

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master_RT
Voyageur; Master.RT

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

Pages or sheets covered by this seal: I50862741 thru I50862769

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

North Carolina COA: C-0844



March 20,2022

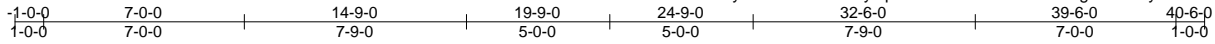
Johnson, Andrew

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 MASTER_RT	Truss A02	Truss Type COMMON	Qty 15	Ply 1	Voyageur; Master_RT	150862741
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:24 2022 Page 1

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5x6 =

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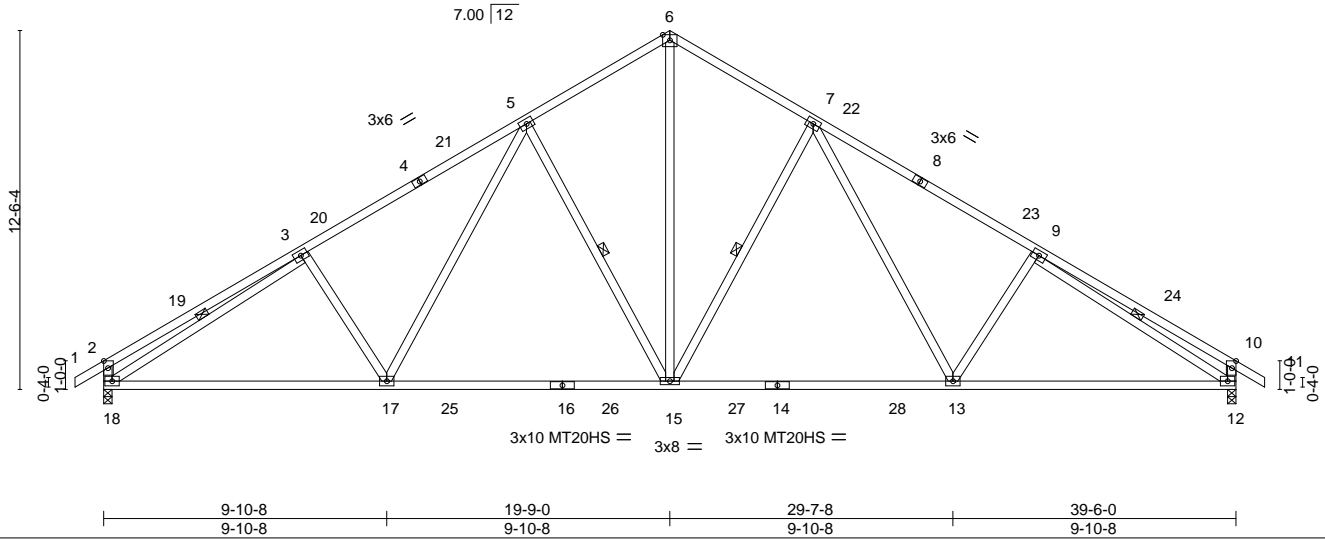


Plate Offsets (X, Y)--	[2:0-3-0,Edge], [10:0-3-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.32	13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.52	13-15	>908	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.10	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.06	15-17	>999	240		
									Weight: 250 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-15, 9-12, 5-15, 3-18

REACTIONS. (size) 18=0-3-8, 12=0-3-8
 Max Horz 18=261(LC 11)
 Max Grav 18=1666(LC 19), 12=1666(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-18=-491/132, 2-3=-549/132, 3-5=-2278/135, 5-6=-1658/178, 6-7=-1658/178, 7-9=-2278/135, 9-10=-549/131, 10-12=-491/132
 BOT CHORD 17-18=-5/2137, 15-17=0/1757, 13-15=0/1666, 12-13=0/1941
 WEBS 6-15=-109/1399, 7-15=-667/137, 7-13=-26/543, 9-13=-263/177, 9-12=-1939/0, 5-15=-667/137, 5-17=-26/543, 3-17=-263/177, 3-18=-1939/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-15 to 2-11-7, Interior(1) 2-11-7 to 19-9-0, Exterior(2) 19-9-0 to 25-4-1, Interior(1) 25-4-1 to 40-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) All plates are 4x6 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



Job MASTER_RT	Truss A02G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master.RT	150862742
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:27 2022 Page 1



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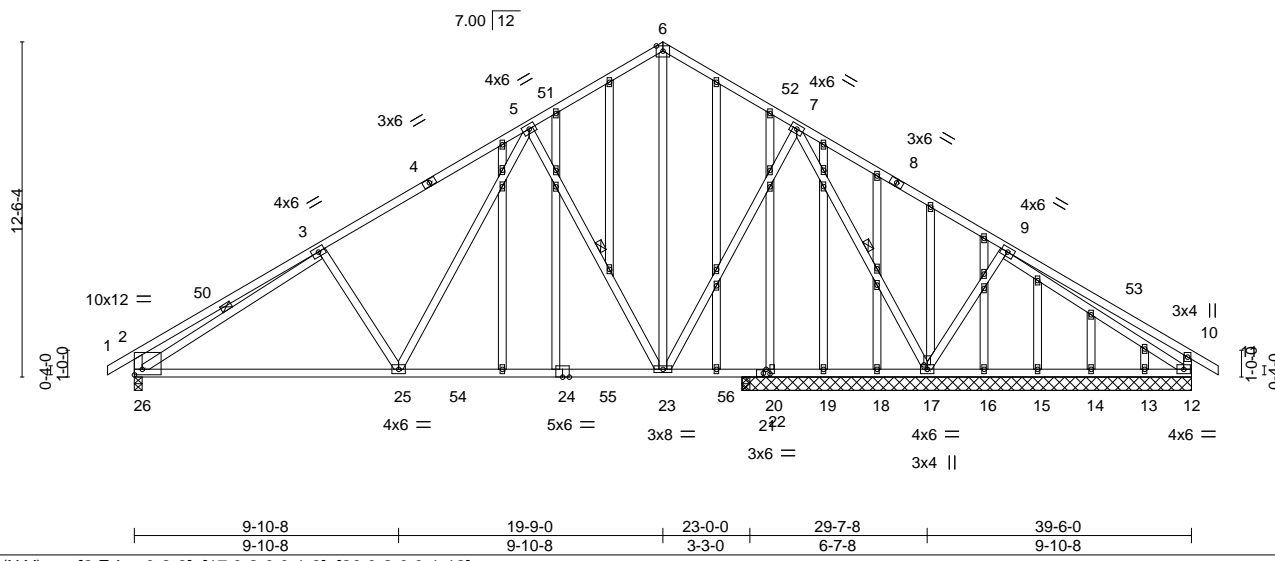


Plate Offsets (X,Y)--	[2:Edge,0-2-8], [17:0-2-0,0-1-8], [20:0-2-0,0-1-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.35 23-25 >783 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.79	Vert(CT) -0.53 23-25 >519 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.03 17 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 23-25 >999 240	Weight: 367 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-17, 5-23, 3-26
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 16-9-8 except (jt=length) 26=0-3-8, 22=0-3-8.
 (lb) - Max Horz 26=261(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 20, 26, 12 except 17=140(LC 13), 22=112(LC 18)
 Max Grav All reactions 250 lb or less at joint(s) 20, 19, 18, 16, 15, 14, 13, 22 except 17=1565(LC 1), 26=1186(LC 19), 12=290(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=479/122, 3-5=1449/141, 5-6=753/166, 6-7=753/163, 7-9=0/418, 9-10=257/165, 2-26=452/123, 10-12=332/144
 BOT CHORD 25-26=147/1456, 23-25=-21/999, 22-23=0/425, 20-22=0/425, 19-20=0/425, 18-19=0/425, 17-18=0/425
 WEBS 6-23=97/489, 7-23=-5/496, 7-17=1403/78, 9-17=430/205, 5-23=715/203, 5-25=43/633, 3-25=-309/198, 3-26=-1187/0, 9-12=-98/260

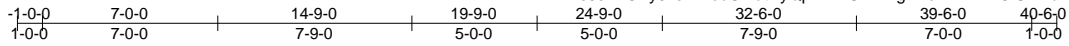
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-15 to 2-11-7, Interior(1) 2-11-7 to 19-9-0, Exterior(2) 19-9-0 to 23-8-6, Interior(1) 23-8-6 to 40-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 26, 12 except (jt=lb) 17=140, 22=112.



Job MASTER_RT	Truss A02H	Truss Type COMMON	Qty 7	Ply 1	Voyageur; Master.RT	150862743
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Builders FirstSource, Apex, NC 27523

ID:whs5sxHCvY0zsWPodSMdtHyQpf-ZHU2?vhgYfko4KxNATCIUm?d2e?C6?ojvyQWGNzZfRK
8.430 s Oct 22 2021 MiTek Industries, Inc. Fri Mar 18 15:38:01 2022 Page 1



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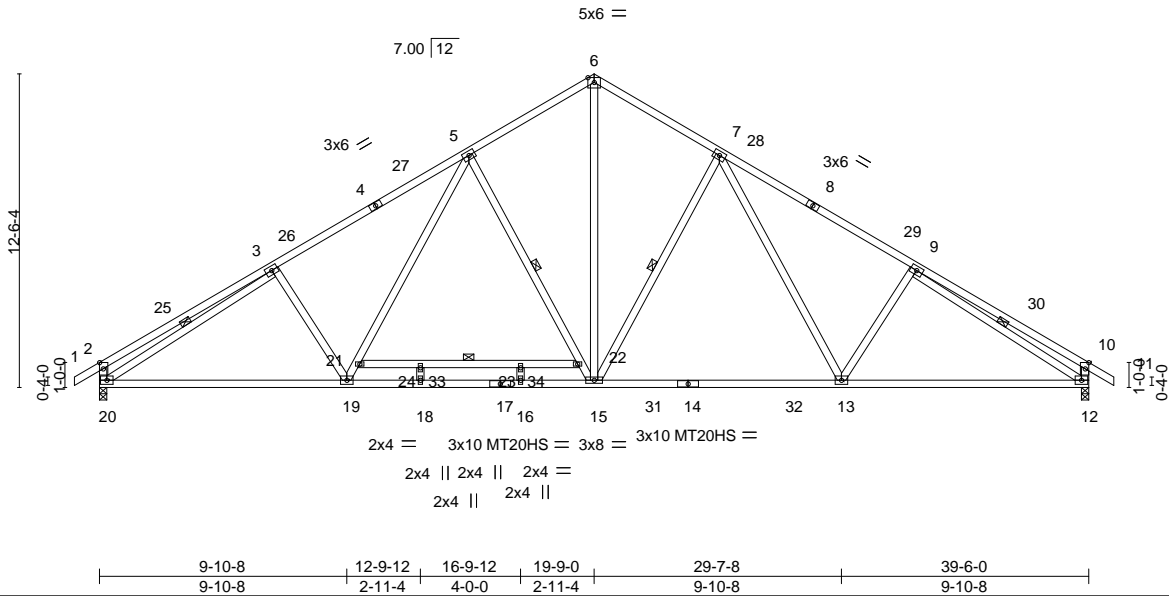


Plate Offsets (X,Y)--	[2:0-3-0,Edge], [10:0-3-0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.98	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.36 16-18 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.53 16-18 >882 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.10 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 18 >999 240	Weight: 265 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.1 *Except* 14-17: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-15, 9-12, 5-15, 3-20, 21-22

REACTIONS. (size) 20=0-3-8, 12=0-3-8
 Max Horz 20=-261(LC 10)
 Max Grav 20=1655(LC 19), 12=1659(LC 20)

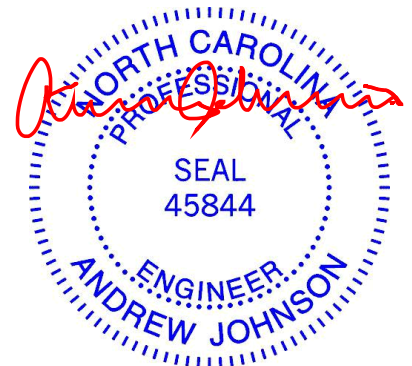
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-20=-494/131, 2-25=-557/106, 3-25=-441/130, 3-26=-2250/94, 4-26=-2150/113,
 4-27=-2145/133, 5-27=-2051/136, 5-6=-1644/179, 6-7=-1644/179, 7-28=-2069/135,
 8-28=-2163/132, 8-29=-2168/112, 9-29=-2268/92, 9-30=-436/132, 10-30=-548/108,
 10-12=-491/132
 BOT CHORD 19-20=-6/2114, 18-19=0/1770, 17-18=0/1770, 16-17=0/1770, 15-16=0/1770, 15-31=0/1655,
 14-31=0/1655, 14-32=0/1655, 13-32=0/1655, 12-13=0/1933
 WEBS 6-15=-110/1385, 7-15=-669/136, 7-13=-26/548, 9-13=-263/177, 9-12=-1931/0,
 5-22=-657/137, 15-22=-677/133, 19-21=-29/530, 5-21=-27/588, 3-19=-264/176,
 3-20=-1896/3

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-15 to 2-11-7, Interior(1) 2-11-7 to 19-9-0, Exterior(2) 19-9-0 to 25-4-1, Interior(1) 25-4-1 to 40-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 4x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - N/A

9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

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



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Continued on page 2

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

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



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Voyageur; Master.RT	150862743
MASTER_RT	A02H	COMMON	7	1	Job Reference (optional)	

Builders FirstSource, Apex, NC 27523

8.430 s Oct 22 2021 MiTek Industries, Inc. Fri Mar 18 15:38:01 2022 Page 2
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LOAD CASE(S)

- Uniform Loads (plf)
Vert: 1-2=-60, 2-6=-60, 6-10=-60, 10-11=-60, 12-20=-20
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-50, 2-6=-50, 6-10=-50, 10-11=-50, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-20, 2-6=-20, 6-10=-20, 10-11=-20, 12-20=-40, 33-34=-40(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=32, 2-25=17, 6-25=12, 6-28=17, 10-28=12, 10-11=8, 12-20=-12
Horz: 2-20=13, 1-2=-44, 2-25=-29, 6-25=-24, 6-28=29, 10-28=24, 10-11=20, 10-12=24
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-27=12, 6-27=17, 6-30=12, 10-30=17, 10-11=32, 12-20=-12
Horz: 2-20=-24, 1-2=-20, 2-27=-24, 6-27=-29, 6-30=24, 10-30=29, 10-11=44, 10-12=-13
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-0, 2-6=-44, 6-10=-44, 10-11=-40, 12-20=-20
Horz: 2-20=-15, 1-2=-20, 2-6=24, 6-10=-24, 10-11=-20, 10-12=-22
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-6=-44, 6-10=-44, 10-11=-0, 12-20=-20
Horz: 2-20=22, 1-2=20, 2-6=24, 6-10=-24, 10-11=20, 10-12=15
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-4, 2-6=-14, 6-10=5, 10-11=1, 12-20=-12
Horz: 2-20=13, 1-2=-8, 2-6=2, 6-10=17, 10-11=13, 10-12=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-6=5, 6-10=-14, 10-11=-4, 12-20=-12
Horz: 2-20=-16, 1-2=-13, 2-6=-17, 6-10=-2, 10-11=8, 10-12=-13
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-6=-31, 6-10=-11, 10-11=-7, 12-20=-20
Horz: 2-20=21, 1-2=7, 2-6=11, 6-10=9, 10-11=13, 10-12=7
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-7, 2-6=-11, 6-10=-31, 10-11=-27, 12-20=-20
Horz: 2-20=-7, 1-2=-13, 2-6=-9, 6-10=-11, 10-11=-7, 10-12=-21
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-26=19, 6-26=9, 6-10=2, 10-11=-3, 12-20=-12
Horz: 2-20=11, 1-2=-26, 2-26=-31, 6-26=-21, 6-10=14, 10-11=9, 10-12=12
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-6=2, 6-29=9, 10-29=19, 10-11=14, 12-20=-12
Horz: 2-20=-12, 1-2=-9, 2-6=-14, 6-29=21, 10-29=31, 10-11=26, 10-12=-11
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-6=9, 6-10=2, 10-11=-3, 12-20=-12
Horz: 2-20=5, 1-2=-17, 2-6=-21, 6-10=14, 10-11=9, 10-12=12
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-6=2, 6-10=9, 10-11=5, 12-20=-12
Horz: 2-20=-12, 1-2=-9, 2-6=-14, 6-10=21, 10-11=17, 10-12=-5
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-26=2, 6-26=-7, 6-10=-15, 10-11=-11, 12-20=-20
Horz: 2-20=19, 1-2=-26, 2-26=-22, 6-26=-13, 6-10=5, 10-11=9, 10-12=3
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-11, 2-6=-15, 6-29=-7, 10-29=2, 10-11=6, 12-20=-20
Horz: 2-20=-3, 1-2=-9, 2-6=-5, 6-29=13, 10-29=22, 10-11=26, 10-12=-19
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-20, 2-6=-20, 6-10=-20, 10-11=-20, 20-31=-20, 31-32=-60, 12-32=-20, 33-34=-40(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-55, 2-6=-58, 6-10=-44, 10-11=-40, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)
Horz: 2-20=16, 1-2=5, 2-6=8, 6-10=6, 10-11=10, 10-12=6
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Voyageur; Master.RT	150862743
MASTER_RT	A02H	COMMON	7	1	Job Reference (optional)	

Builders FirstSource, Apex, NC 27523

8.430 s Oct 22 2021 MiTek Industries, Inc. Fri Mar 18 15:38:01 2022 Page 3
 ID:whs5sxHCVy0zsWPodSMdtHyQpff-ZHU2?vhgVfko4KxNATCIUm?d2e?C6?ojvyQWGNzZfRK

LOAD CASE(S)

Uniform Loads (plf)

Vert: 1-2=-40, 2-6=-44, 6-10=-58, 10-11=-55, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)
 Horz: 2-20=-6, 1-2=-10, 2-6=-6, 6-10=-8, 10-11=-5, 10-12=-16

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

Uniform Loads (plf)

Vert: 1-2=-30, 2-26=-34, 6-26=-41, 6-10=-46, 10-11=-43, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)
 Horz: 2-20=15, 1-2=-20, 2-26=-16, 6-26=-9, 6-10=4, 10-11=7, 10-12=2

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

Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-29=-41, 10-29=-34, 10-11=-30, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)
 Horz: 2-20=-2, 1-2=-7, 2-6=-4, 6-29=9, 10-29=16, 10-11=20, 10-12=-15

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-6=-60, 6-10=-20, 10-11=-20, 12-20=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-6=-20, 6-10=-60, 10-11=-60, 12-20=-20

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

Uniform Loads (plf)

Vert: 1-2=-50, 2-6=-50, 6-10=-20, 10-11=-20, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(F)

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

Uniform Loads (plf)

Vert: 1-2=-20, 2-6=-20, 6-10=-50, 10-11=-50, 20-31=-20, 31-32=-50, 12-32=-20, 33-34=-30(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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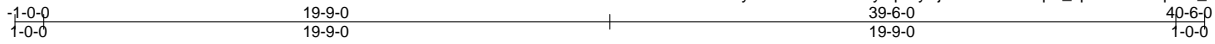
818 Soundside Road
 Edenton, NC 27932

Job MASTER_RT	Truss A03G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master_RT	150862744
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:30 2022 Page 1

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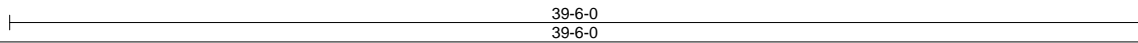
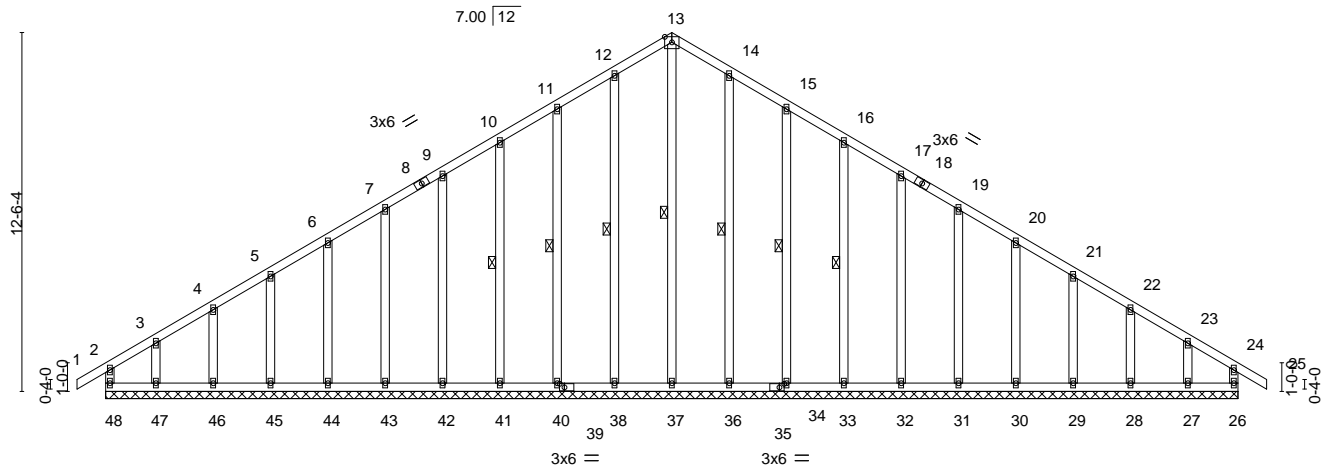


Plate Offsets (X,Y)--	[35:0-2-0,0-1-8], [39:0-2-0,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.00 25 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 25 n/r 120		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.01 26 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R			
				Weight: 314 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.
 WEBS 1 Row at midpt 13-37, 12-38, 11-40, 10-41, 14-36, 15-34, 16-33

REACTIONS. All bearings 39-6-0.
 (lb) - Max Horz 48--261(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 26, 38, 40, 41, 42, 43, 44, 45, 46, 36, 34, 33, 32, 31, 30, 29, 28 except 48--120(LC 8), 47--130(LC 12), 27--112(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 48, 26, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 36, 34, 33, 32, 31, 30, 29, 28, 27

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 11-12--226/264, 12-13--253/296, 13-14--253/296, 14-15--226/264

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-15 to 2-11-7, Exterior(2) 2-11-7 to 19-9-0, Corner(3) 19-9-0 to 23-9-0, Exterior(2) 23-9-0 to 40-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 38, 40, 41, 42, 43, 44, 45, 46, 36, 34, 33, 32, 31, 30, 29, 28 except (jt=lb) 48=120, 47=130, 27=112.



March 20,2022

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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



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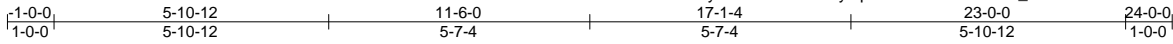
Job MASTER_RT	Truss B01	Truss Type COMMON	Qty 2	Ply 1	Voyageur; Master.RT	150862745
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

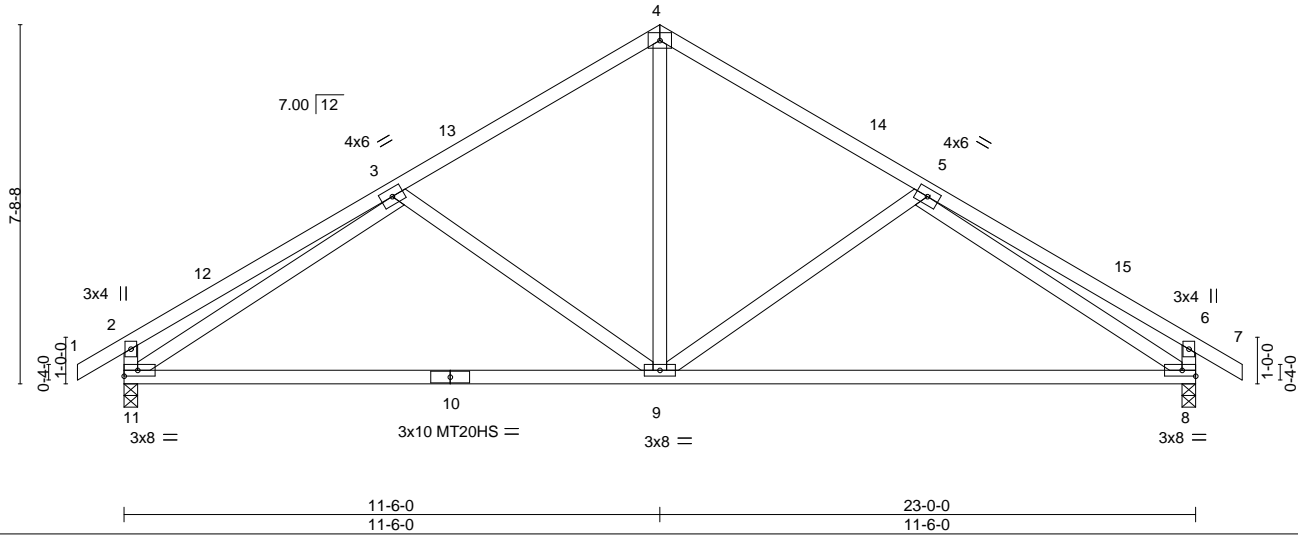
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:31 2022 Page 1

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4x6 =

Scale = 1:49.5



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 0.67	Vert(LL)	-0.31 9-11	>867	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.64 9-11	>429	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.02 9	>999	240		
								Weight: 130 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 8=0-3-8
 Max Horz 11=-166(LC 10)
 Max Grav 11=977(LC 1), 8=977(LC 1)

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

TOP CHORD 2-11=-402/95, 2-3=-419/70, 3-4=-951/78, 4-5=-951/78, 5-6=-418/71, 6-8=-402/95
 BOT CHORD 9-11=-13/947, 8-9=0/947
 WEBS 4-9=0/593, 5-9=-282/142, 5-8=-814/52, 3-9=-282/142, 3-11=-814/53

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-15 to 2-0-1, Interior(1) 2-0-1 to 11-6-0, Exterior(2) 11-6-0 to 15-8-15, Interior(1) 15-8-15 to 23-11-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



March 20, 2022

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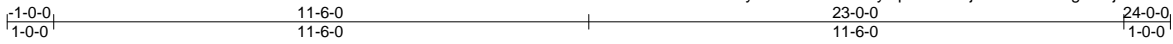
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



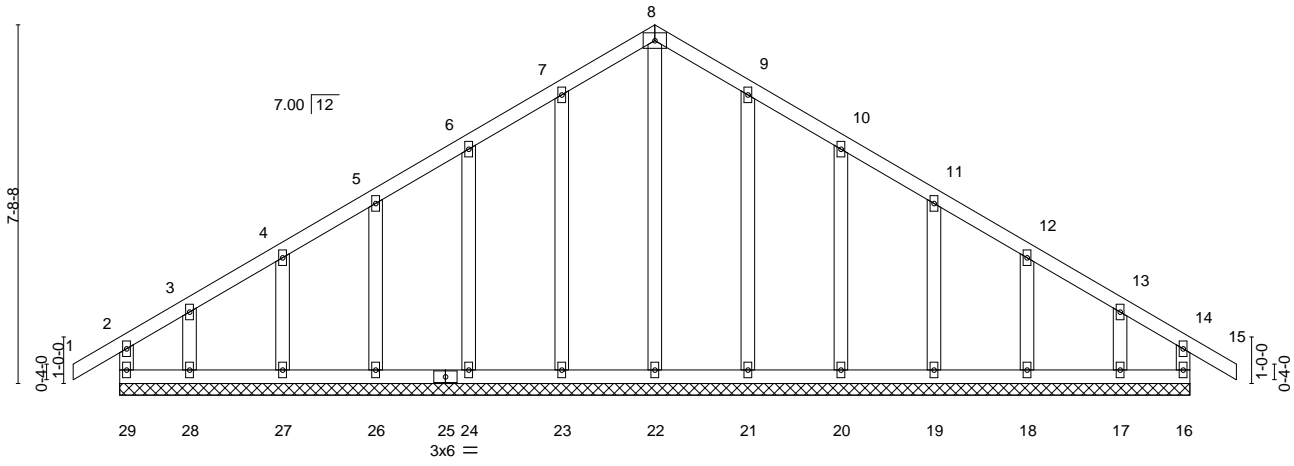
818 Soundside Road
 Edenton, NC 27932

Job MASTER_RT	Truss B01G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master.RT	150862746
Builders FirstSource (Apex, NC), Apex, NC - 27523,					8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:33 2022 Page 1	
					ID:whs5sxHCvY0zsWPodSMdtHyQpff-MoPGjbe7xxGawIzlg3Mej4tDPutdxHDfz9I0BkzZjtq	



4x6 =

Scale = 1:49.5



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 0.13	Vert(LL)	-0.00	15	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	15	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.15	Horz(CT)	0.00	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 144 lb	FT = 20%

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

REACTIONS. All bearings 23-0-0.
 (lb) - Max Horz 29=166(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 29, 16, 23, 24, 26, 27, 28, 21, 20, 19, 18, 17
 Max Grav All reactions 250 lb or less at joint(s) 29, 16, 22, 23, 24, 26, 27, 28, 21, 20, 19, 18, 17

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=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-15 to 2-0-1, Exterior(2) 2-0-1 to 11-6-0, Corner(3) 11-6-0 to 14-6-0, Exterior(2) 14-6-0 to 23-11-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 16, 23, 24, 26, 27, 28, 21, 20, 19, 18, 17.



March 20, 2022

Job MASTER_RT	Truss P01	Truss Type JACK	Qty 8	Ply 1	Voyageur; Master.RT	150862756
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:50 2022 Page 1
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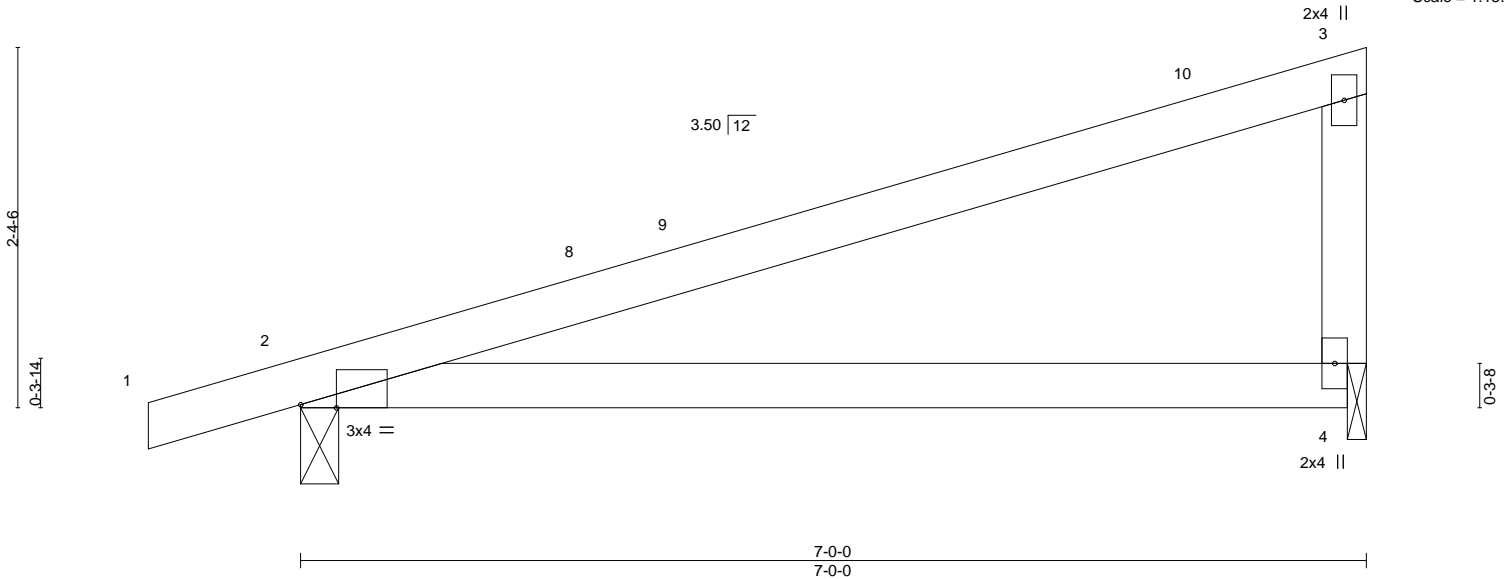


Plate Offsets (X,Y)-- [2:0-2-13,Edge]		CSI.		DEFL.		PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	TC	0.72	in (loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.15	BC	0.58	Vert(LL) -0.10	4-7	>817	360
TCDL 10.0	Lumber DOL 1.15	WB	0.04	Vert(CT) -0.23	4-7	>359	240
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP		Horz(CT) 0.00	2	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014			Wind(LL) 0.08	4-7	>971	240
						Weight: 25 lb	FT = 20%

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

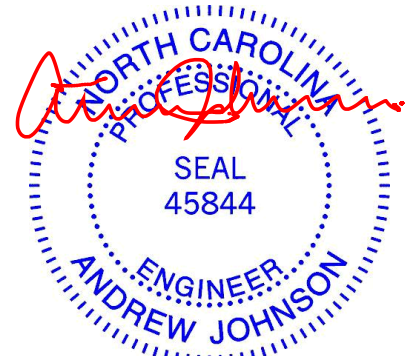
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=74(LC 8)
 Max Uplift 2=-45(LC 8), 4=-30(LC 8)
 Max Grav 2=339(LC 1), 4=270(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=6.0psf; BCDL=6.0psf; h=32ft; 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 6-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



March 20,2022

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818 Soundside Road
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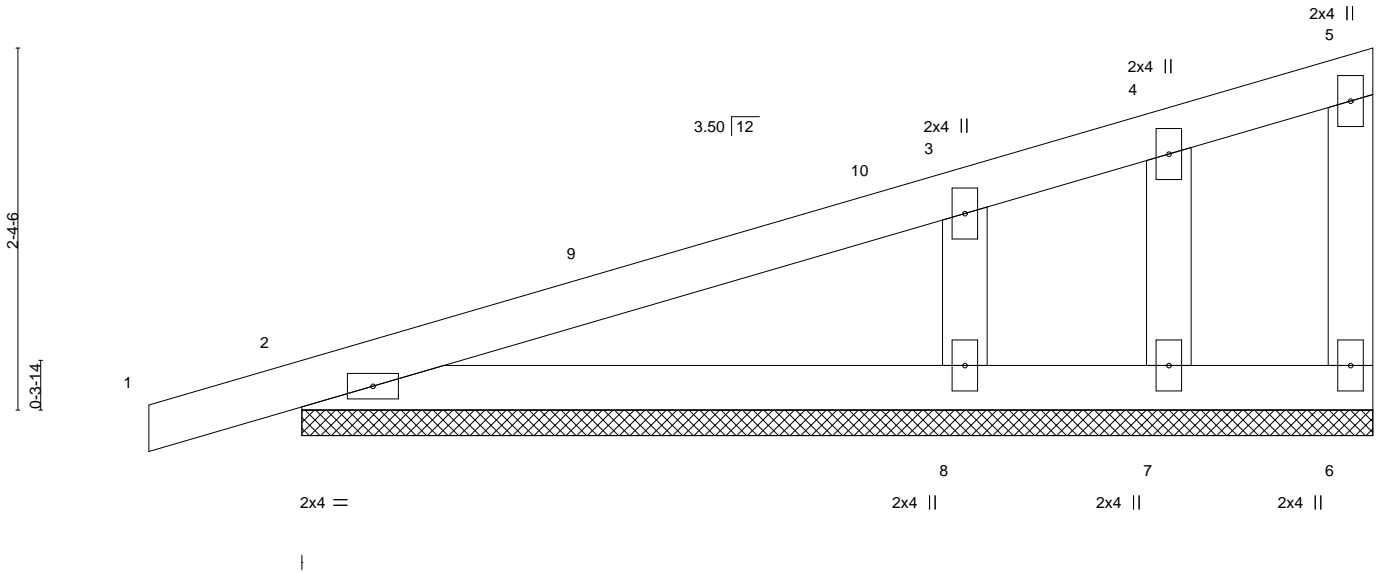
Job MASTER_RT	Truss P01G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master.RT	150862757
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:50 2022 Page 1
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Scale = 1:15.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	0.01	1	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 29 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

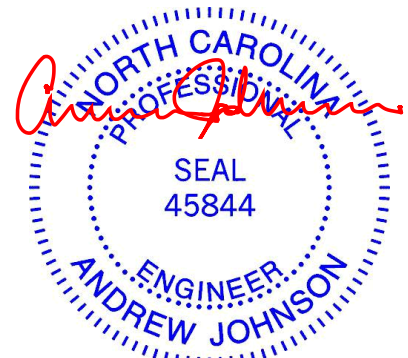
BRACING-

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

REACTIONS. All bearings 7-0-0.
 (lb) - Max Horz 2=71(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8
 Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=368(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-8=-259/171

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Gable studs spaced at 1-4-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7, 8.



March 20, 2022

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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



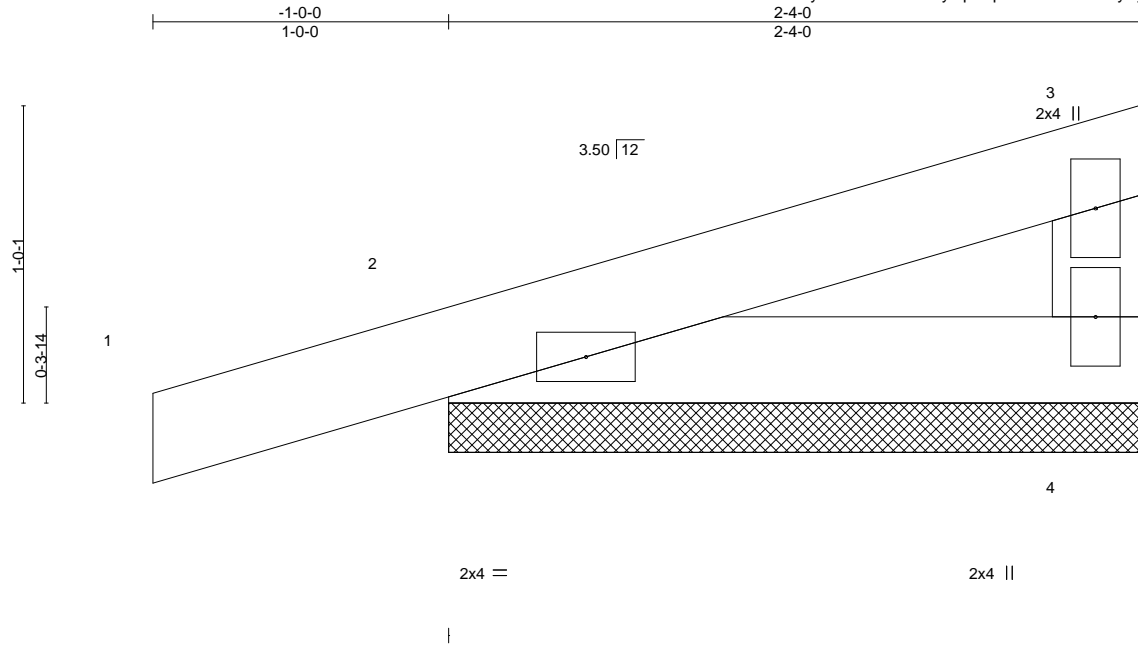
Job MASTER_RT	Truss P02G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master.RT	150862758
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:51 2022 Page 1

ID:whs5sxHCvY0zsWPodSMdtHyQpf-qGV4VIsPiTY143yCjrtStdIlg80u9S0J6yGzqhzZjtY



Scale = 1:7.8

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	1	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 9 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 2-4-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=2-4-0, 2=2-4-0
 Max Horz 2=26(LC 9)
 Max Uplift 4=5(LC 12), 2=42(LC 8)
 Max Grav 4=74(LC 1), 2=161(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=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Gable studs spaced at 1-4-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
 - 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



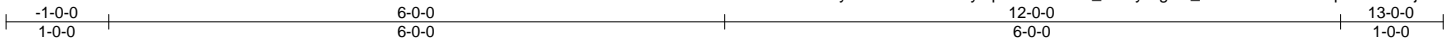
March 20, 2022

Job MASTER_RT	Truss SP01	Truss Type COMMON	Qty 4	Ply 1	Voyageur; Master.RT	150862762
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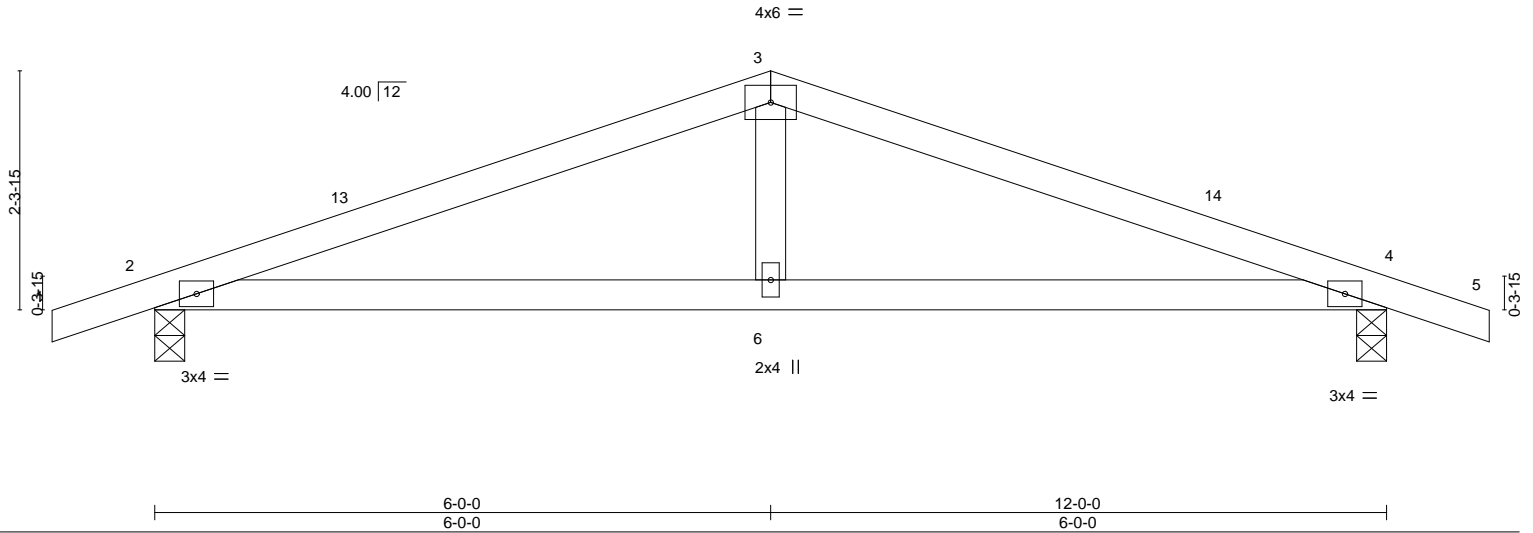
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:54 2022 Page 1

ID:w5s5xHCvY0zsWPodSMdtHyQpf-FrAC8muL_OwcyWgnO_Ea3VFkJMwiMn7lpwLdR0zZjtV



Scale = 1:22.4



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 0.43	Vert(LL)	-0.05 6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.10 6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.04 6-9	>999	240		
								Weight: 43 lb	FT = 20%

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

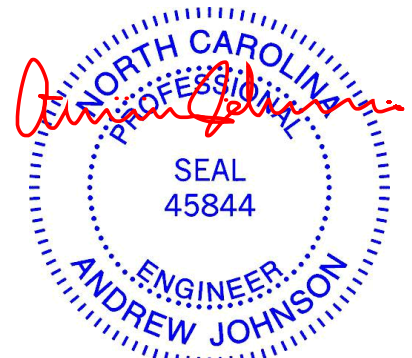
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=40(LC 12)
 Max Uplift 2=55(LC 8), 4=55(LC 9)
 Max Grav 2=540(LC 1), 4=540(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-888/94, 3-4=-888/90
 BOT CHORD 2-6=-27/810, 4-6=-27/810
 WEBS 3-6=0/276

NOTES-

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



March 20, 2022

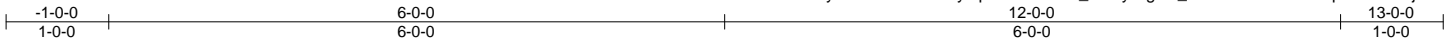
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

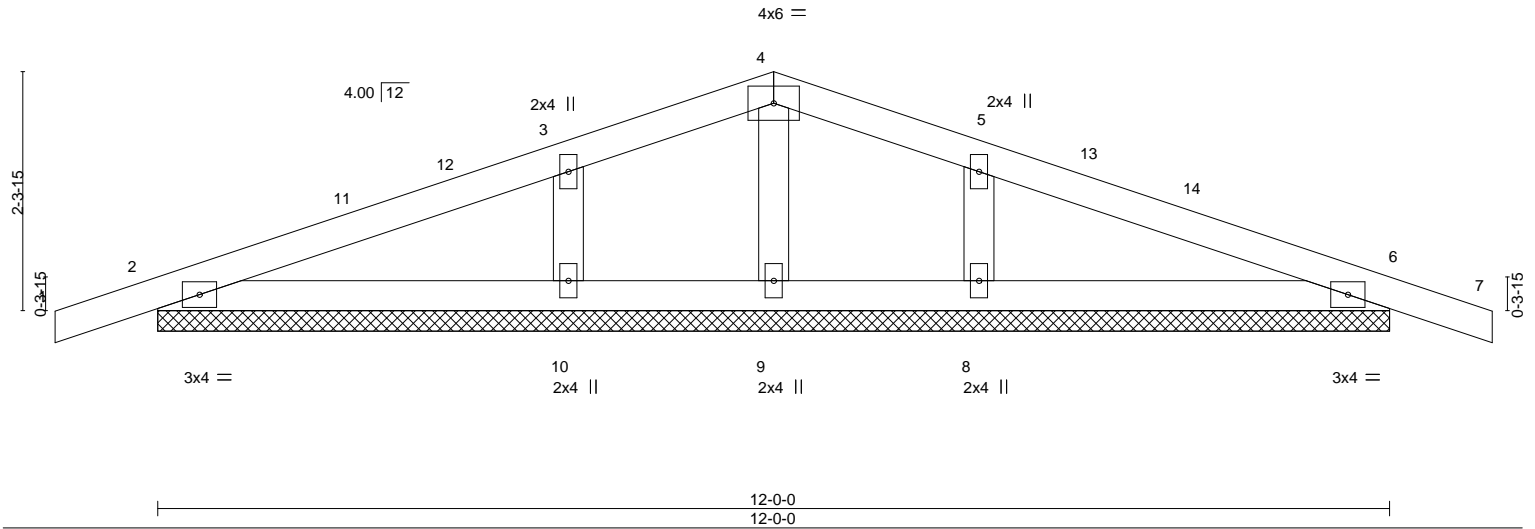


818 Soundside Road
 Edenton, NC 27932

Job MASTER_RT	Truss SP01G	Truss Type GABLE	Qty 1	Ply 1	Voyageur; Master.RT	150862763
Builders FirstSource (Apex, NC), Apex, NC - 27523,					8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 18 10:34:54 2022 Page 1	
					ID:whs5sxHCvY0zsWPodSMdtHyQpff-FrAC8mul_OwcyWgnO_Ea3VFn2M0WMo1lpwLdR0zZjtV	
Job Reference (optional)						



Scale = 1:22.4



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 0.19	Vert(LL)	0.00	7	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	0.01	7	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 46 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 12-0-0.
 (lb) - Max Horz 2=31(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=322(LC 1), 8=322(LC 1)

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

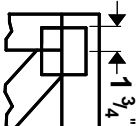
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 6-0-0, Corner(3) 6-0-0 to 9-0-0, Exterior(2) 9-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.

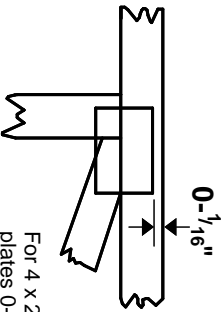


Symbols

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

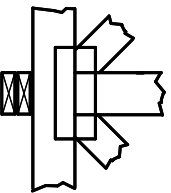
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



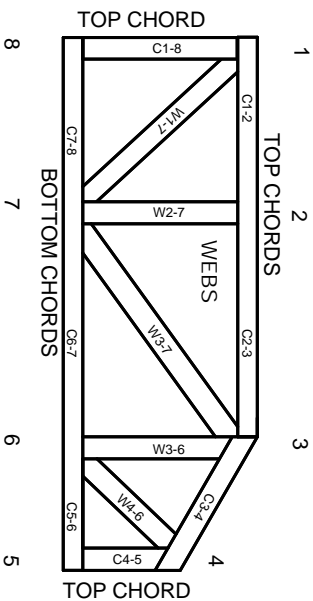
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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: MII-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.

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master_RT
Voyageur; Master.RT

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

Pages or sheets covered by this seal: I50862770 thru I50862770

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

North Carolina COA: C-0844



March 20,2022

Johnson, Andrew

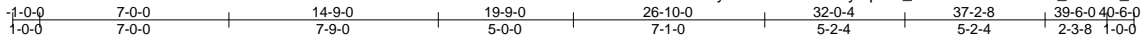
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 MASTER_RT	Truss A02T	Truss Type SPECIAL	Qty 1	Ply 1	Voyageur; Master.RT	150862770
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 10:47:37 2022 Page 1

ID:whs5xHCvY0zsWPodSMdtHyQpff-a_XzKa40GvU2VZIso_COa9L_rwEZehk3F7gVilzJzha



5x8 =

Scale = 1:85.3

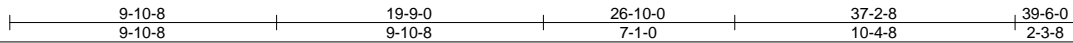
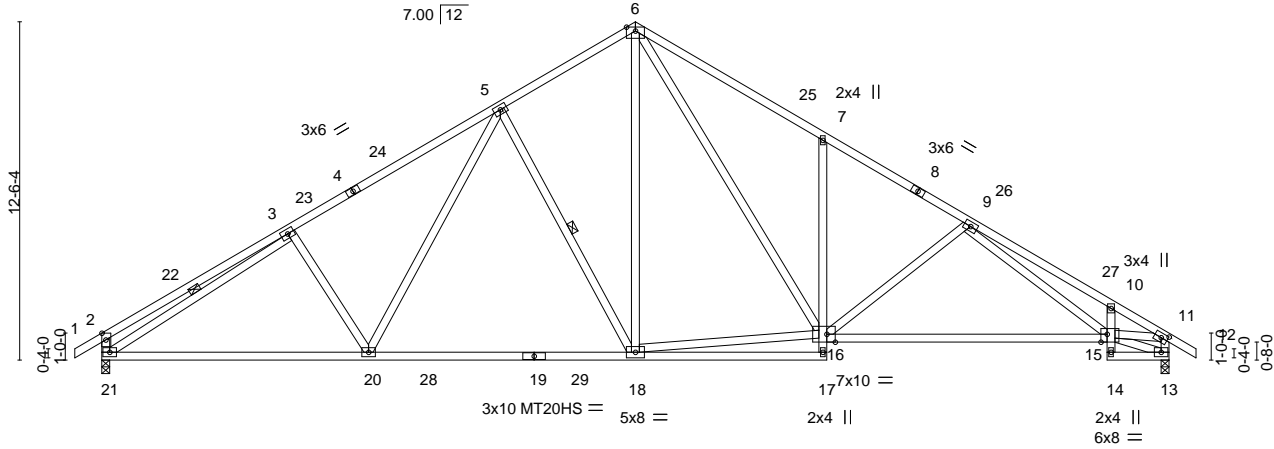


Plate Offsets (X, Y)-- [2:0-3-0,Edge], [11:0-2-14,0-2-0], [15:0-2-12,Edge], [16:0-3-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 1.00	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.40 15-16 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Vert(CT) -0.86 15-16 >548 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.14 13 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 15-16 >999 240	Weight: 268 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.1 *Except* 7-17,10-14: 2x4 SP No.3, 13-14: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-21, 5-18

REACTIONS. (size) 21=0-3-8, 13=0-3-8
 Max Horz 21=-261(LC 10)
 Max Grav 21=1637(LC 1), 13=1637(LC 1)

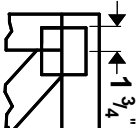
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-21=-489/133, 2-3=-545/132, 3-5=-2174/135, 5-6=-1572/179, 6-7=-2229/227,
 7-9=-2197/109, 9-10=-2878/76, 10-11=-2645/16, 11-13=-1598/52
 BOT CHORD 20-21=-4/2051, 18-20=0/1653, 7-16=-410/162, 15-16=0/2121
 WEBS 3-21=-1857/0, 3-20=-264/177, 5-20=-25/573, 5-18=-673/132, 6-18=-28/750,
 16-18=0/1373, 6-16=-115/1067, 9-16=-374/123, 9-15=-36/485, 11-15=0/2151

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-15 to 2-11-7, Interior(1) 2-11-7 to 19-9-0, Exterior(2) 19-9-0 to 25-4-1, Interior(1) 25-4-1 to 40-5-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) All plates are 4x6 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

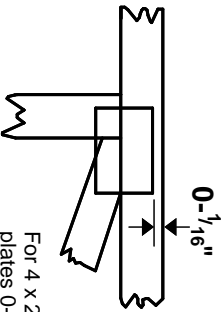


Symbols

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



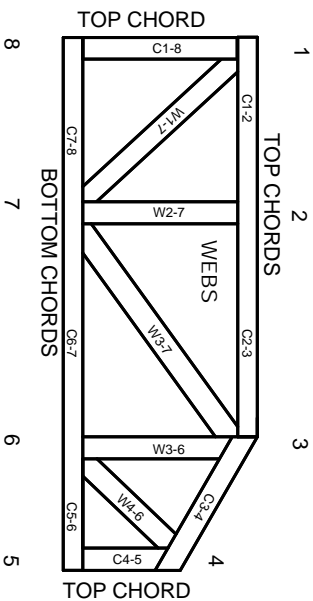
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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: MII-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. Rewriting 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.