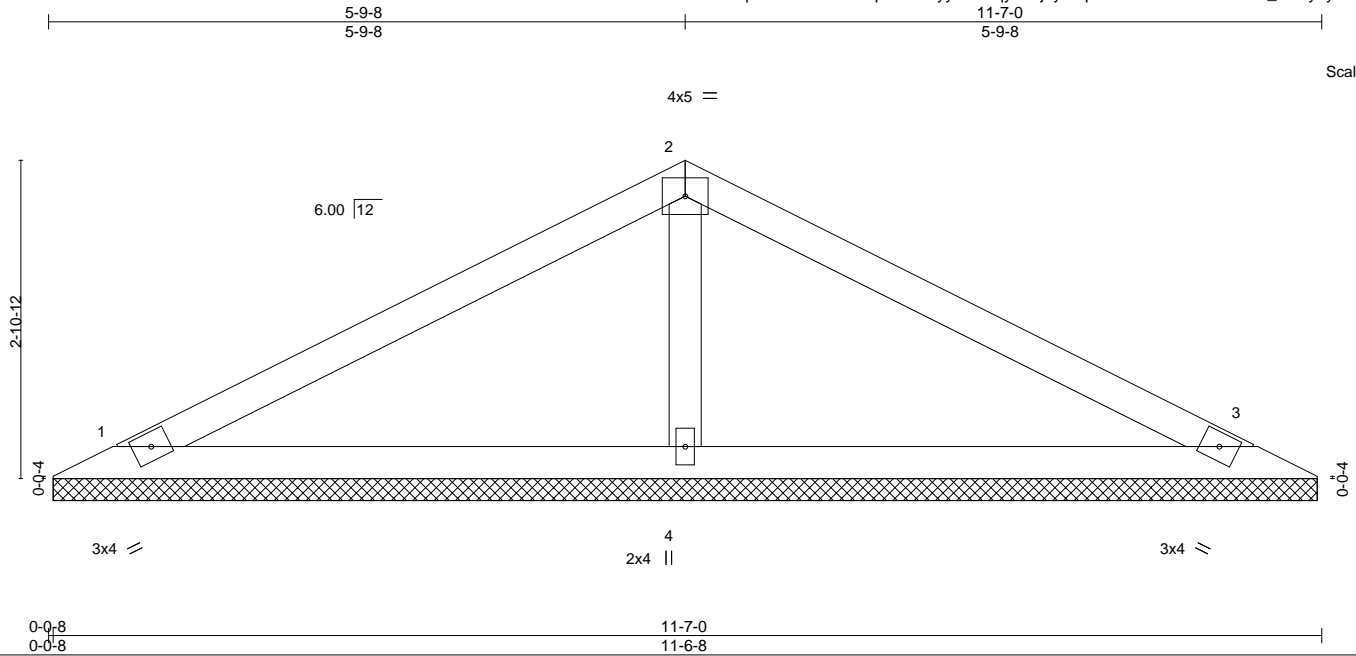


818 Soundside Road
Edenton, NC 27932

Job 20063300	Truss V7	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	141520182
					Job Reference (optional)	

The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:58:04 2020 Page 1
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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 0.38	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	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 38 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. (size) 1=11-6-0, 3=11-6-0, 4=11-6-0
Max Horz 1=35(LC 10)
Max Uplift 1=-30(LC 10), 3=-37(LC 11), 4=-15(LC 10)
Max Grav 1=190(LC 21), 3=190(LC 22), 4=449(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-298/126

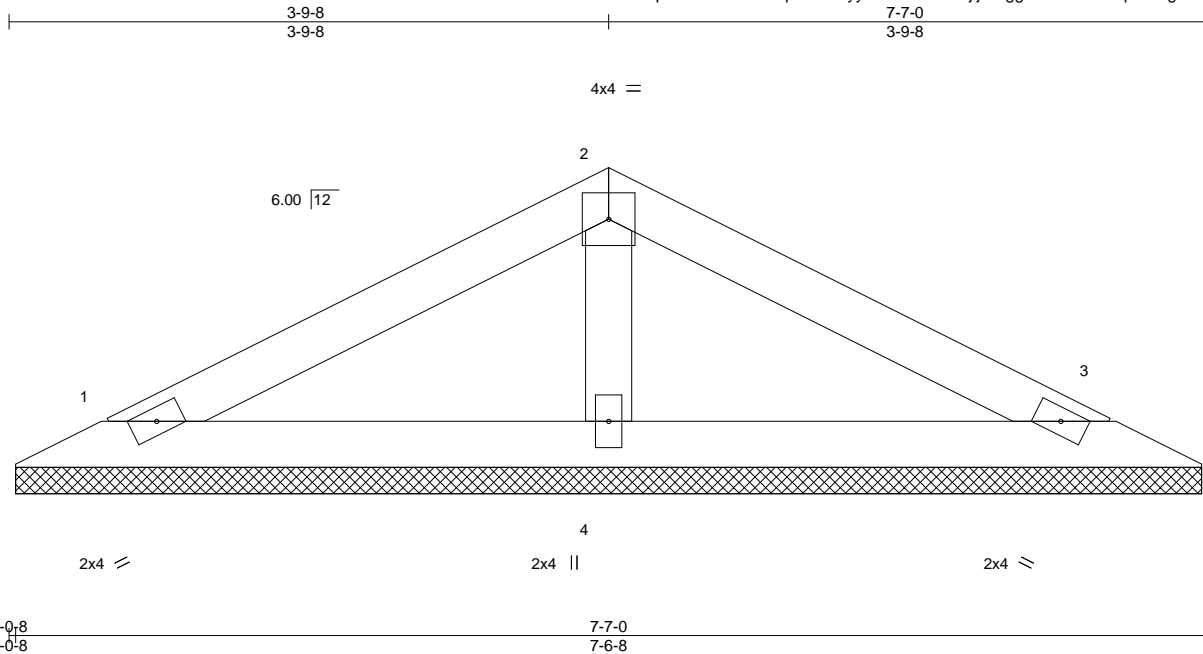
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 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 with a clearance greater than 6-0-0 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, 4.



Job 20063300	Truss V8	Truss Type Valley Truss	Qty 1	Ply 1	NOF-15	141520183
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The Building Center, Gastonia, NC - 28052,

8.410 s May 22 2020 MiTek Industries, Inc. Wed Jun 3 12:58:05 2020 Page 1
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Scale = 1:14.6

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	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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: 24 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. (size) 1=7-6-0, 3=7-6-0, 4=7-6-0
Max Horz 1=-22(LC 11)
Max Uplift 1=-24(LC 10), 3=-28(LC 11)
Max Grav 1=128(LC 1), 3=128(LC 1), 4=249(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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 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 with a clearance greater than 6-0-0 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.



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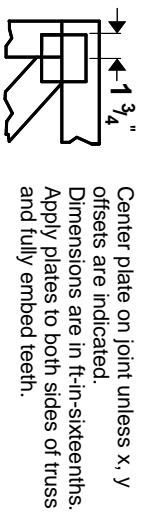
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



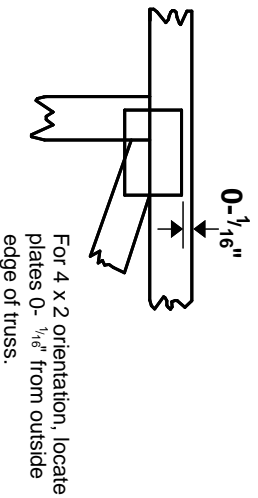
818 Soundside Road
Edenton, NC 27932

Symbols

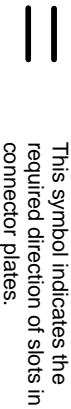
PLATE LOCATION AND ORIENTATION



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



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

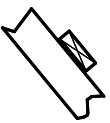


This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

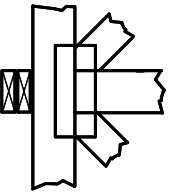
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

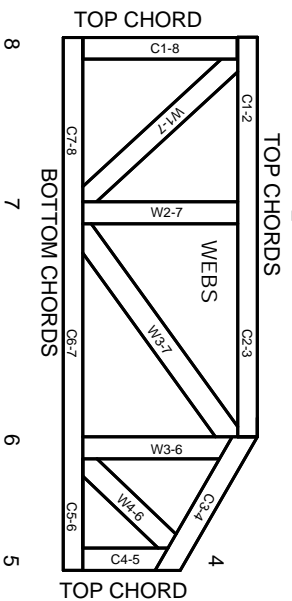


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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