

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 21125026
WAG-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: I49482133 thru I49482158

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



December 31, 2021

Sevier, Scott

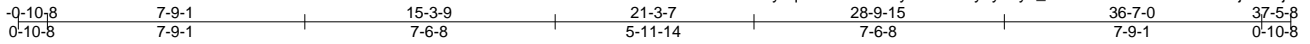
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 21125026	Truss A1	Truss Type PIGGYBACK BASE	Qty 4	Ply 1	WAG-9	149482133
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:02 2021 Page 1

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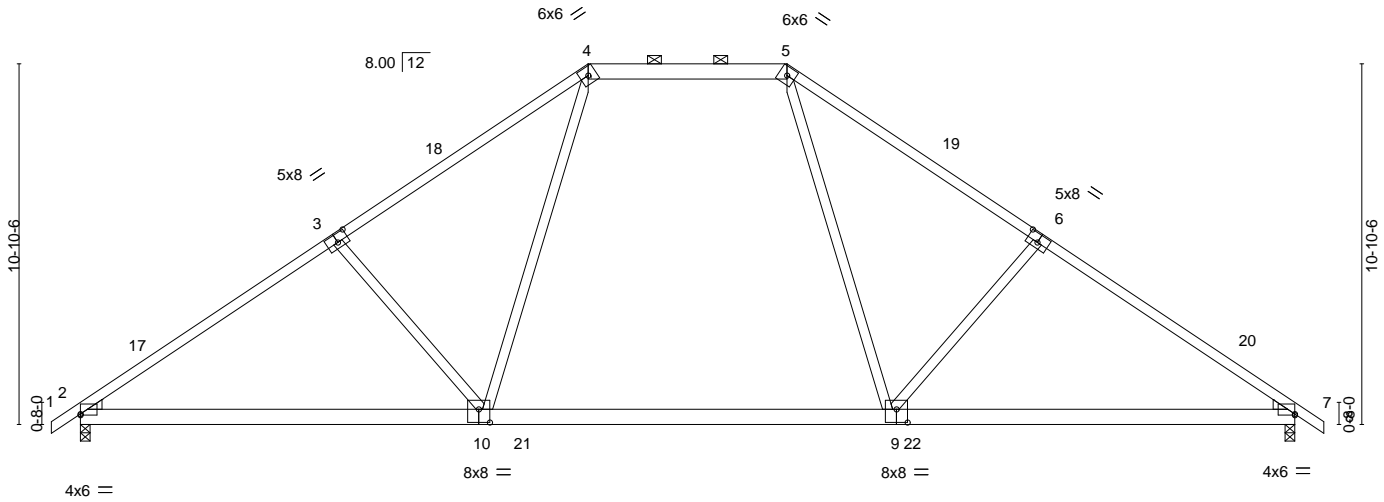


Plate Offsets (X, Y)--	[2:0-0-0,0-0-6], [3:0-4-0,0-3-0], [6:0-4-0,0-3-0], [7:0-0-0,0-0-6], [9:0-4-0,0-4-12], [10:0-4-0,0-4-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.79	Vert(LL)	-0.46	10-13	>946	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.56	9-10	>788		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.06	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 210 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	
WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 7=0-3-8
 Max Horz 2=218(LC 9)
 Max Uplift 2=-122(LC 10), 7=-122(LC 11)
 Max Grav 2=1516(LC 1), 7=1516(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2199/261, 3-4=-1964/288, 4-5=-1322/288, 5-6=-1964/288, 6-7=-2199/261
 BOT CHORD 2-10=-177/1851, 9-10=0/1337, 7-9=-103/1743
 WEBS 3-10=-462/272, 4-10=-51/787, 5-9=-51/787, 6-9=-462/272

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph 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 11-0-10, Exterior(2) 11-0-10 to 25-6-6, Interior(1) 25-6-6 to 34-5-8, Exterior(2) 34-5-8 to 37-5-8 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) Provide adequate drainage to prevent water ponding.
 - 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) except (jt=lb) 2=122, 7=122.
 - 7) 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.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 31, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

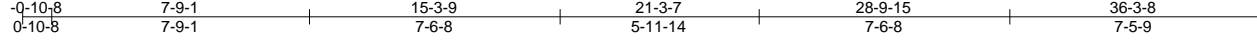
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss A2	Truss Type PIGGYBACK BASE	Qty 16	Ply 1	WAG-9	149482134
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The Building Center, Gastonia, NC - 28052,

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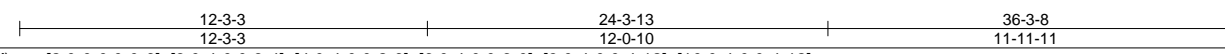
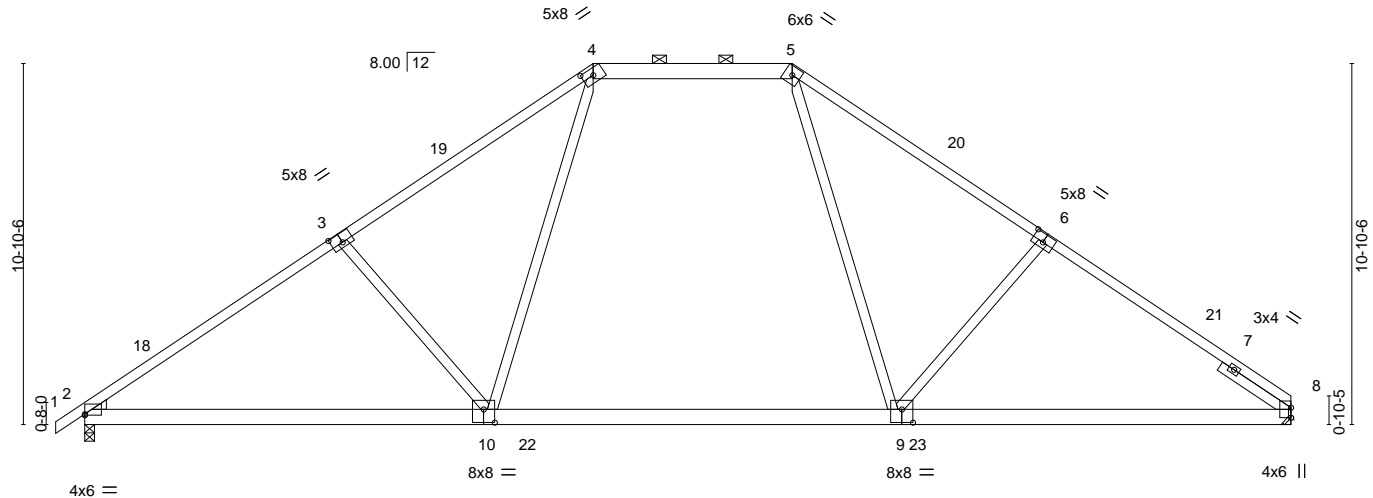


Plate Offsets (X, Y)--	[2:0-0-0,0-0-6], [3:0-4-0,0-3-4], [4:0-4-0,0-2-6], [6:0-4-0,0-3-0], [9:0-4-0,0-4-12], [10:0-4-0,0-4-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.47 10-17	>926	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.58 9-10	>756	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.07 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 211 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2 *Except*
 4-5: 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3
 SLIDER Right 2x4 SP No.2 2-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (6-0-0 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 8=Mechanical, 2=0-3-8
 Max Horz 2=214(LC 7)
 Max Uplift 8=105(LC 11), 2=122(LC 10)
 Max Grav 8=1454(LC 18), 2=1505(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2179/261, 3-4=-1943/287, 4-5=-1302/288, 5-6=-1915/287, 6-8=-2093/260
 BOT CHORD 2-10=-188/1829, 9-10=-15/1311, 8-9=-128/1678
 WEBS 3-10=-465/272, 4-10=-50/788, 5-9=-48/737, 6-9=-425/266

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph 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 11-0-10, Exterior(2) 11-0-10 to 25-6-6, Interior(1) 25-6-6 to 33-3-8, Exterior(2) 33-3-8 to 36-3-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=105, 2=122.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 31, 2021

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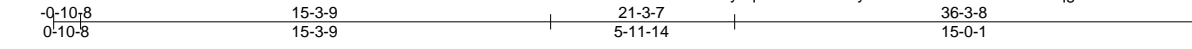
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss A2GE	Truss Type GABLE	Qty 2	Ply 1	WAG-9	149482135
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The Building Center, Gastonia, NC - 28052,

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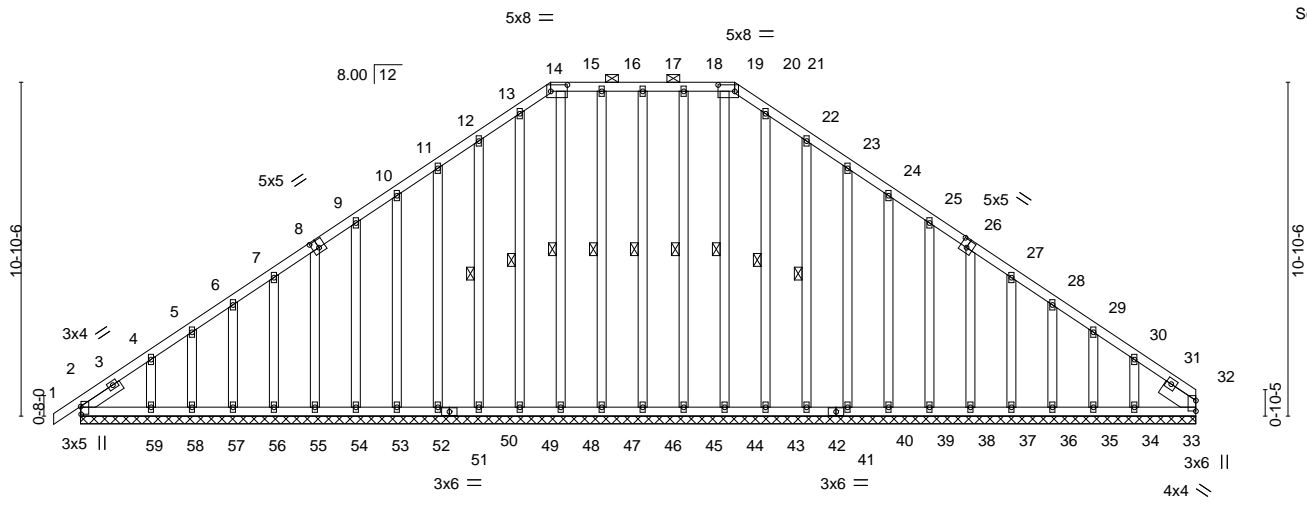


Plate Offsets (X,Y)--	[2:0-3-1,0-0-3], [8:0-2-8,0-3-0], [14:0-6-8,0-2-8], [20:0-6-8,0-2-8], [26:0-2-8,0-3-0], [32:Edge,0-0-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.01	32	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 369 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 2-0-0 oc purlins (6-0-0 max.): 14-20.
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 17-46, 16-47, 15-48, 13-49, 12-50, 18-45, 19-44, 21-43, 22-42
SLIDER Left 2x4 SP No.2 1-6-4, Right 2x6 SP No.1 1-3-6	

REACTIONS. All bearings 36-3-8.
 (lb) - Max Horz 2=217(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 32, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 45, 2, 42, 40, 39, 38, 37, 36, 35, 34 except 33=108(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 32, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 45, 44, 2, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33

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 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 2-3-8, Exterior(2) 2-3-8 to 12-3-9, Corner(3) 12-3-9 to 24-3-7, Exterior(2) 24-3-7 to 33-3-8, Corner(3) 33-3-8 to 36-3-8 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.
 - Provide adequate drainage to prevent water ponding.
 - 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) 32, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 45, 2, 42, 40, 39, 38, 37, 36, 35, 34 except (jt=lb) 33=108.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

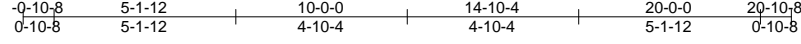


Job 21125026	Truss B1	Truss Type COMMON	Qty 2	Ply 1	WAG-9	149482136
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:07 2021 Page 1

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4x4 =

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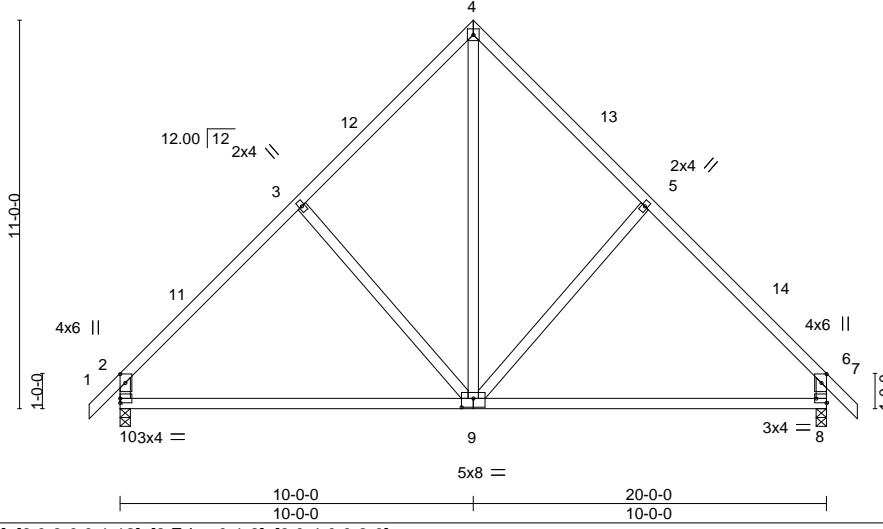


Plate Offsets (X,Y)--	[2:0-3-0,0-1-12], [6:0-3-0,0-1-12], [8:Edge,0-1-8], [9:0-4-0,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.88	Vert(LL) -0.18 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.29	Vert(CT) -0.37 9-10 >646 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MSH	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 115 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-10,6-8: 2x4 SP No.2	

REACTIONS. (size) 10=0-3-8, 8=0-3-8
 Max Horz 10=220(LC 9)
 Max Uplift 10=-59(LC 10), 8=-59(LC 11)
 Max Grav 10=850(LC 1), 8=850(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-842/125, 3-4=-647/172, 4-5=-647/172, 5-6=-842/125, 2-10=-751/152, 6-8=-751/152
 BOT CHORD 9-10=-98/571, 8-9=-17/501
 WEBS 4-9=-135/577

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph 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) 10, 8.



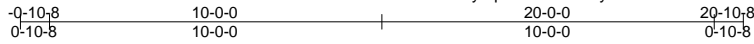
December 31, 2021

Job 21125026	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	WAG-9	149482137
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:08 2021 Page 1

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3x6 =

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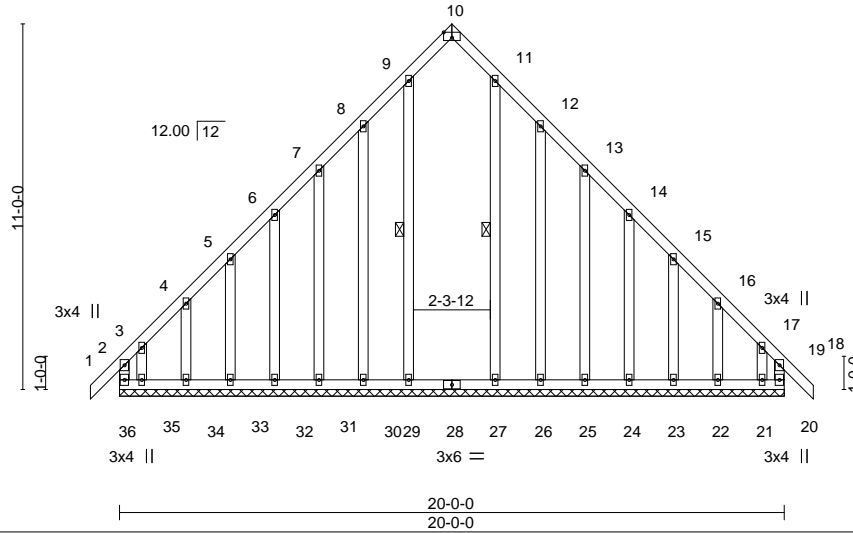


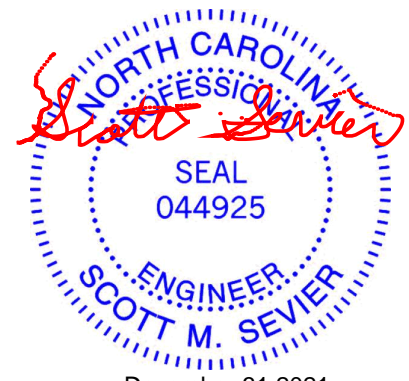
Plate Offsets (X,Y)--	[10:0-3:0,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.00	19	n/r	120
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.00	19	n/r	90
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	20	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					
								PLATES
								MT20
								GRIP
								244/190
								Weight: 185 lb
								FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 9-29, 11-27
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 20-0-0.
 (lb) - Max Horz 36=-220(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 30, 31, 32, 33, 34, 26, 25, 24, 23, 22 except 36=-225(LC 8), 20=-195(LC 9), 35=-433(LC 10), 21=-419(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 29, 27, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21 except 36=575(LC 10), 20=555(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-36=-353/248, 2-3=-420/285, 3-4=-271/175, 16-17=-260/175, 17-18=-406/285, 18-20=-339/248

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 1-4-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 30, 31, 32, 33, 34, 26, 25, 24, 23, 22 except (jt=lb) 36=225, 20=195, 35=433, 21=419.



December 31, 2021

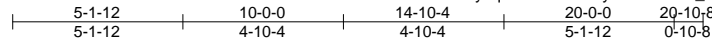
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</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 21125026	Truss B2GR	Truss Type COMMON GIRDER	Qty 1	Ply 3	WAG-9	149482138
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:10 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5liyDPNH-1VX_Gu2e6llfJR_0WrrMSdJBi5JKAOli60Yf0XTy3rDJ



4x6 ||

Scale = 1:69.7

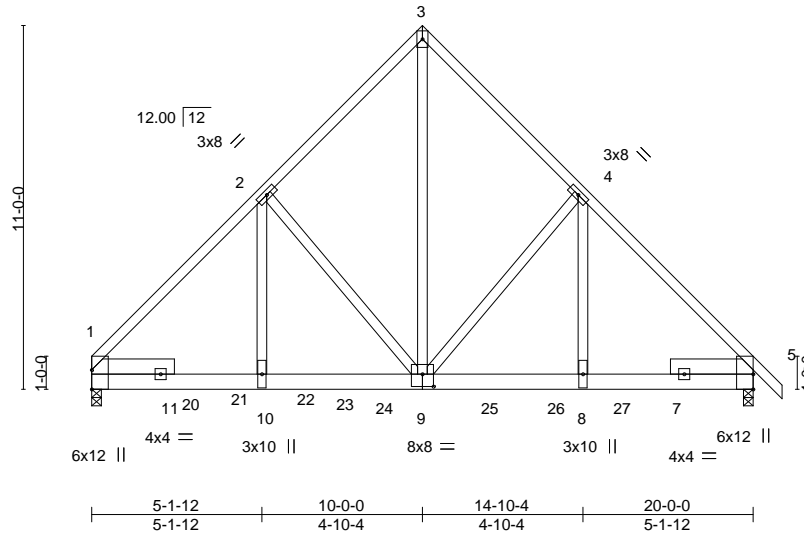


Plate Offsets (X,Y)--	[9:0-4-0,0-4-8]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL 1.15		TC 0.36	Vert(LL) -0.08	8-9	>999	360
TCDL 10.0	Lumber DOL 1.15		BC 0.65	Vert(CT) -0.15	8-9	>999	240
BCLL 0.0 *	Rep Stress Incr NO		WB 0.63	Horz(CT) 0.02	5	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MSH				
							PLATES MT20
							GRIP 244/190
							Weight: 466 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 2x6 SP No.1		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*			
3-9: 2x4 SP No.2			
SLIDER Left 2x6 SP No.1 2-6-0, Right 2x6 SP No.1 2-6-0			

REACTIONS. (size) 1=0-3-8, 5=0-3-8
 Max Horz 1=-214(LC 23)
 Max Uplift 1=-679(LC 9), 5=-579(LC 9)
 Max Grav 1=8625(LC 1), 5=7338(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-8267/700, 2-3=-5747/583, 3-4=-5741/583, 4-5=-8012/680
 BOT CHORD 1-10=-506/5770, 9-10=-506/5770, 8-9=-408/5574, 5-8=-408/5574
 WEBS 3-9=-711/7674, 4-9=-2454/367, 4-8=-236/3214, 2-9=-2757/391, 2-10=-266/3602

- NOTES-**
- 1) 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.
 - 2) 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.
 - 3) Unbalanced roof live loads have been considered for this design.
 - 4) Wind: ASCE 7-10; Vult=115mph 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
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=679, 5=579.
 - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1431 lb down and 125 lb up at 1-3-5, 1431 lb down and 125 lb up at 1-11-5, 1431 lb down and 125 lb up at 3-11-5, 1431 lb down and 125 lb up at 5-11-5, 1431 lb down and 125 lb up at 7-11-5, 1431 lb down and 125 lb up at 9-11-5, 1431 lb down and 125 lb up at 11-11-5, 1431 lb down and 125 lb up at 13-11-5, and 1431 lb down and 125 lb up at 15-11-5, and 1431 lb down and 125 lb up at 17-11-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



Continued on page 2

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 21125026	Truss B2GR	Truss Type COMMON GIRDER	Qty 1	Ply 3	WAG-9 Job Reference (optional)	149482138
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:10 2021 Page 2
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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, 12-16=-20

Concentrated Loads (lb)

Vert: 9=-1431(F) 7=-1431(F) 20=-1431(F) 21=-1431(F) 22=-1431(F) 23=-1431(F) 24=-1431(F) 25=-1431(F) 26=-1431(F) 27=-1431(F)

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

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818 Soundside Road
Edenton, NC 27932

Job 21125026	Truss C1	Truss Type COMMON	Qty 2	Ply 1	WAG-9	149482139
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:11 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5liyDPNH-Vh5MTE3HscQWkbZC4ZthAXkqZjj97sNFFCOZ4vy3rDI



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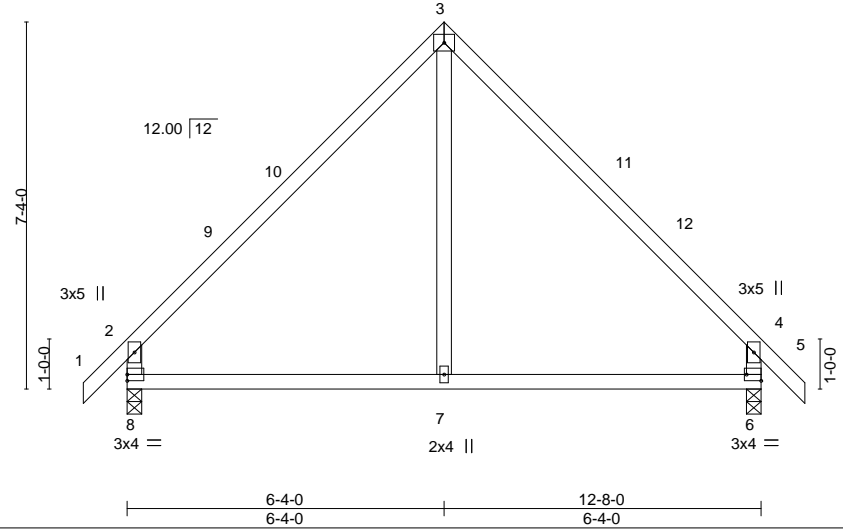


Plate Offsets (X,Y)--	[6:Edge,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.05	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.08	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						

Weight: 62 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 Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 8=146(LC 9)
 Max Uplift 8=-42(LC 10), 6=-42(LC 11)
 Max Grav 8=675(LC 17), 6=675(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-595/98, 3-4=-595/98, 2-8=-540/147, 4-6=-540/147
 BOT CHORD 7-8=0/370, 6-7=0/370
 WEBS 3-7=0/399

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph 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 3-4-0, Exterior(2) 3-4-0 to 9-4-0, Interior(1) 9-4-0 to 10-6-8, Exterior(2) 10-6-8 to 13-6-8 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 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.



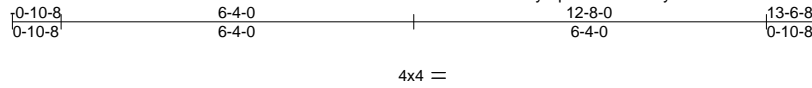
December 31,2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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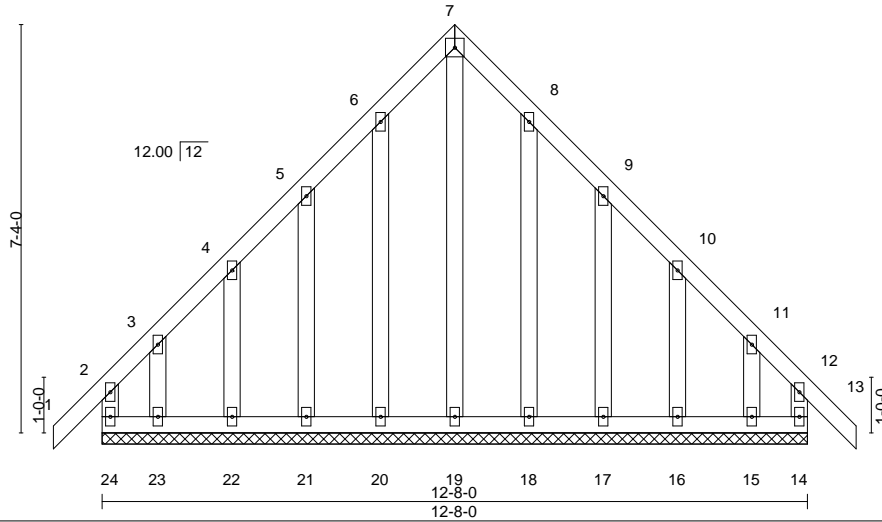
Job 21125026	Truss C1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	WAG-9	149482140
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:12 2021 Page 1
ID:KZLmft3tysq9OF7NcMJ5liyDPNH-zufkha4vdvYNyl8OdGOWjkG5u79XslyPUS86cLy3rDH



Scale = 1:41.4



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 0.15	Vert(LL)	-0.00	13	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	13	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 103 lb	FT = 20%

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

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

REACTIONS. All bearings 12-8-0.
(lb) - Max Horz 24=146(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 14, 20, 21, 22, 18, 17, 16 except 24=109(LC 6), 23=148(LC 10), 15=138(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph 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 2-4-0, Exterior(2) 2-4-0 to 3-4-0, Corner(3) 3-4-0 to 9-4-0, Exterior(2) 9-4-0 to 10-4-0, Corner(3) 10-4-0 to 13-6-8 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) 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) 14, 20, 21, 22, 18, 17, 16 except (jt=lb) 24=109, 23=148, 15=138.



December 31, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



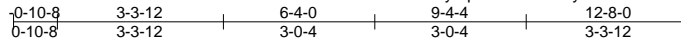
818 Soundside Road
Edenton, NC 27932

Job 21125026	Truss C2GR	Truss Type COMMON GIRDER	Qty 1	Ply 2	WAG-9 Job Reference (optional)	149482141
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:13 2021 Page 1

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4x6 ||

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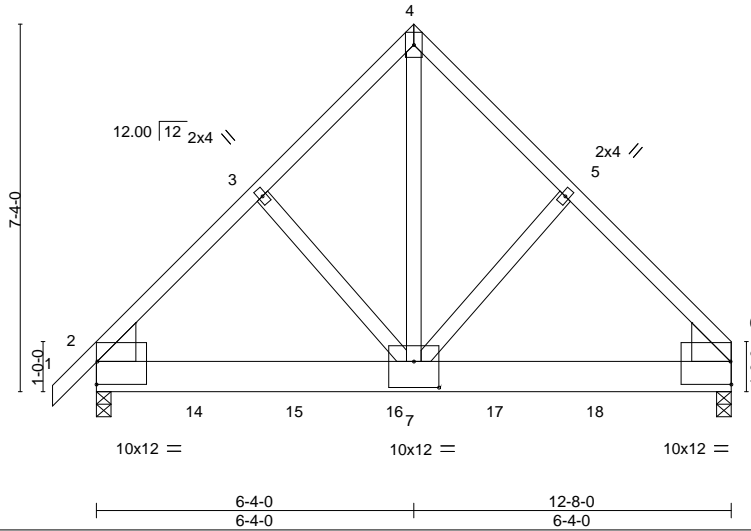


Plate Offsets (X, Y)-- [2:Edge,0-5-8], [6:Edge,0-5-8], [7:0-6-0,0-6-4]

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 0.17	Vert(LL)	-0.04	7-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.09	7-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MSH							
									Weight: 194 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x8 SP DSS
 WEBS 2x4 SP No.3 *Except*
 4-7: 2x4 SP No.2

WEDGE

Left: 2x10 SP No.2 , Right: 2x10 SP No.2

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=140(LC 5)
 Max Uplift 2=-351(LC 8), 6=-412(LC 8)
 Max Grav 2=4413(LC 1), 6=5242(LC 1)

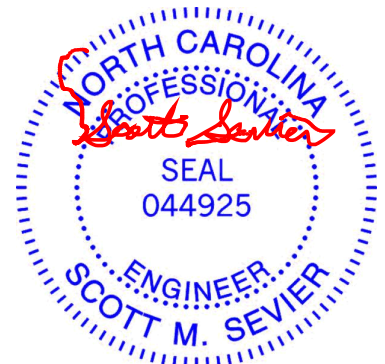
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3916/354, 3-4=-3822/381, 4-5=-3823/380, 5-6=-3916/353
 BOT CHORD 2-7=-256/2747, 6-7=-211/2749
 WEBS 4-7=-464/5116

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: 2x8 - 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 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) 2=351, 6=412.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1431 lb down and 125 lb up at 1-11-5, 1431 lb down and 125 lb up at 3-11-5, 1431 lb down and 125 lb up at 5-11-5, 1431 lb down and 125 lb up at 7-11-5, and 1431 lb down and 125 lb up at 9-11-5, and 1434 lb down and 122 lb up at 11-11-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



December 31, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Job 21125026	Truss C2GR	Truss Type COMMON GIRDER	Qty 1	Ply 2	WAG-9 Job Reference (optional)	149482141
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:13 2021 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 8-11=-20

Concentrated Loads (lb)

Vert: 13=-1434(F) 14=-1431(F) 15=-1431(F) 16=-1431(F) 17=-1431(F) 18=-1431(F)

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

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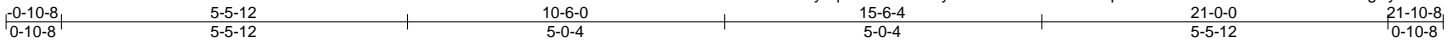
818 Soundside Road
Edenton, NC 27932

Job 21125026	Truss D	Truss Type COMMON	Qty 5	Ply 1	WAG-9	149482142
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:14 2021 Page 1

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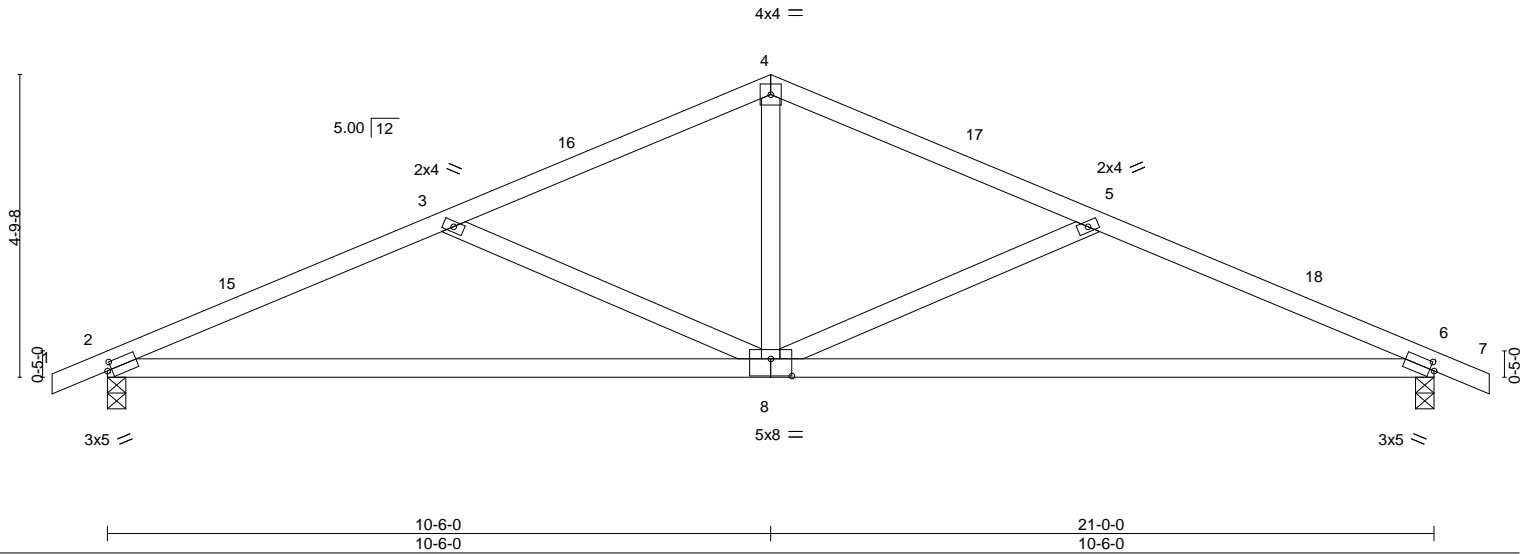


Plate Offsets (X,Y)-- [2:0-0-14,0-1-8], [6:0-0-14,0-1-8], [8:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.18 8-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.29	Vert(CT) -0.39 8-14 >642 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 91 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, 6=0-3-8
 Max Horz 2=65(LC 10)
 Max Uplift 2=-95(LC 10), 6=-95(LC 11)
 Max Grav 2=893(LC 1), 6=893(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1594/226, 3-4=-1192/163, 4-5=-1192/163, 5-6=-1594/226
 BOT CHORD 2-8=-172/1442, 6-8=-139/1442
 WEBS 4-8=0/615, 5-8=-461/171, 3-8=-461/170

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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 7-6-0, 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.
 - 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.



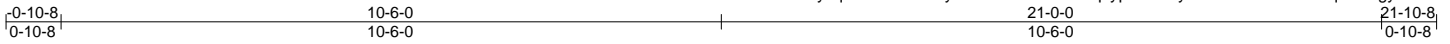
December 31, 2021

Job 21125026	Truss DGE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	WAG-9	149482143
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:15 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5liyDPNH-NTKtJb6nwqxyDszJOydKNueUKBu3hDrAqMmDgy3rDE



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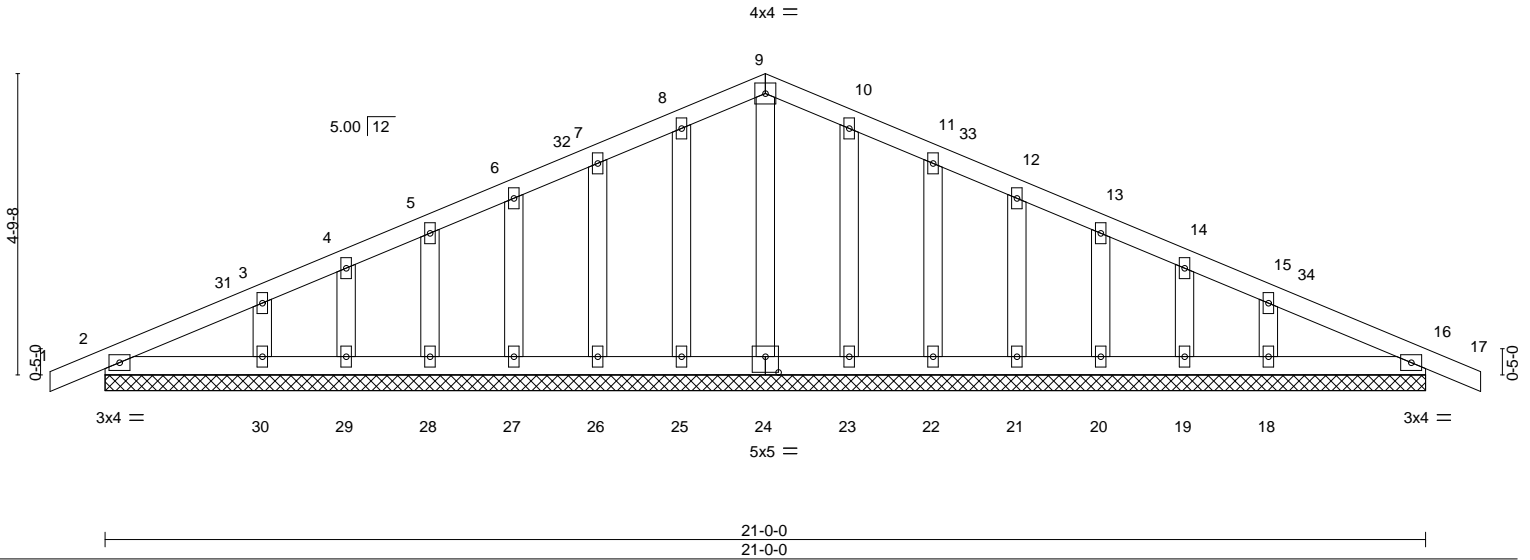


Plate Offsets (X,Y)--	[24:0-2-8,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00 16 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00 16 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 16 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 115 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=65(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16
 Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16

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 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
- 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16.



December 31, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



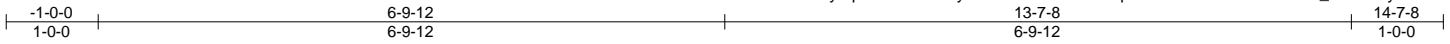
818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss F	Truss Type COMMON	Qty 5	Ply 1	WAG-9	149482144
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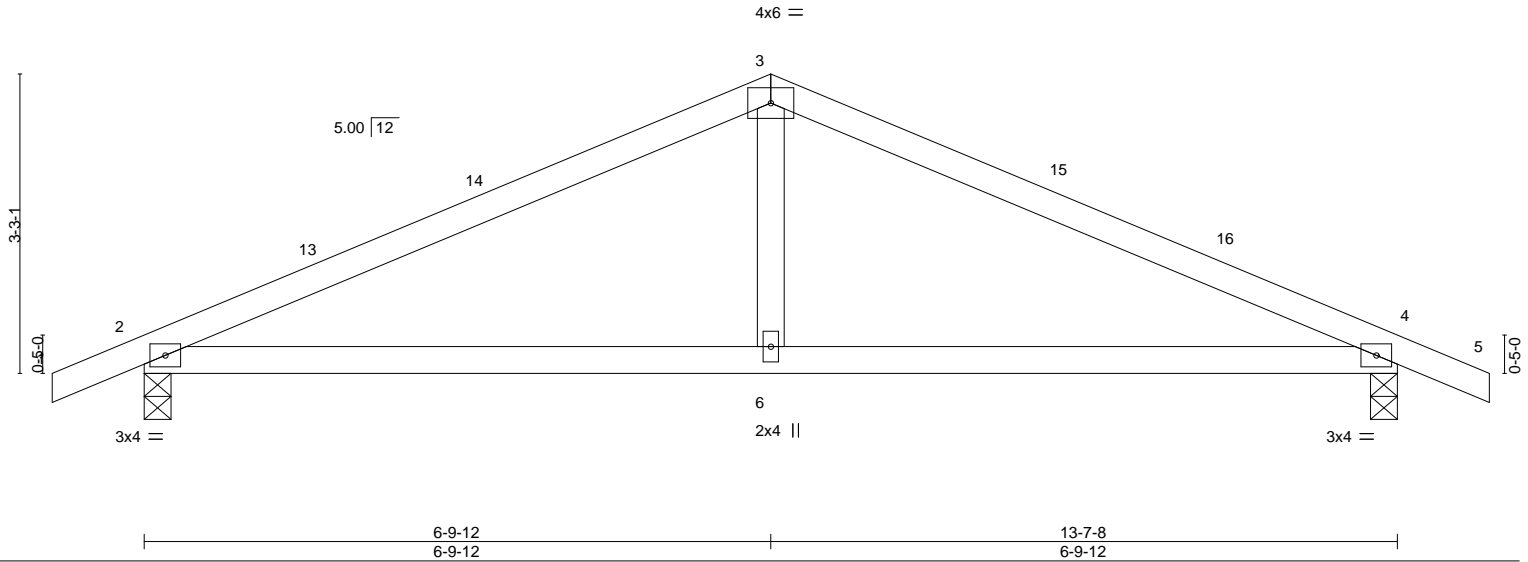
The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:16 2021 Page 1

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Scale = 1:25.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.49	Vert(LL)	-0.06	6-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.47	Vert(CT)	-0.11	6-12	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS					Weight: 50 lb	FT = 20%
	Code IRC2015/TPI2014							

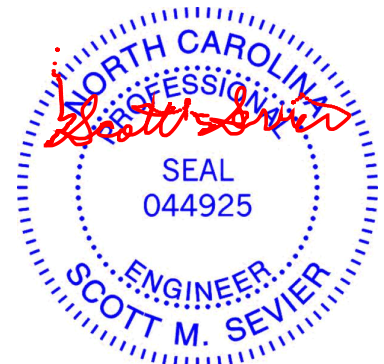
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=-44(LC 11)
 Max Uplift 2=-69(LC 10), 4=-69(LC 11)
 Max Grav 2=605(LC 1), 4=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-855/156, 3-4=-855/156
 BOT CHORD 2-6=-59/727, 4-6=-59/727
 WEBS 3-6=0/302

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=5.0psf; BC DL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-9-12, Exterior(2) 3-9-12 to 9-9-12, Interior(1) 9-9-12 to 11-7-8, Exterior(2) 11-7-8 to 14-7-8 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.



December 31, 2021

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

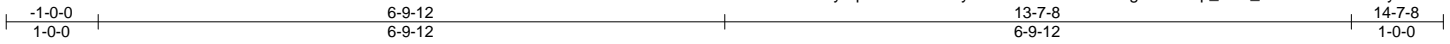
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss FGE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	WAG-9	149482145
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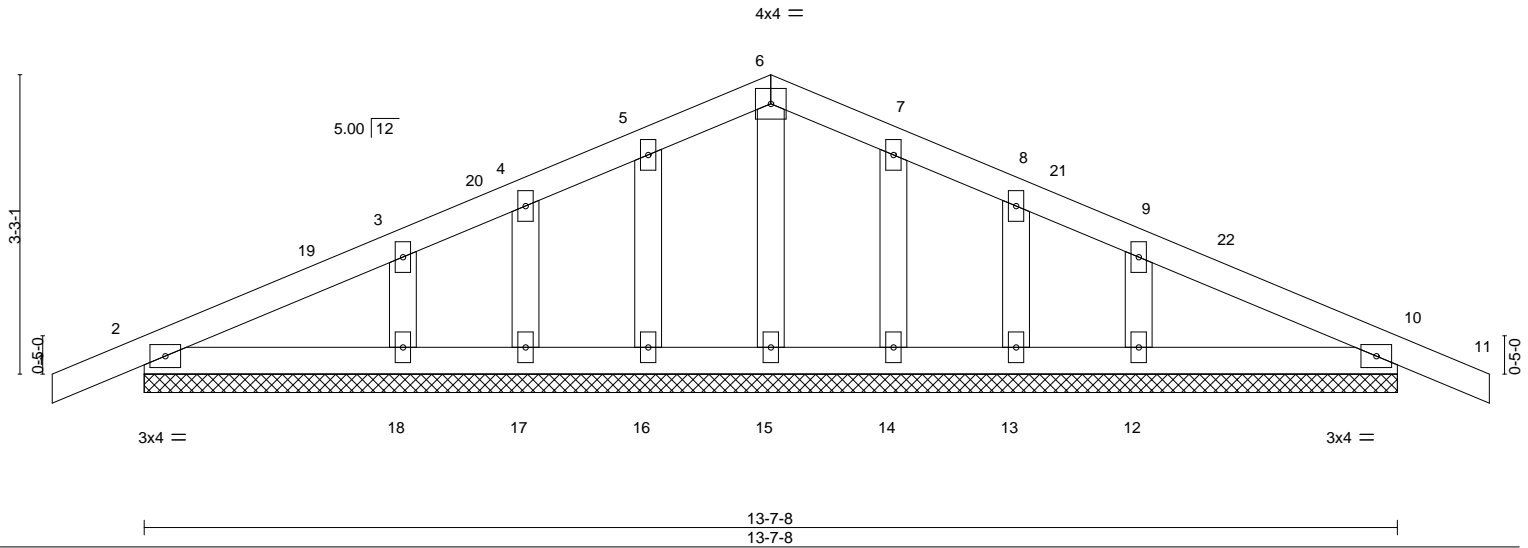
The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:17 2021 Page 1

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Scale = 1:25.1



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 0.08	Vert(LL)	0.00	10	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	11	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 64 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 13-7-8.
 (lb) - Max Horz 2=-44(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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 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) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 3-9-12, Corner(3) 3-9-12 to 9-9-12, Exterior(2) 9-9-12 to 11-7-8, Corner(3) 11-7-8 to 14-7-8 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



December 31, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

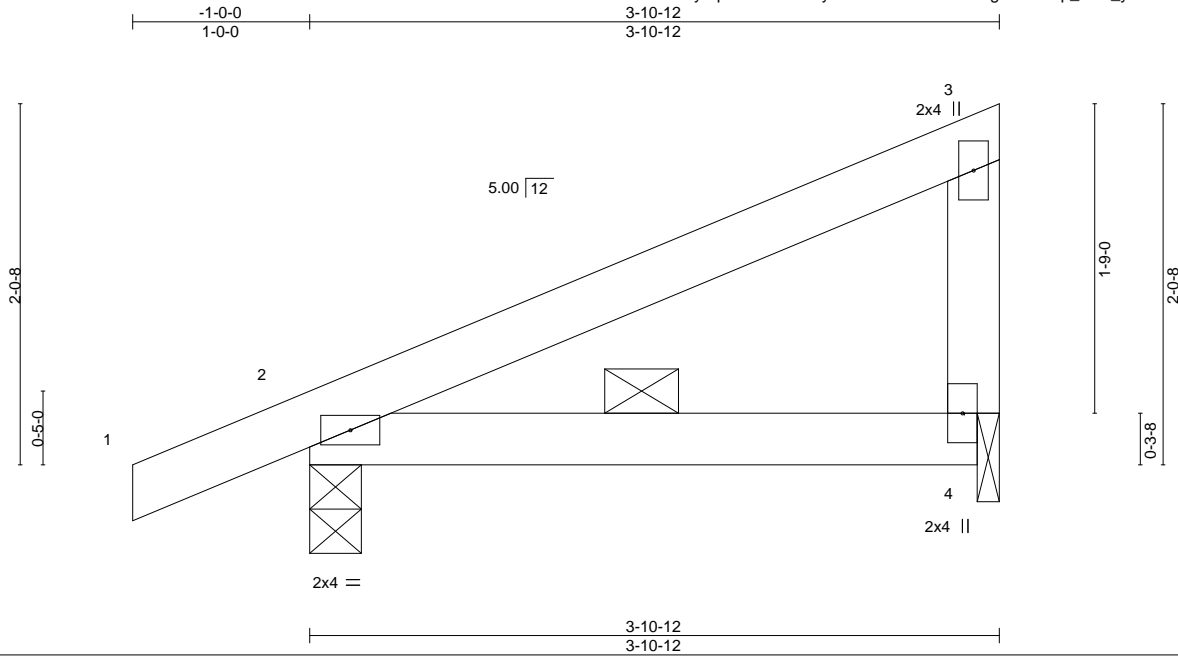


818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss M4	Truss Type Monopitch	Qty 5	Ply 1	WAG-9	I49482146
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:17 2021 Page 1
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Scale = 1:13.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	-0.01	4-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	-0.02	4-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP					Weight: 16 lb	FT = 20%
	Code IRC2015/TPI2014							

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

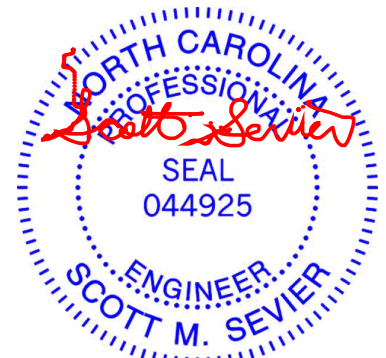
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins, except end verticals.
BOT CHORD 2-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=61(LC 10)
Max Uplift 2=-30(LC 10), 4=-31(LC 10)
Max Grav 2=218(LC 1), 4=142(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 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.



December 31, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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818 Soundside Road
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Job 21125026	Truss PB1	Truss Type Piggyback	Qty 20	Ply 1	WAG-9	149482147
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:18 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5iyDPNH-o100xd8gDIJXggbY_XVKy?W8PXAHG2UHsobRq?y3rDB



3x4 =

Scale = 1:14.0

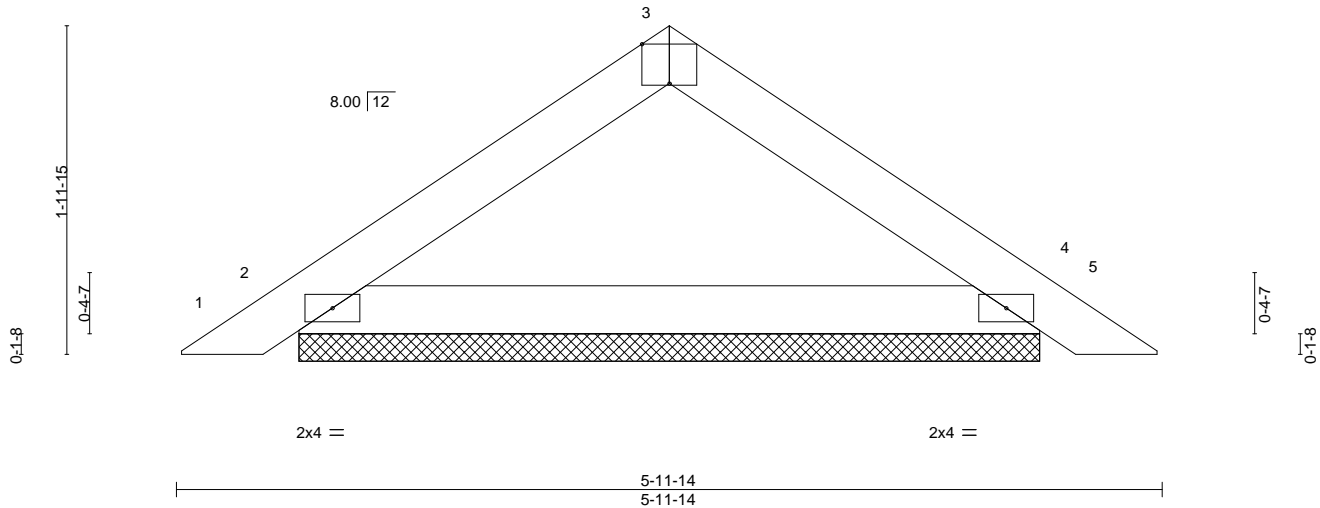


Plate Offsets (X,Y)--	[3:0-2-0,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	0.00	5	n/r	120
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	0.00	5	n/r	90
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					
								GRIP
								MT20
								244/190
								Weight: 17 lb
								FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-6-0, 4=4-6-0
Max Horz 2=-37(LC 8)
Max Uplift 2=-23(LC 10), 4=-23(LC 11)
Max Grav 2=208(LC 1), 4=208(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 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) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 31, 2021

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

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818 Soundside Road
Edenton, NC 27932

Job 21125026	Truss PB1GE	Truss Type Piggyback	Qty 2	Ply 1	WAG-9	I49482148
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The Building Center, Gastonia, NC - 28052,

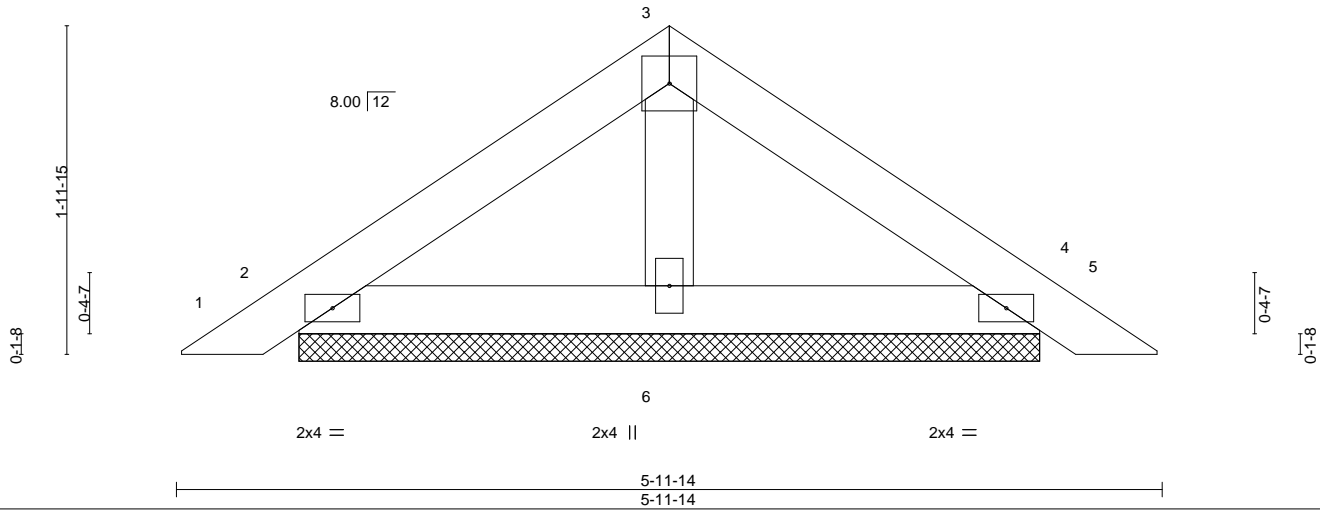
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:19 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5IiyDPNH-GEaO9z9l_3ROlqAIYE0ZVD3J9xZh?VPR5SK_MRY3rDA



4x4 =

Scale = 1:14.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	0.00	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	0.00	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 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 5-11-14 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-6-0, 4=4-6-0, 6=4-6-0
 Max Horz 2=-37(LC 8)
 Max Uplift 2=-27(LC 10), 4=-32(LC 11)
 Max Grav 2=128(LC 1), 4=128(LC 1), 6=160(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 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) 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) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 31, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



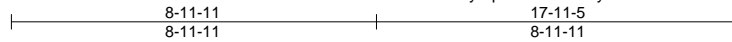
818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V01	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482149
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:19 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5IiyDPNH-GEaO9z9l_3ROlqAIYE0ZVD3GBxM?TXR5SK_MRY3rDA



4x4 =

Scale = 1:56.6

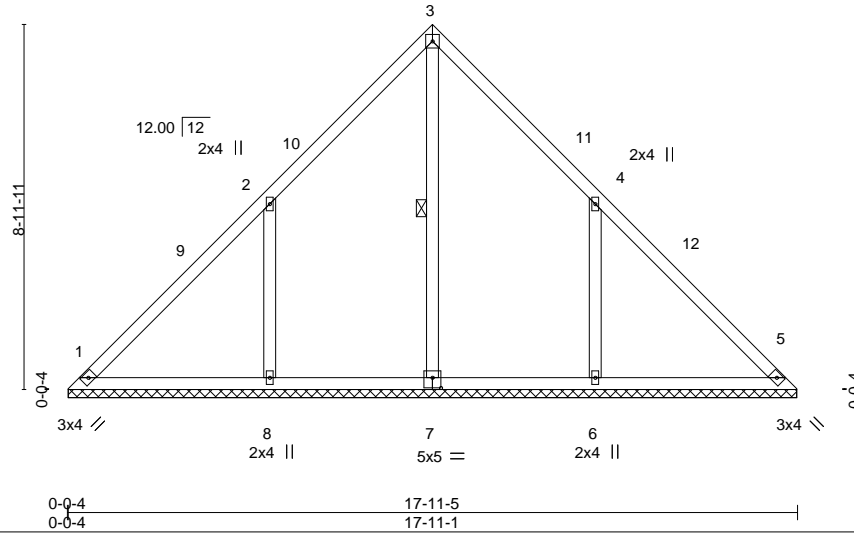


Plate Offsets (X,Y)--	[7:0-2-8,0-3-0]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	n/a	-	n/a 999
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	n/a	-	n/a 999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	5	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH				
							PLATES
							MT20
							GRIP
							244/190
							Weight: 88 lb
							FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. All bearings 17-10-13.
(lb) - Max Horz 1=174(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-230(LC 10), 6=-230(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=354(LC 20), 8=510(LC 17), 6=510(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-340/256, 4-6=-340/255

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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) 0-4-4 to 3-4-4, Interior(1) 3-4-4 to 5-11-11, Exterior(2) 5-11-11 to 11-11-11, Interior(1) 11-11-11 to 14-7-2, Exterior(2) 14-7-2 to 17-7-2 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, 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=230, 6=230.



December 31, 2021

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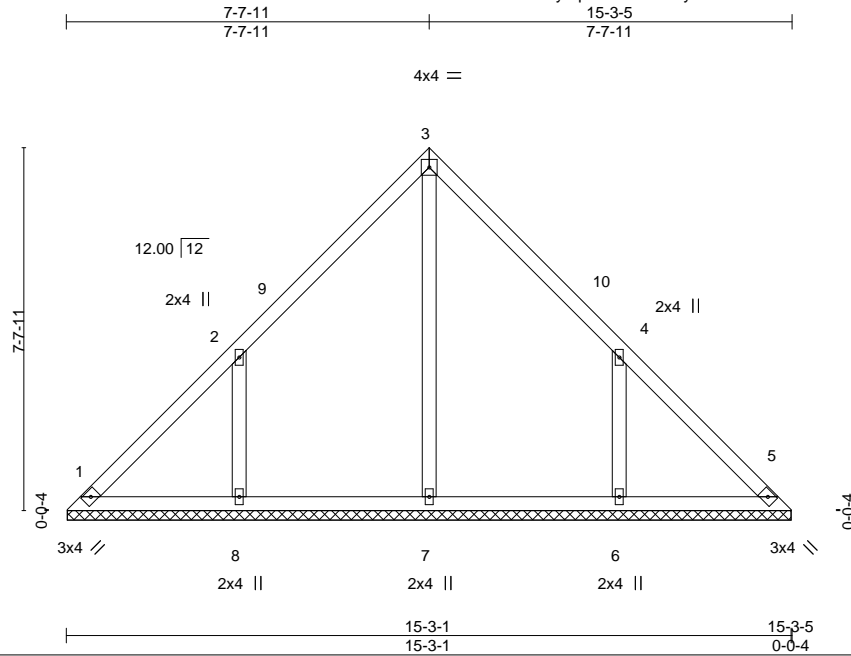
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 21125026	Truss V02	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482150
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:20 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5IiyDPNH-kQ8mMJAwinZFw_lx5yXo1QcS9LtokwlaJ64Xuuy3rD9



Scale = 1:48.5

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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH						Weight: 73 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 15-2-13.
 (lb) - Max Horz 1=-147(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-192(LC 10), 6=-191(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=356(LC 20), 8=432(LC 17), 6=432(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-290/220, 4-6=-290/220

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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) 0-4-4 to 3-7-11, Interior(1) 3-7-11 to 4-7-11, Exterior(2) 4-7-11 to 10-7-11, Interior(1) 10-7-11 to 11-7-11, Exterior(2) 11-7-11 to 14-11-2 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, with BCDL = 10.0psf.
 - 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=192, 6=191.



December 31, 2021

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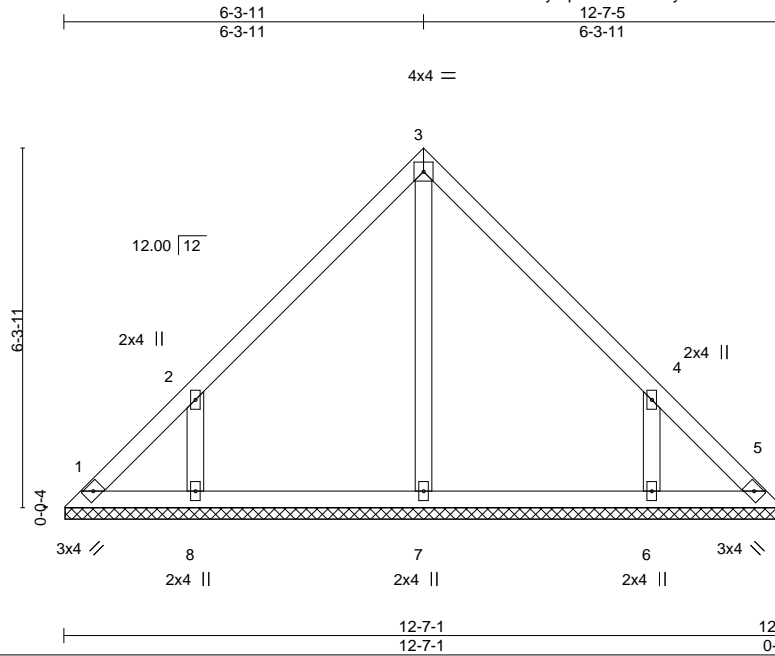


818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V03	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482151
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:21 2021 Page 1
ID:KZLmft3tysq9OF7NcMJ5liyDPNH-Cch8afBYWgh6X8K7ff21ae8d8ID2OjjYmp5QKy3rD8



Scale = 1:40.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH						Weight: 57 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 12-6-13.
 (lb) - Max Horz 1=-120(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-168(LC 10), 6=-168(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=322(LC 17), 6=322(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-265/205, 4-6=-265/204

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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=168, 6=168.



December 31, 2021

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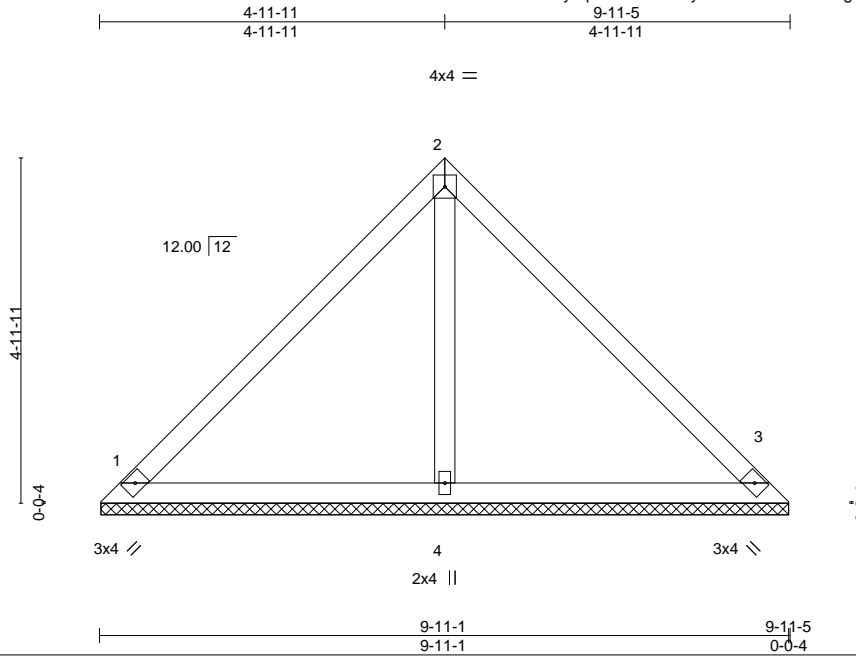
818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V04	Truss Type Valley	Qty 1	Ply 1	WAG-9 Job Reference (optional)	I49482152
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:21 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5iyDPNH-Cch8afBYWgh6X8K7ff21ae8bjBZTO1jYmp5QKy3rD8



Scale = 1:33.2

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 0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH						Weight: 41 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=9-10-13, 3=9-10-13, 4=9-10-13
 Max Horz 1=93(LC 6)
 Max Uplift 1=26(LC 11), 3=26(LC 11), 4=14(LC 10)
 Max Grav 1=200(LC 1), 3=200(LC 1), 4=338(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 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, 4.



December 31, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V05	Truss Type Valley	Qty 1	Ply 1	WAG-9 Job Reference (optional)	149482153
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The Building Center, Gastonia, NC - 28052,

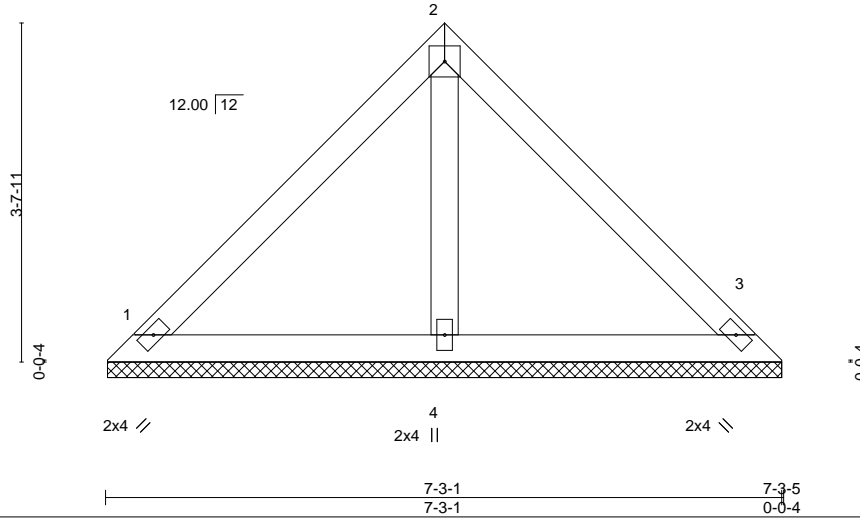
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:22 2021 Page 1

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4x4 =

Scale = 1:24.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 29 lb	FT = 20%
	Code IRC2015/TPI2014							

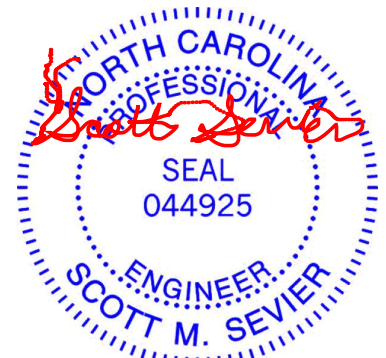
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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. (size) 1=7-2-13, 3=7-2-13, 4=7-2-13
 Max Horz 1=66(LC 6)
 Max Uplift 1=31(LC 11), 3=31(LC 11)
 Max Grav 1=159(LC 1), 3=159(LC 1), 4=208(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 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) 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.



December 31, 2021

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

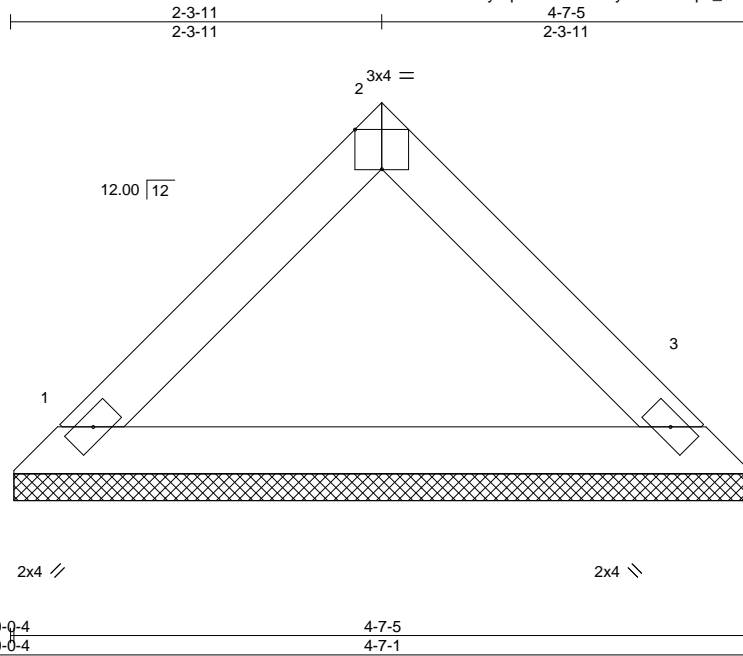
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V06	Truss Type Valley	Qty 1	Ply 1	WAG-9 Job Reference (optional)	149482154
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:23 2021 Page 1

ID:KZLmft3tysq9OF7NcMJ5liyDPNH-8?pv_LCo2IxpRUWn45Vf3D_HYUWxJ0?4ICVCy3rD6



Scale = 1:14.3

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

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-6-13, 3=4-6-13
 Max Horz 1=40(LC 6)
 Max Uplift 1=9(LC 10), 3=9(LC 10)
 Max Grav 1=156(LC 1), 3=156(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 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.

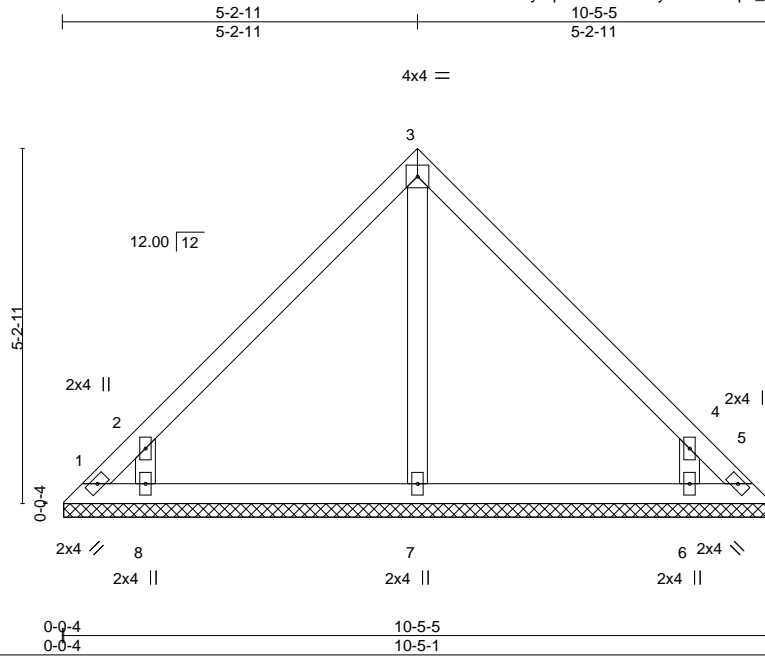


December 31, 2021

Job 21125026	Truss V07	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482155
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:23 2021 Page 1
ID:KZLmft3tysq9OF7NcMJ5liyDPNH-8?pv_LCo2lxpnRUWn45Vf3DyMYvYxIL074ICVCy3rD6



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 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-SH						Weight: 45 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 10-4-13.
 (lb) - Max Horz 1=99(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=115(LC 8), 8=190(LC 10), 6=190(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=356(LC 17), 6=355(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-315/248, 4-6=-315/248

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph 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) 5 except (jt=18) 1=115, 8=190, 6=190.



December 31, 2021

Job 21125026	Truss V08	Truss Type Valley	Qty 1	Ply 1	WAG-9	I49482156
					Job Reference (optional)	

The Building Center, Gastonia, NC - 28052,

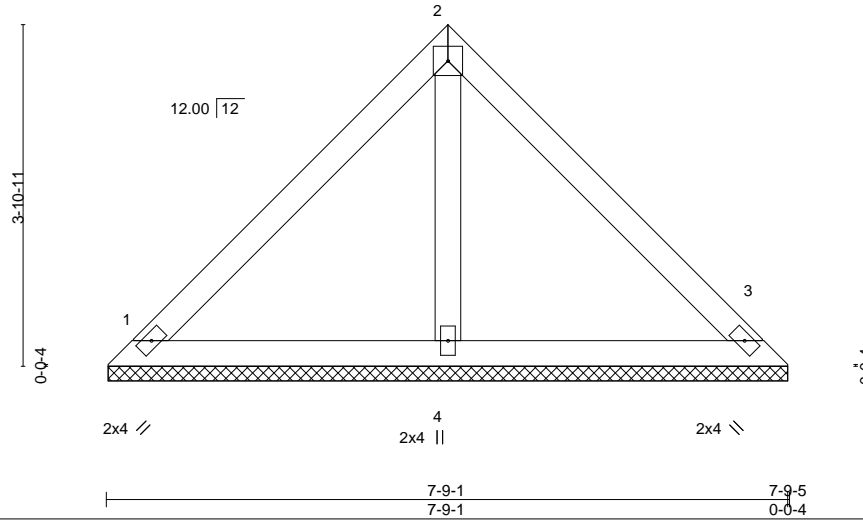
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:24 2021 Page 1

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4x4 =

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	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 31 lb	FT = 20%

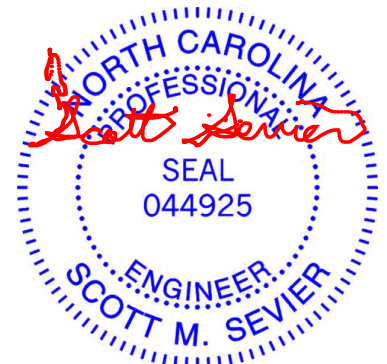
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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=7-8-13, 3=7-8-13, 4=7-8-13
 Max Horz 1=72(LC 7)
 Max Uplift 1=34(LC 11), 3=34(LC 11)
 Max Grav 1=171(LC 1), 3=171(LC 1), 4=224(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 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.



December 31, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

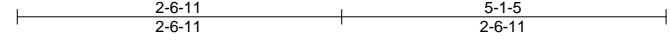
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 21125026	Truss V09	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482157
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:25 2021 Page 1

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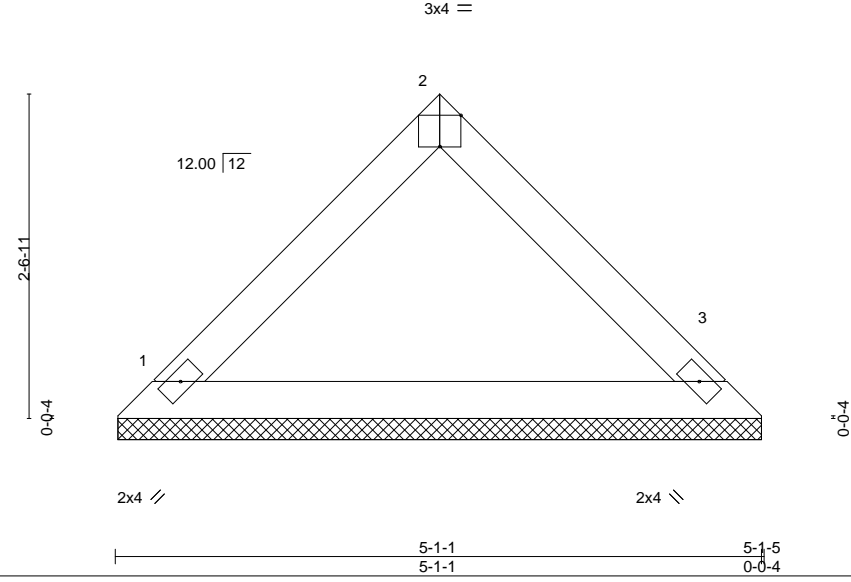


Plate Offsets (X,Y)--	[2:0-2-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 17 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-0-13, 3=5-0-13
 Max Horz 1=45(LC 7)
 Max Uplift 1=-11(LC 11), 3=-11(LC 10)
 Max Grav 1=176(LC 1), 3=176(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 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.



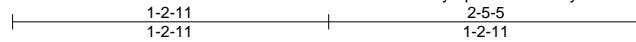
December 31, 2021

Job 21125026	Truss V10	Truss Type Valley	Qty 1	Ply 1	WAG-9	149482158
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The Building Center, Gastonia, NC - 28052,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 30 07:44:25 2021 Page 1

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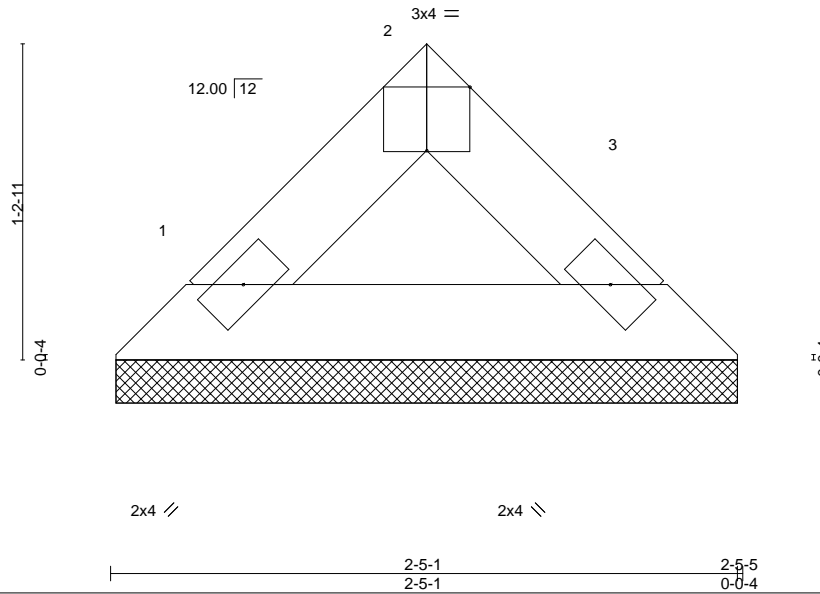


Plate Offsets (X,Y)--	[2:0-2-0,Edge]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 7 lb	FT = 20%

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

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

REACTIONS. (size) 1=2-4-13, 3=2-4-13
Max Horz 1=18(LC 6)
Max Uplift 1=4(LC 10), 3=4(LC 10)
Max Grav 1=70(LC 1), 3=70(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 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.



December 31,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

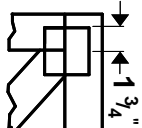
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



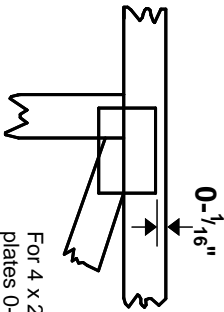
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

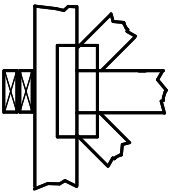
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



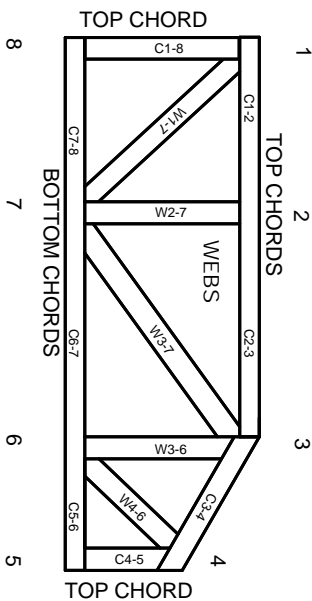
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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