

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20031164
NOF-9

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: I40724351 thru I40724365

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

North Carolina COA: C-0844



March 24, 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	NOF-9	140724351
20031164	A	COMMON	6	1		

The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-1cpo_9BlgfNE04Y9tS8LOURzffQYuHhCb4DJ2hzY34b

0-10-8	5-11-14	12-0-14	20-6-0	28-11-2	35-0-2	41-0-0	41-10-8
0-10-8	5-11-14	6-1-0	8-5-2	8-5-2	6-1-0	5-11-14	0-10-8

Scale = 1:69.2

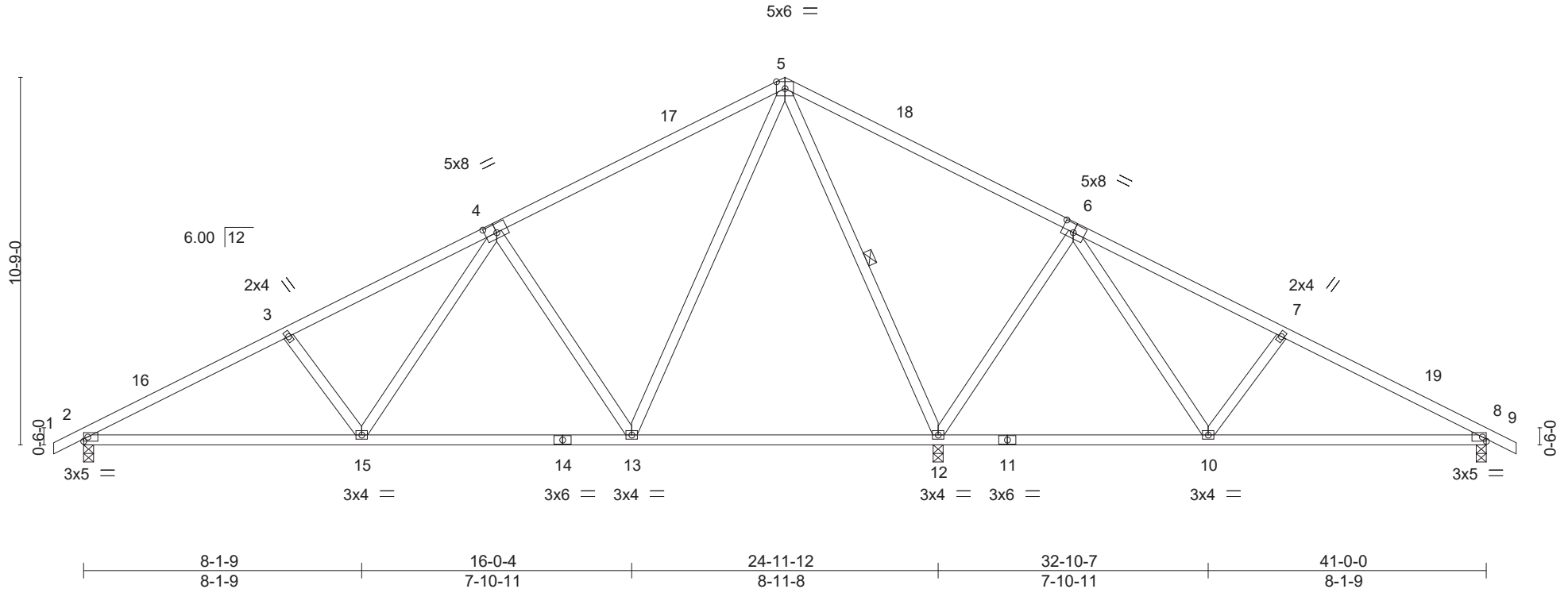


Plate Offsets (X,Y)--	[4:0-4-0,0-3-0], [6:0-4-0,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.84	Vert(LL) -0.37 12-13 >806 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.50 12-13 >601 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 218 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 or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-12

REACTIONS. (size) 8=0-3-8, 12=0-3-8, 2=0-3-8
 Max Horz 2=146(LC 10)
 Max Uplift 8=-87(LC 11), 12=-137(LC 10), 2=-113(LC 10)
 Max Grav 8=484(LC 22), 12=2107(LC 1), 2=892(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1338/169, 3-4=-1154/177, 4-5=-550/161, 5-6=0/761, 6-7=-302/155, 7-8=-490/117
 BOT CHORD 2-15=-227/1125, 13-15=-121/733, 10-12=-279/96, 8-10=-44/380
 WEBS 5-12=-1471/180, 6-12=-704/243, 6-10=-45/508, 7-10=-306/144, 5-13=-128/872,
 4-13=-688/242, 4-15=-43/483, 3-15=-270/142

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2) 17-6-0 to 23-6-0, Interior(1) 23-6-0 to 38-10-8, Exterior(2) 38-10-8 to 41-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 8, 137 lb uplift at joint 12 and 113 lb uplift at joint 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	Truss	Truss Type	Qty	Ply	NOF-9	140724352
20031164	A1	COMMON	3	1		

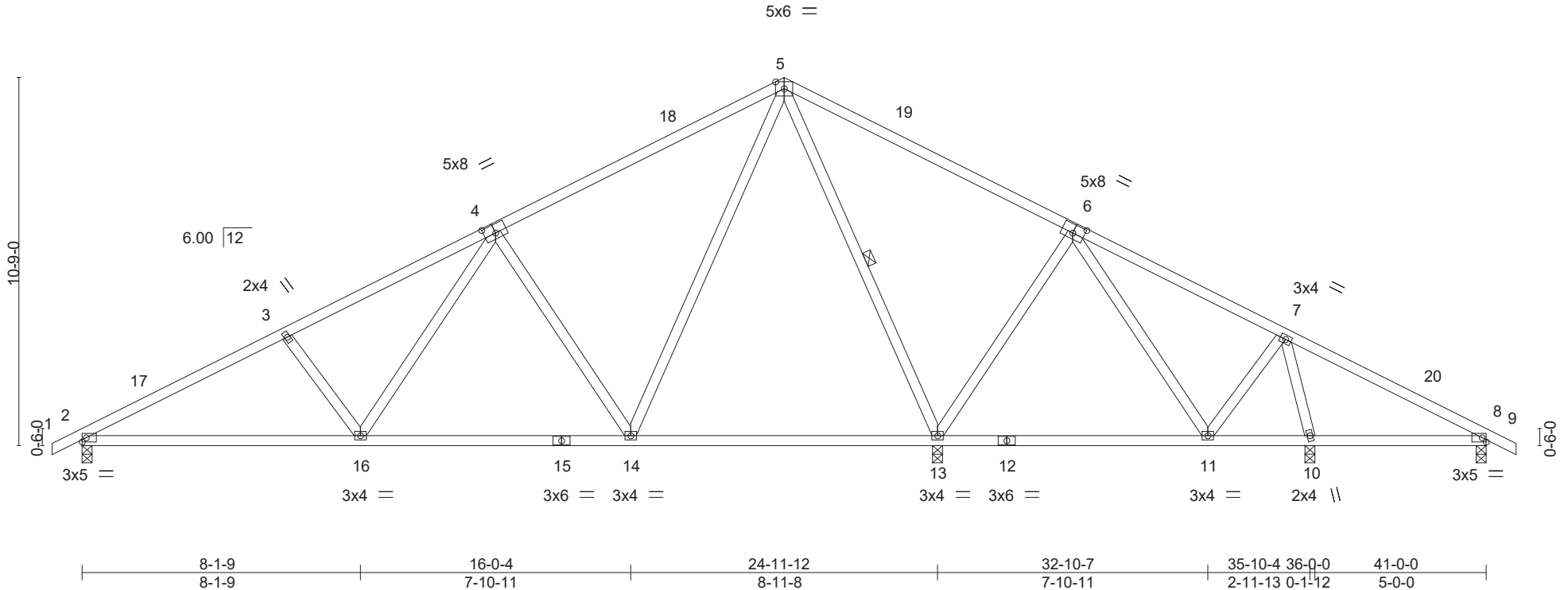
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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-VoNBCVBwRyV5dE7MR9fawi_823n3dl6Mqkzta7zY34a

0-10-8	5-11-14	12-0-14	20-6-0	28-11-2	35-0-2	41-0-0	41-10-8
0-10-8	5-11-14	6-1-0	8-5-2	8-5-2	6-1-0	5-11-14	0-10-8

Scale = 1:69.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.91	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.36 13-14 >817 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.91	Vert(CT) -0.48 13-14 >620 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 13 n/a n/a		
	Code IRC2015/TPI2014			Weight: 223 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-13

REACTIONS. All bearings 0-3-8.
 (lb) - Max Horz 2=146(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 10 except 13=166(LC 10), 2=-108(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 8 except 13=1916(LC 2), 2=907(LC 1), 10=503(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1372/158, 3-4=-1188/167, 4-5=-575/168, 5-6=-14/625
 BOT CHORD 2-16=-217/1155, 14-16=-112/780, 11-13=-280/99
 WEBS 5-13=-1359/195, 6-13=-542/209, 6-11=-11/267, 5-14=-129/869, 4-14=-688/242, 4-16=-44/483, 3-16=-267/142, 7-10=-416/120

- 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) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2) 17-6-0 to 23-6-0, Interior(1) 23-6-0 to 38-10-8, Exterior(2) 38-10-8 to 41-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10 except (jt=lb) 13=166, 2=108.



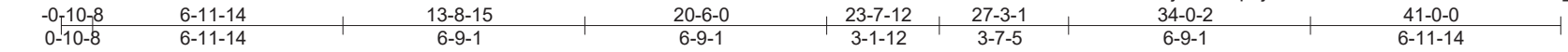
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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/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.</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 20031164	Truss A2	Truss Type COMMON	Qty 9	Ply 1	NOF-9	I40724353
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The Building Center Inc., Gastonia, NC 28052

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-DWqLrJT2m2kKlza5BNBd2uJBcecoM6T_vjms9HzXkys



5x5 =

Scale = 1:78.0

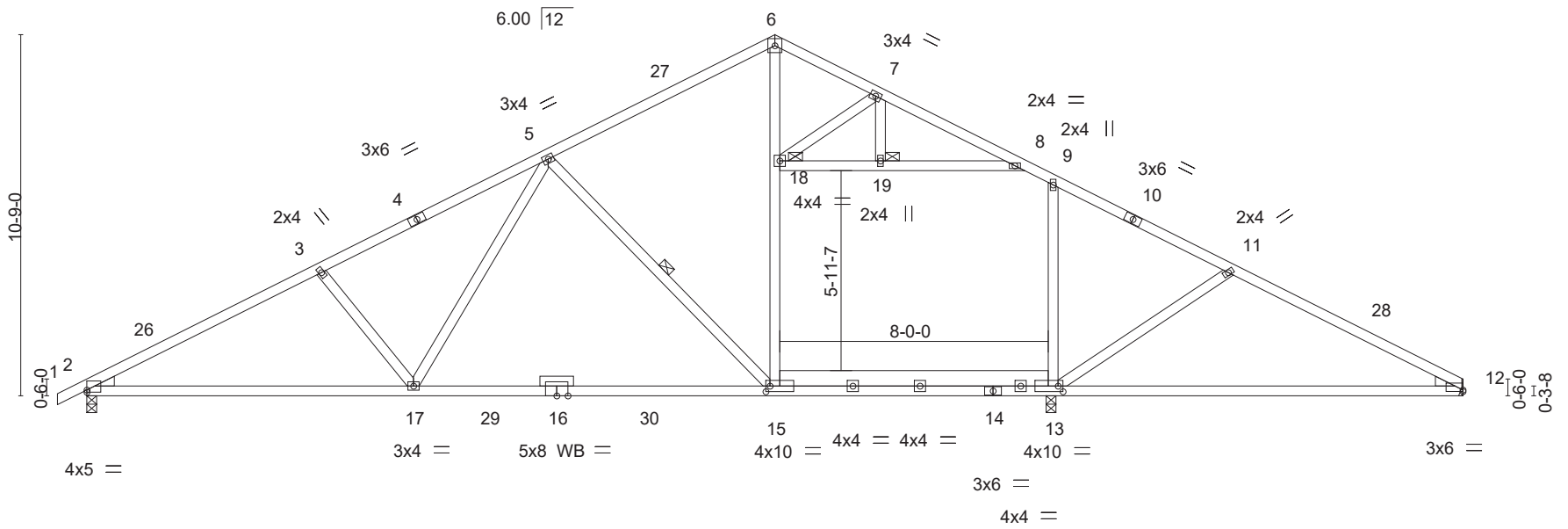


Plate Offsets (X,Y)-- [2:0-0-0,0-0-13], [12:0-0-0,0-0-9], [13:0-1-12,0-2-0], [15:0-1-8,0-2-0]

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 0.60	Vert(LL) -0.36 15-17 >963 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.62 15-17 >561 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.07 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 237 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP DSS *Except*
13-15: 2x6 SP No.1
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-15 oc purlins. [PSA]
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-15
JOINTS 1 Brace at Jt(s): 18, 19

REACTIONS. (size) 2=0-3-8 (min. 0-1-8), 13=0-3-8 (min. 0-1-8), 12=Mechanical
Max Horz 2=152(LC 14)
Max Uplift 2=-160(LC 10), 13=-205(LC 11), 12=-35(LC 10)
Max Grav 2=1428(LC 1), 13=892(LC 22), 12=1015(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-26=-2508/250, 3-26=-2427/277, 3-4=-2303/254, 4-5=-2165/272, 5-27=-1456/195,
6-27=-1370/208, 6-7=-1412/224, 7-8=-1588/260, 8-9=-1467/178, 9-10=-1318/134,
10-11=-1426/120, 11-28=-1650/139, 12-28=-1722/112
BOT CHORD 2-17=-318/2210, 17-29=-185/1745, 16-29=-185/1745, 16-30=-185/1745, 15-30=-185/1745,
14-15=-27/1262, 13-14=-29/1249, 12-13=-74/1476
WEBS 3-17=-360/179, 5-17=-45/600, 5-15=-748/230, 15-18=-73/896, 6-18=-95/1004,
11-13=-397/180, 9-13=-431/207, 7-18=-271/136

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2) 17-6-0 to 23-7-12, Interior(1) 23-7-12 to 38-0-0, Exterior(2) 38-0-0 to 41-0-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 2, 205 lb uplift at joint 13 and 35 lb uplift at joint 12.



March 24, 2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724354
20031164	A2GE	GABLE	1	1		

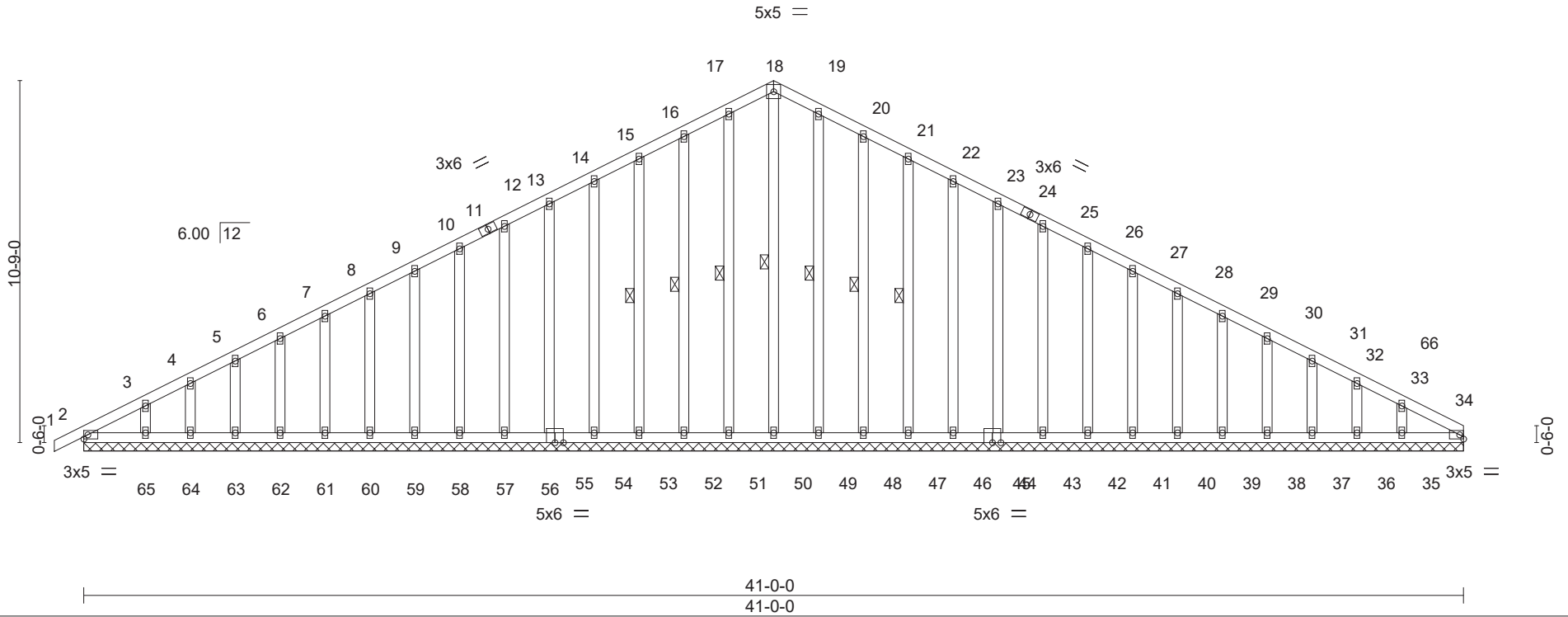
The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-wN3JqXEjttgUhrx6IDHYKcszG?wqlaoWIBXBSzY34X

0-10-8 20-6-0 41-0-0
0-10-8 20-6-0 20-6-0

Scale = 1:73.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) -0.00 1 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 34 n/a n/a		
	Code IRC2015/TPI2014			Weight: 363 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 18-50, 17-51, 16-52, 15-53, 19-49, 20-48, 21-47

REACTIONS. All bearings 41-0-0.
 (lb) - Max Horz 2=149(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35
 Max Grav All reactions 250 lb or less at joint(s) 34, 2, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 16-17=-91/278, 17-18=-94/304, 18-19=-94/304, 19-20=-91/278

- 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 Corner(3) -0-10-8 to 3-2-0, Exterior(2) 3-2-0 to 16-4-13, Corner(3) 16-4-13 to 24-6-0, Exterior(2) 24-6-0 to 36-10-13, Corner(3) 36-10-13 to 41-0-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35.



March 24, 2020

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Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724355
20031164	AGE	GABLE	1	1		

The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-KykSSZGh0oFFL9aWnQm_AzENCU01fJECgQBonzY34U

-0-10-8 20-6-0 41-0-0 41-10-8
0-10-8 20-6-0 20-6-0 0-10-8

Scale = 1:73.6

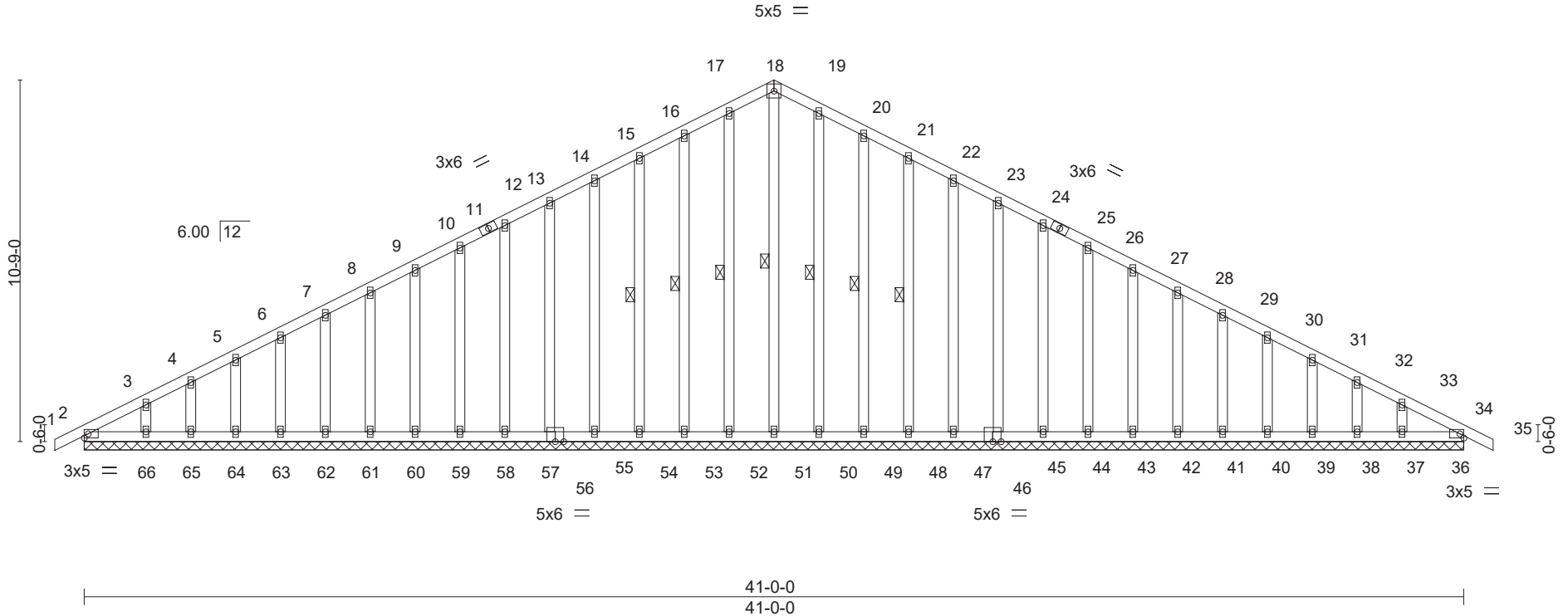


Plate Offsets (X,Y)-- [45:0-1-12,0-0-0], [46:0-0-0,0-1-12], [56:0-0-0,0-1-12], [57:0-1-12,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	Vert(LL)	-0.00	34	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	34	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Horz(CT)	0.01	34	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 364 lb	FT = 20%
	Code IRC2015/TPI2014							

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 18-51, 17-52, 16-53, 15-54, 19-50, 20-49, 21-48

REACTIONS. All bearings 41-0-0.
 (lb) - Max Horz 2=146(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 50, 49, 48, 47, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36
 Max Grav All reactions 250 lb or less at joint(s) 34, 2, 51, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 50, 49, 48, 47, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 16-17=-90/280, 17-18=-93/306, 18-19=-93/306, 19-20=-90/280

- 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 Corner(3) -0-10-8 to 3-2-0, Exterior(2) 3-2-0 to 16-4-13, Corner(3) 16-4-13 to 24-6-0, Exterior(2) 24-6-0 to 37-9-5, Corner(3) 37-9-5 to 41-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 50, 49, 48, 47, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36.



March 24, 2020

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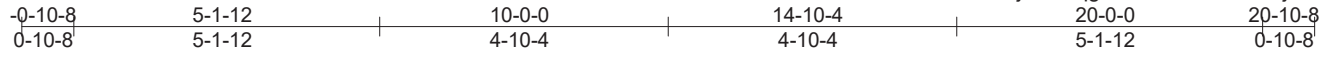
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724356
20031164	B	COMMON	4	1		

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-o8lqgvHJn6N6zJ9iL7HDjAmVtuAbm4cORK9IKDzY34T



4x4 =

Scale = 1:50.2

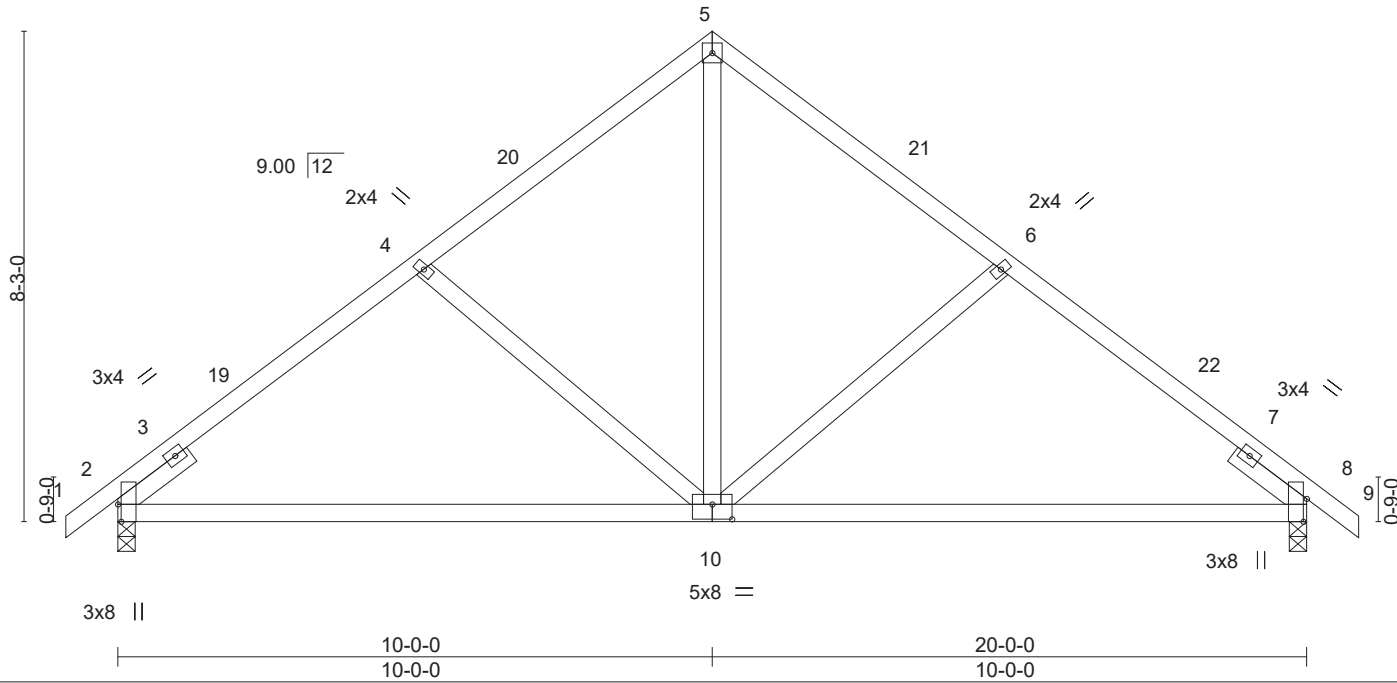


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [8:0-4-10,Edge], [10:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	Vert(LL)	-0.14 10-17	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(CT)	-0.28 10-17	>859	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.22	Horz(CT)	0.02 2	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS					Weight: 105 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 1-6-0, Right 2x4 SP No.3 -x 1-6-0

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=165(LC 9)
Max Uplift 2=-76(LC 10), 8=-76(LC 11)
Max Grav 2=853(LC 1), 8=853(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-921/135, 4-5=-760/137, 5-6=-760/137, 6-8=-921/135
BOT CHORD 2-10=-107/746, 8-10=-25/722
WEBS 5-10=-57/560, 6-10=-277/169, 4-10=-277/168

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2) 7-0-0 to 13-0-0, Interior(1) 13-0-0 to 17-10-8, Exterior(2) 17-10-8 to 20-10-8 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.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



March 24, 2020

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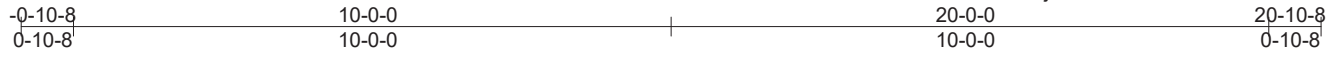
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724357
20031164	BGE	COMMON SUPPORTED GAB	1	1		

The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-GKsCtEHxYPVzbTkuvroSFOJj9Hi9VYzXg_vlsfzY34S



4x4 =

Scale = 1:49.9

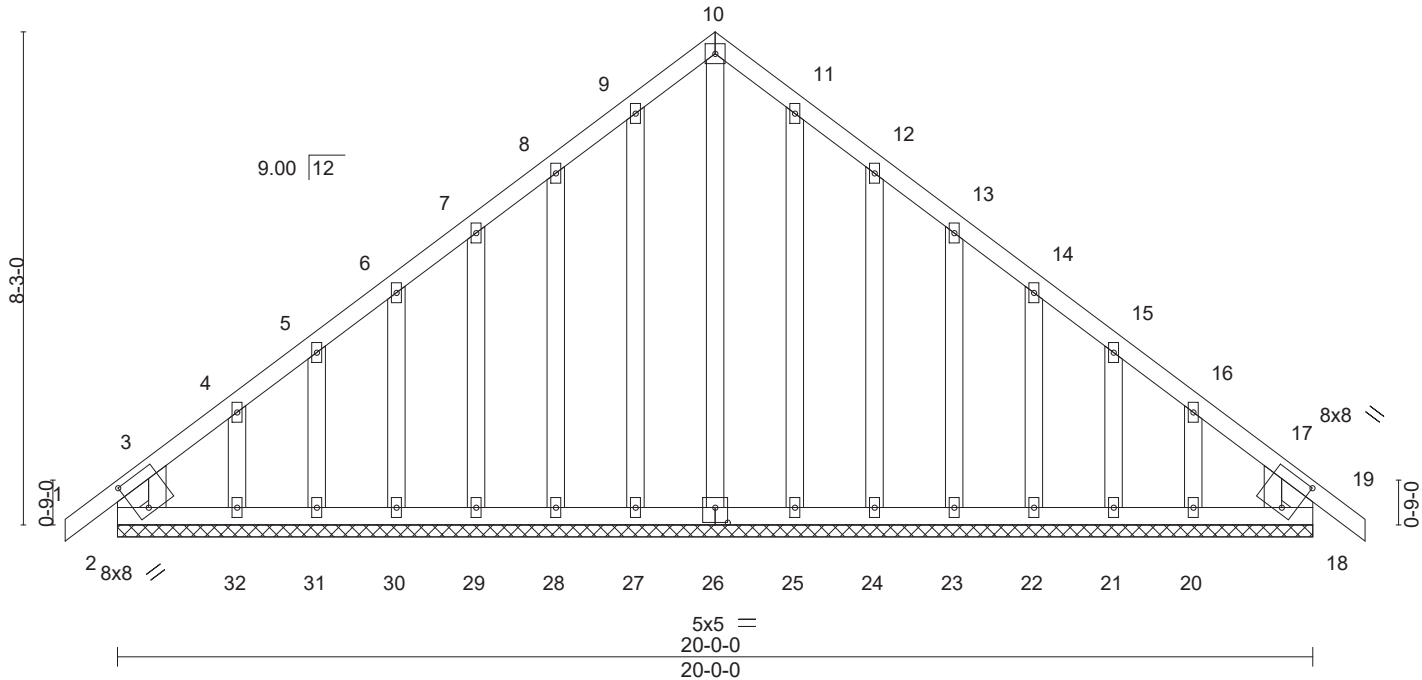


Plate Offsets (X,Y)-- [2:0-1-12,0-2-5], [2:0-2-9,0-6-13], [3:0-2-3,0-0-0], [17:0-2-3,0-0-0], [17:0-2-9,0-6-13], [18:0-1-12,0-2-5], [26:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 19 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) -0.00 19 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 18 n/a n/a		
	Code IRC2015/TPI2014			Weight: 161 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -x 0-8-8, Right 2x4 SP No.3 -x 0-8-8

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

REACTIONS. All bearings 20-0-0.
 (lb) - Max Horz 2=-165(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 18
 Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 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 Corner(3) -0-10-8 to 2-0-0, Exterior(2) 2-0-0 to 7-0-0, Corner(3) 7-0-0 to 13-0-0, Exterior(2) 13-0-0 to 17-10-8, Corner(3) 17-10-8 to 20-10-8 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) 2, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 18.



March 24, 2020

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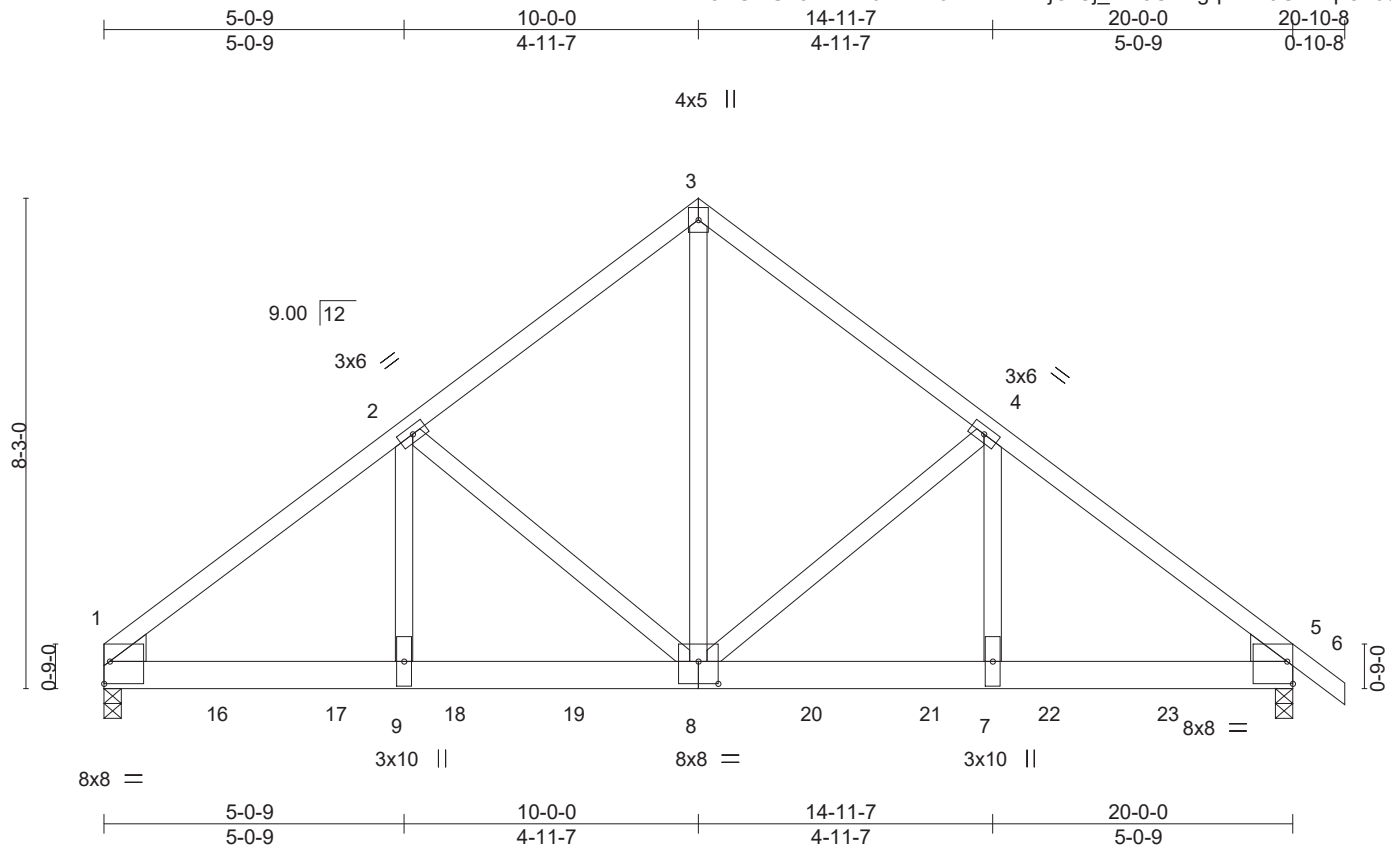
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724358
20031164	BGR	COMMON GIRDER	1	2		

The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-Cj_zlwJC41lgqmuH0GrwKpOz65DKzKLq7IOPxYzY34Q



Scale = 1:50.2

Plate Offsets (X,Y)-- [1:0-0-9,0-0-7], [1:0-4-4,0-0-14], [1:Edge,0-4-8], [5:Edge,0-4-8], [5:0-4-4,0-0-14], [5:0-0-9,0-0-7], [8:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.43	Vert(LL) -0.10	7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(CT) -0.19	7-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.67	Horz(CT) 0.04	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MSH					Weight: 259 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.3 *Except*
 3-8: 2x4 SP No.2

WEDGE

Left: 2x6 SP No.1, Right: 2x6 SP No.1

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
 Max Horz 1=-160(LC 25)
 Max Uplift 1=-263(LC 8), 5=-276(LC 9)
 Max Grav 1=5303(LC 1), 5=5307(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-6848/356, 2-3=-4868/318, 3-4=-4868/319, 4-5=-6844/355
 BOT CHORD 1-9=-307/5400, 8-9=-307/5400, 7-8=-222/5396, 5-7=-222/5396
 WEBS 3-8=-284/5466, 4-8=-2058/225, 4-7=-68/2292, 2-8=-2064/226, 2-9=-67/2294

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 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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; TCDL=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=263, 5=276.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1015 lb down and 55 lb up at 1-11-4, 1015 lb down and 55 lb up at 3-11-4, 1015 lb down and 55 lb up at 5-11-4, 1015 lb down and 55 lb up at 7-11-4, 1015 lb down and 55 lb up at 9-11-4, 1015 lb down and 55 lb up at 11-11-4, 1015 lb down and 55 lb up at 13-11-4, and 1015 lb down and 55 lb up at 15-11-4, and 1015 lb down and 55 lb up at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



March 24, 2020

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9
20031164	BGR	COMMON GIRDER	1	2	I40724358 Job Reference (optional)

The Building Center, Gastonia, NC - 28052,

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-Cj_zlwJC41lgqmuH0GrwKpOz65DKzKLq7IOPxYzY34Q

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, 10-13=-20

Concentrated Loads (lb)

Vert: 8=-995(F) 16=-995(F) 17=-995(F) 18=-995(F) 19=-995(F) 20=-995(F) 21=-995(F) 22=-995(F) 23=-995(F)

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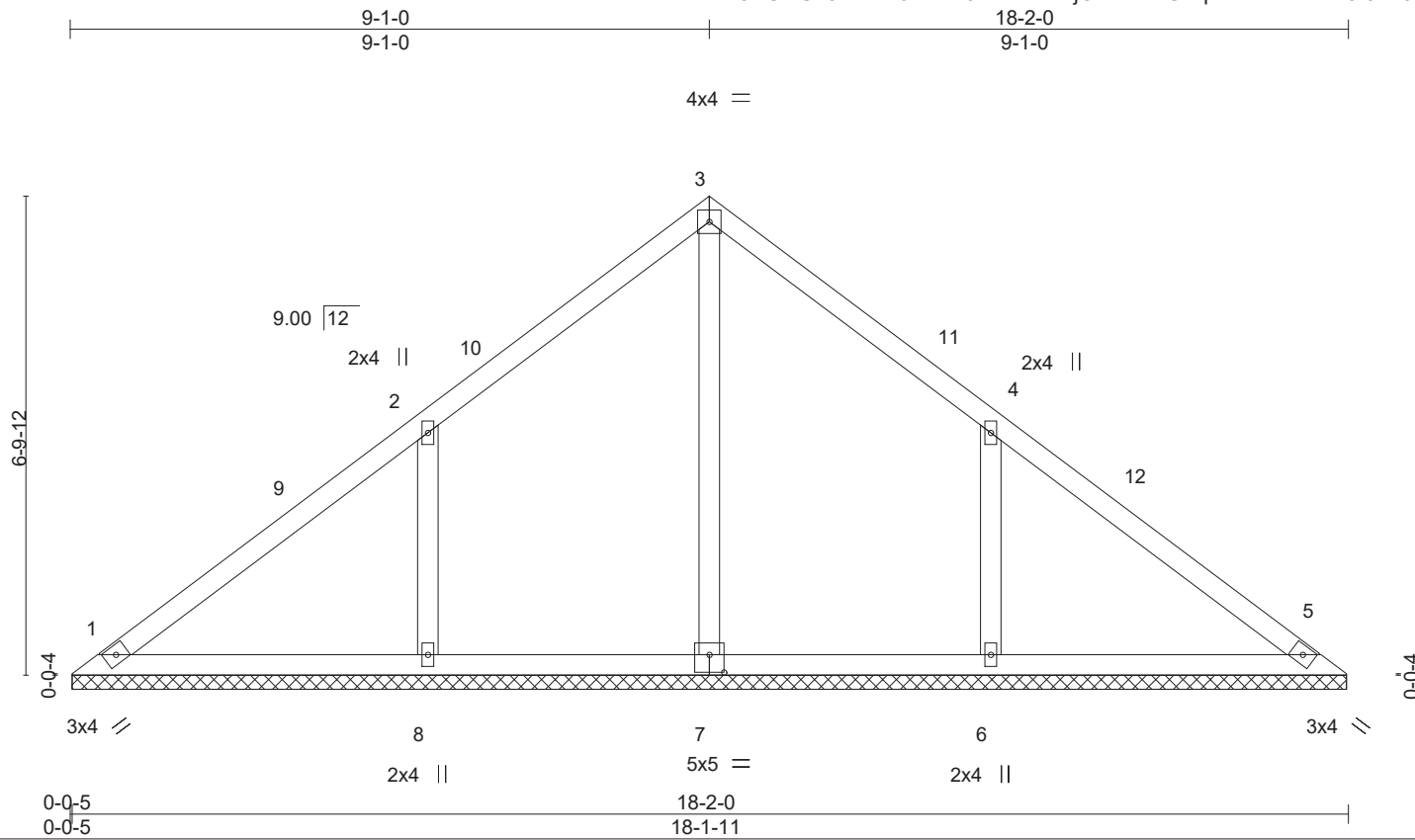
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724359
20031164	V01	Valley	1	1		

The Building Center, Gastonia, NC - 28052,

8.330 s Mar 10 2020 MiTek Industries, Inc. Mon Mar 23 12:05:40 2020 Page 1

ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-hvYLVGKqrKtXSwTTazM9t0xA3VikiwCzMx7yT_zY34P



Scale = 1:41.9

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 78 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

REACTIONS. All bearings 18-1-5.
(lb) - Max Horz 1=-131(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-157(LC 10), 6=-157(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=351(LC 20), 8=491(LC 17), 6=491(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-324/198, 4-6=-324/198

- 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) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 6-1-0, Exterior(2) 6-1-0 to 12-1-0, Interior(1) 12-1-0 to 14-8-12, Exterior(2) 14-8-12 to 17-8-12 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
 - 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, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=157, 6=157.



March 24, 2020

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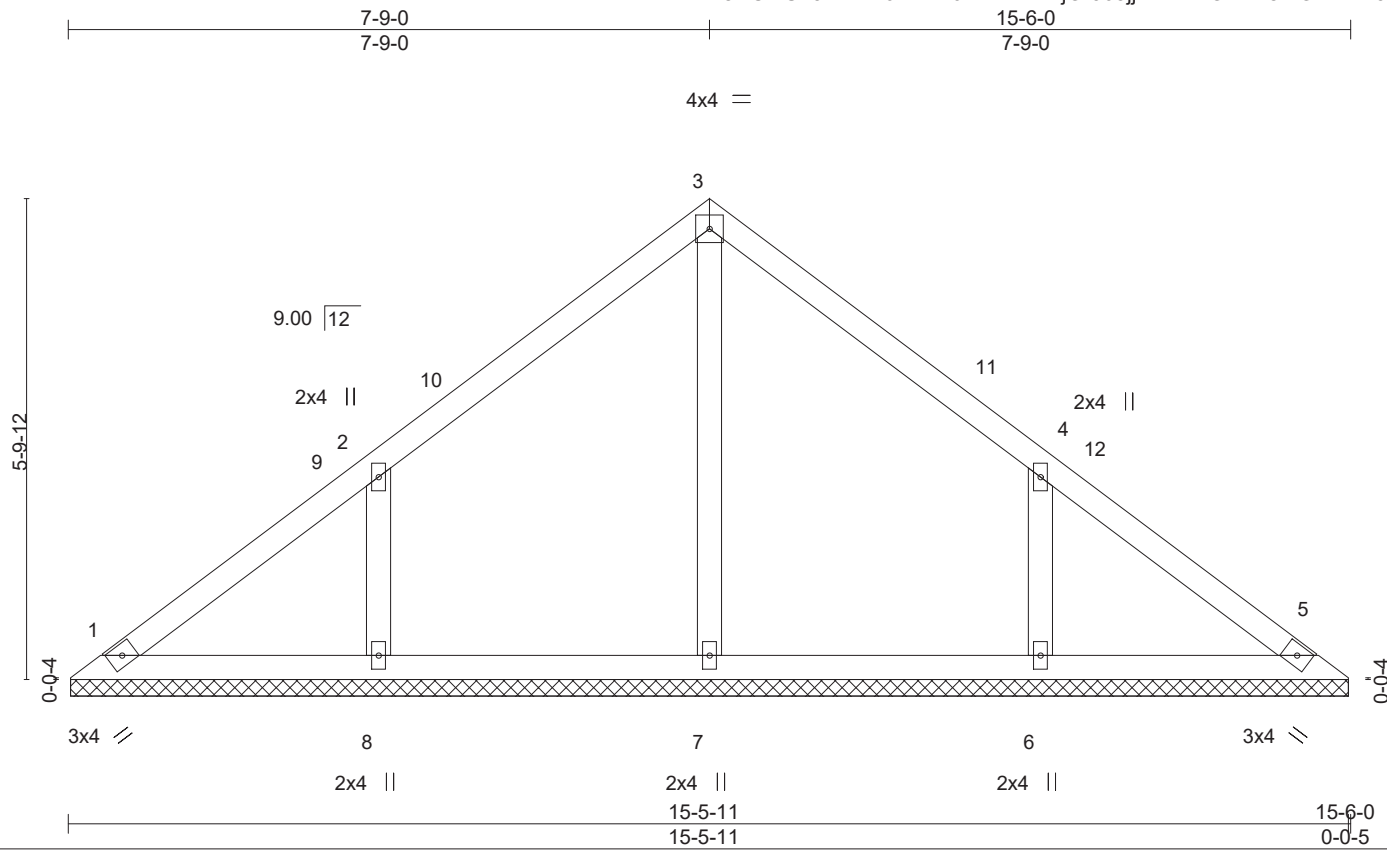
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724360
20031164	V02	Valley	1	1		

The Building Center, Gastonia, NC - 28052,

8.330 s Mar 10 2020 MiTek Industries, Inc. Mon Mar 23 12:05:41 2020 Page 1

ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-965jicLSc?O441f8htOPETM9v20RNp7bbtV?QzY340



Scale = 1:36.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 65 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 15-5-5.
 (lb) - Max Horz 1=-111(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-132(LC 10), 6=-132(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=358(LC 17), 6=358(LC 18)

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

WEBS 2-8=-272/168, 4-6=-272/168

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) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 4-9-0, Exterior(2) 4-9-0 to 10-9-0, Interior(1) 10-9-0 to 12-0-12, Exterior(2) 12-0-12 to 15-0-12 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
- 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 except (jt=lb) 8=132, 6=132.



March 24, 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.



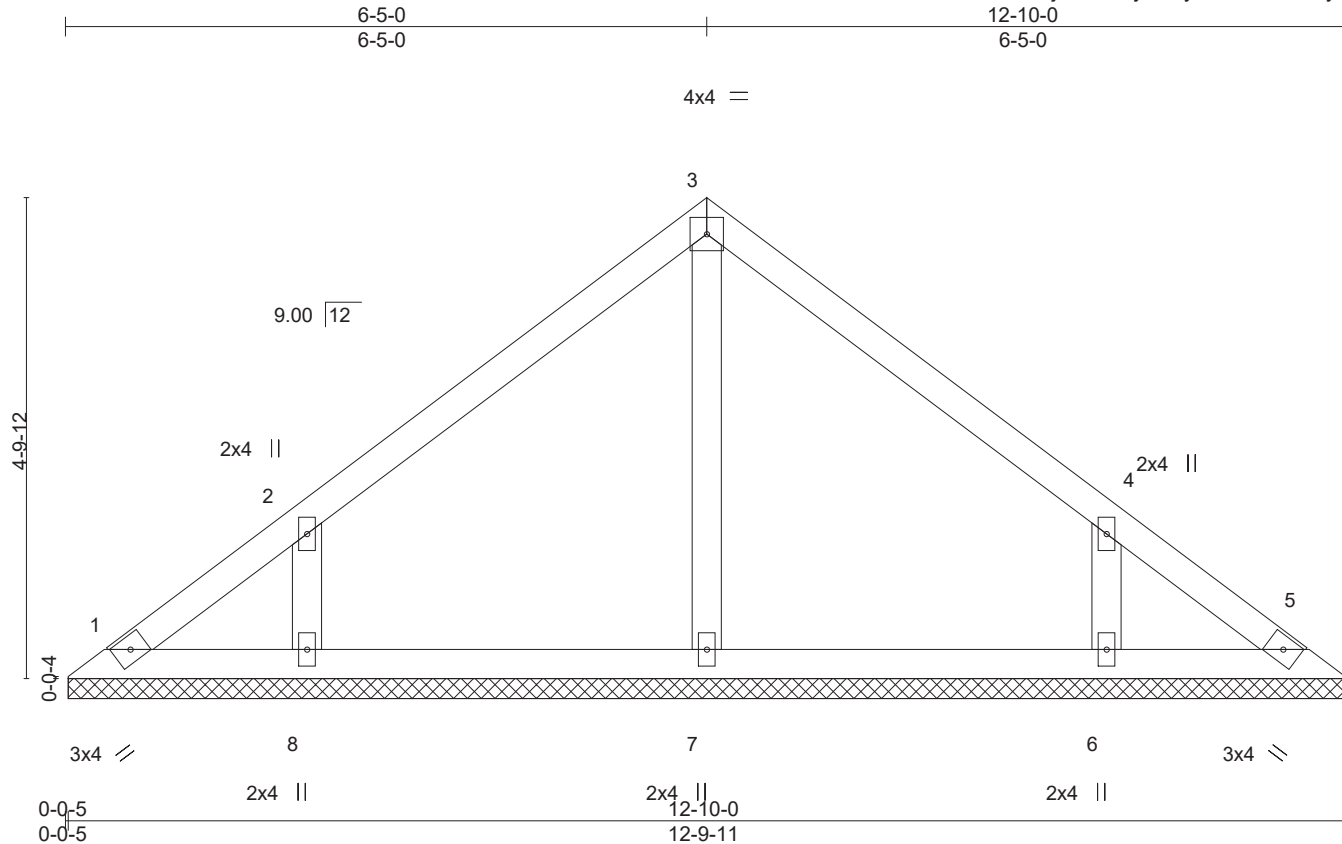
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724361
20031164	V03	Valley	1	1		

The Building Center, Gastonia, NC - 28052,

8.330 s Mar 10 2020 MiTek Industries, Inc. Mon Mar 23 12:05:42 2020 Page 1

ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-dlf5wyL4Ny7FhEcshOOdyR0YKIO1AqTGpFc3XtzY34N



Scale = 1:29.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 51 lb	FT = 20%
	Code IRC2015/TPI2014							

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 12-9-5.
(lb) - Max Horz 1=-91(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-117(LC 10), 6=-116(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 1), 8=308(LC 17), 6=308(LC 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=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, 5 except (jt=lb) 8=117, 6=116.



March 24, 2020

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ENGINEERING BY
TRENCO
A MiTek Affiliate

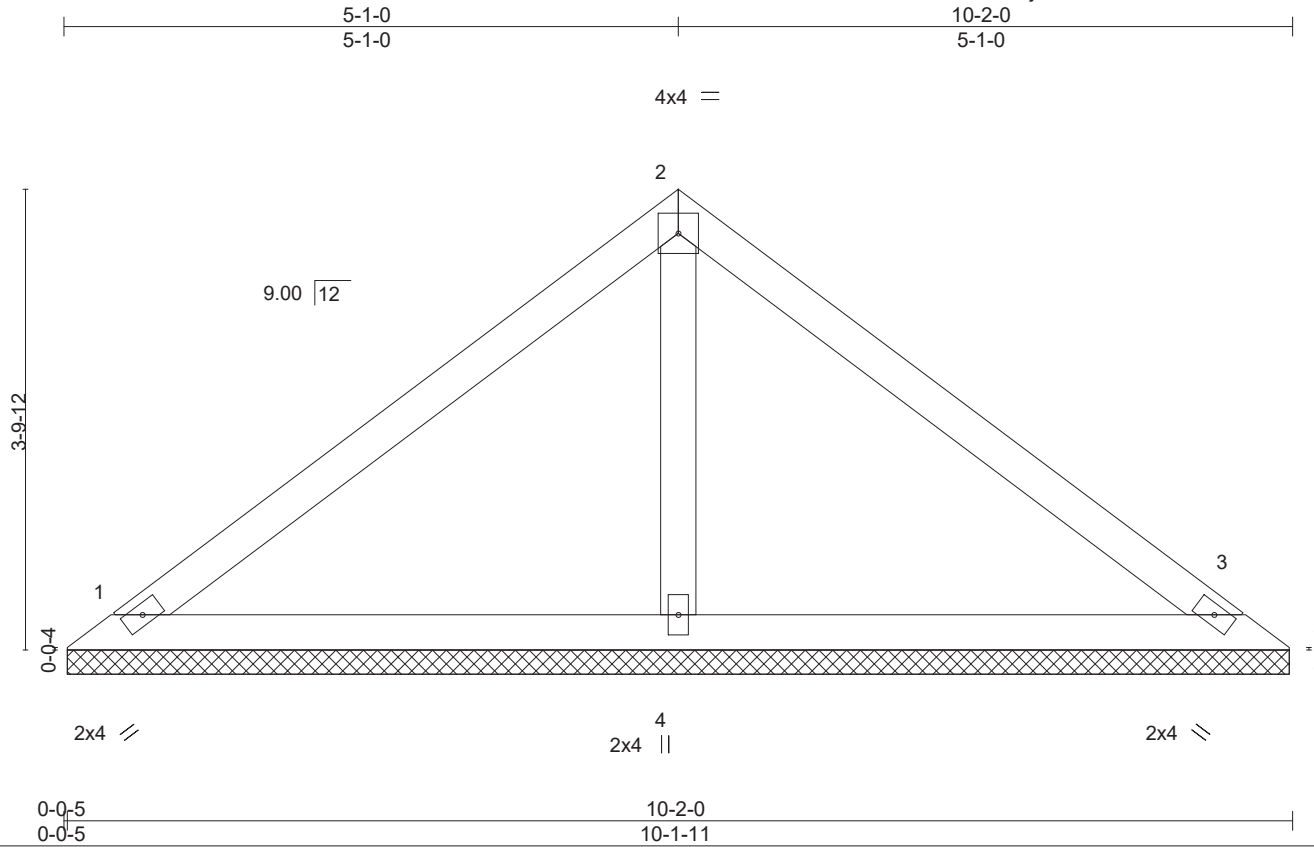
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724362
20031164	V04	Valley	1	1		

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-5UDT8IMi8FG6JOB2F5vsVfZh?iinvHpQ2vMc4JzY34M



Scale = 1:24.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 37 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=10-1-5, 3=10-1-5, 4=10-1-5
 Max Horz 1=-70(LC 8)
 Max Uplift 1=-26(LC 10), 3=-36(LC 11), 4=-6(LC 10)
 Max Grav 1=190(LC 1), 3=190(LC 1), 4=363(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.



March 24, 2020

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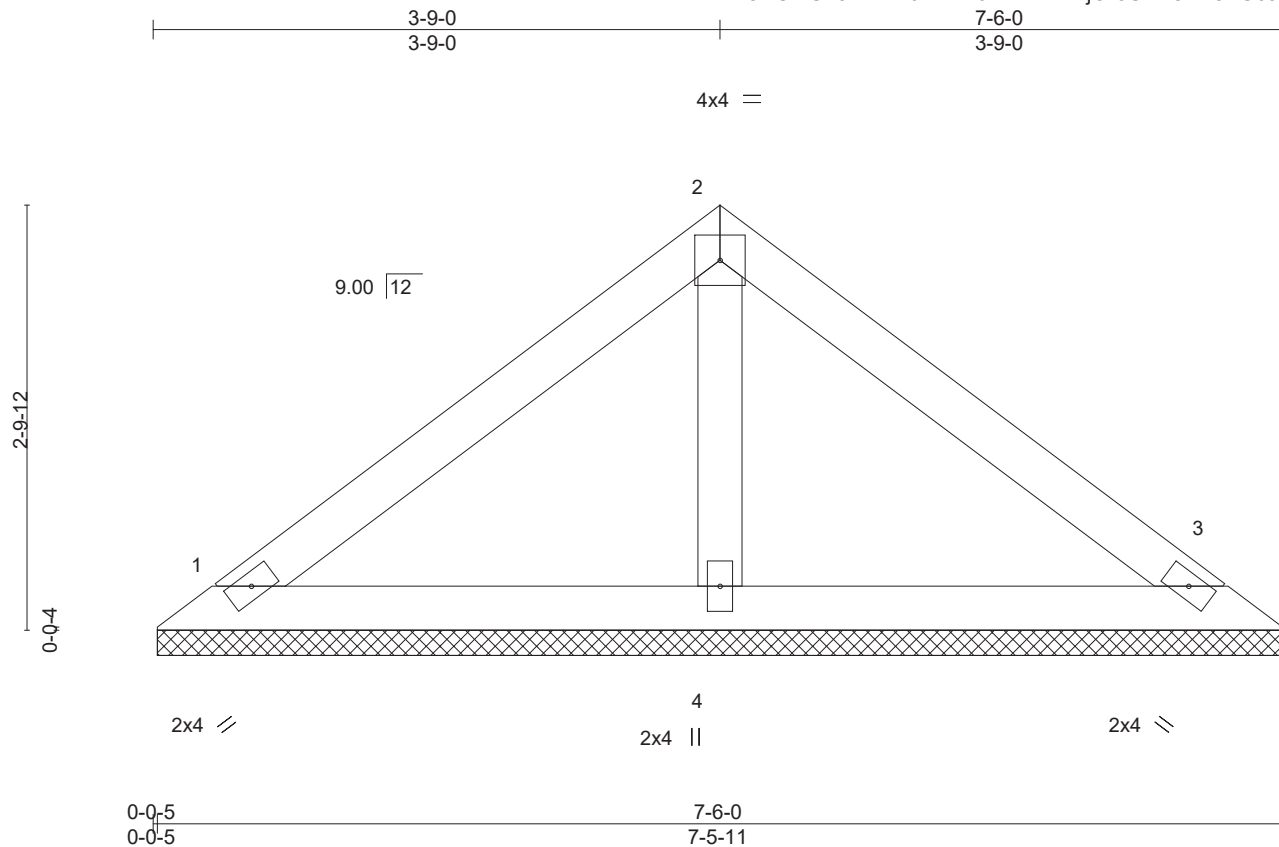
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724363
20031164	V05	Valley	1	1		

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-5UDT8IMi8FG6JOB2F5vsVfZiaikRvIIQ2vMc4JzY34M



Scale = 1:19.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 27 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=7-5-5, 3=7-5-5, 4=7-5-5
 Max Horz 1=-50(LC 6)
 Max Uplift 1=-25(LC 10), 3=-32(LC 11)
 Max Grav 1=148(LC 1), 3=148(LC 1), 4=235(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.



March 24, 2020

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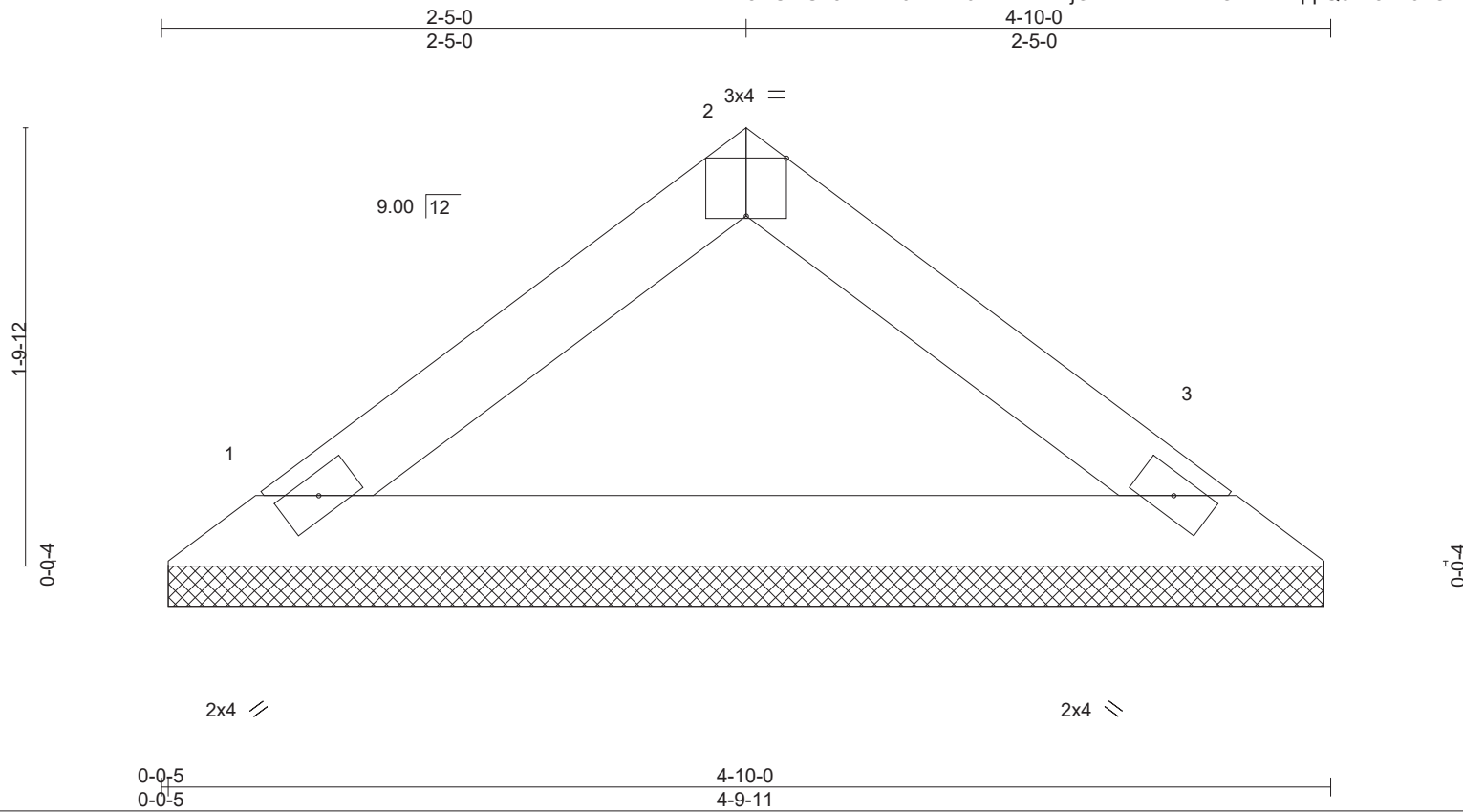
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724364
20031164	V06	Valley	1	1		

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ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-ZhnsLeNKvZOzxXmEppQ51s5vV62Oel2ZH5AclyY34L



Scale = 1:11.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 15 lb	FT = 20%
	Code IRC2015/TPI2014							

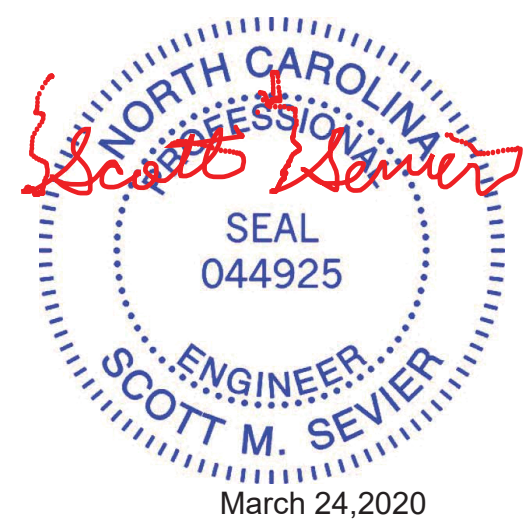
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. (size) 1=4-9-5, 3=4-9-5
Max Horz 1=30(LC 9)
Max Uplift 1=-12(LC 10), 3=-12(LC 11)
Max Grav 1=158(LC 1), 3=158(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.

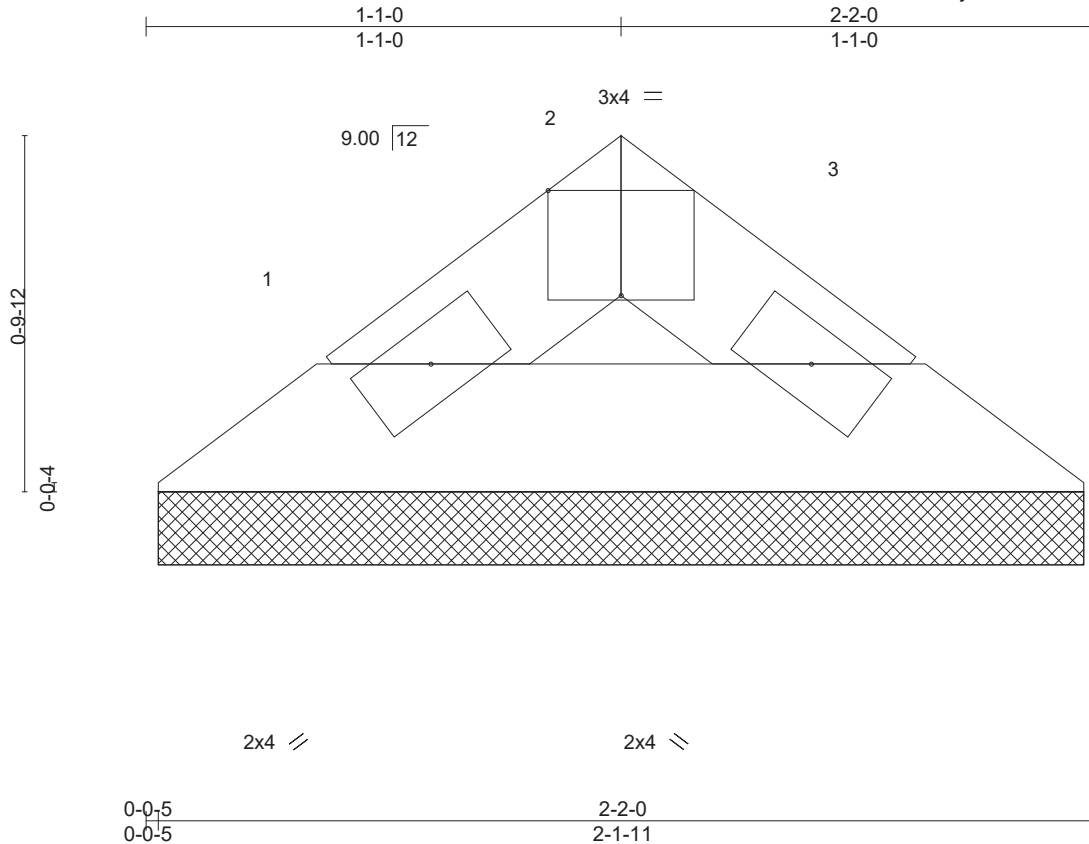


Job	Truss	Truss Type	Qty	Ply	NOF-9	I40724365
20031164	V07	Valley	1	1		

The Building Center, Gastonia, NC - 28052,

8.330 s Mar 10 2020 MiTek Industries, Inc. Mon Mar 23 12:05:44 2020 Page 1

ID:P8HCMU73SEDR6eVBE6m2ePzZmjO-ZhnsLeNKvZOzxXmEppQ51s5wS657eI2ZH5AcIzY34L



Scale = 1:6.8

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	Weight: 6 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P									

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

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

REACTIONS. (size) 1=2-1-5, 3=2-1-5
 Max Horz 1=10(LC 7)
 Max Uplift 1=-4(LC 10), 3=-4(LC 11)
 Max Grav 1=52(LC 1), 3=52(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.



March 24, 2020

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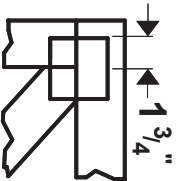
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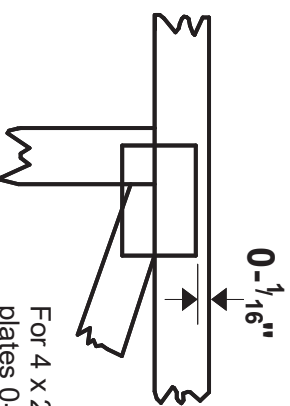
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

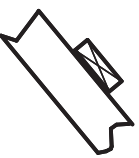
*** Plate location details available in MITek 2020 software or upon request.**

PLATE SIZE

4 X 4

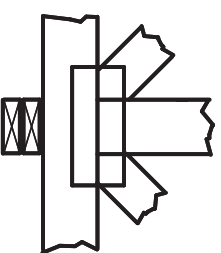
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



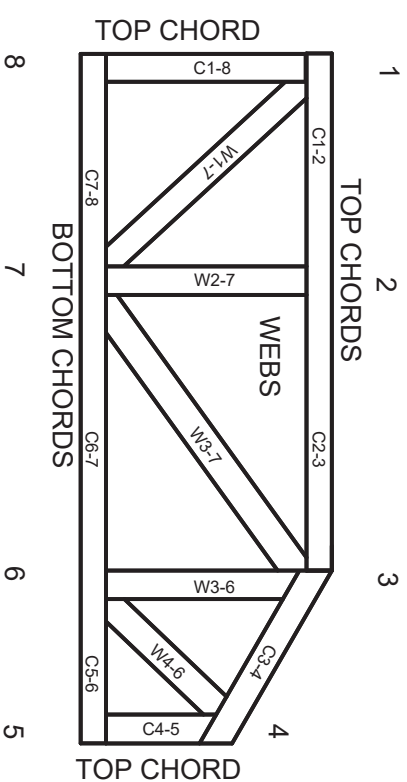
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: 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

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MI1-7473 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.